

The prevention of business failure : a state of the art

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Date of submission : the 02nd of October 2007

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Abstract

Research related to the prevention of business failure is surveyed in this paper. More specifically, the evolution of the accounting literature on business failure from a predictive to a preventive perspective is explained. After a clarification of the concept of business failure prevention, the main features of representative studies are presented and analysed. These studies are compared in terms of dynamics of the results proposed, of failure stage(s) studied, of conceptual approach privileged, of research object and of methodology used to obtain results. A typology of the research on business failure prevention is then proposed on the basis of two pertinent differentiating criteria: the dynamics of the contributions and the failure stage(s) taken into consideration. This paper finally stresses current limitations of business failure prevention literature, particularly the need for a consensus on how and why firms fail and the lack of investigation about typical failure profiles and paths. Potentialities for future progress in the field are discussed at the end of the paper.

Key words : Business failure – Failure prevention – Causes and symptoms of failure – Failure path – Failure prediction – Default risk

Introduction

Business failure has been one of the most investigated topics in the accounting literature during the last seven decades (Balcaen and Ooghe, 2006). This interest for the analysis and for the understanding of business failure can notably be explained by the fact that a large number of stakeholders are concerned with the activity of a firm and with its evolution over time : its customers, its suppliers, its creditors, its workers are all interested in the potential future of the firm (Weitzel and Jonsson, 1989 ; Daubie and Meskens, 2001). So, its potential disappearance may lead both to dramatic macroeconomic consequences for the global well-being and to disastrous microeconomic consequences for the multiple partners of the firm (Charest et al., 1990).

Since the early 1930's and the initial contribution of Fitz Patrick (1932), a specific research field focused on the study of business failure has emerged and the number of research on this phenomenon has considerably increased over time (Guilhot, 2000). A large part of these contributions have been elaborated into a predictive perspective (Author, 2004). They generally propose to diagnose the risk of bankruptcy in the short term on the basis of financial data treated with various statistical techniques.

However, some authors (Keasey and Watson, 1991 ; Daubie and Meskens, 2001 ; Author, 2004 ; Balcaen and Ooghe, 2006) consider that these statistical models elaborated in a predictive and short run perspective have important limits. So, they have oriented their own research focus on a purely preventive approach of this phenomenon (Balcaen and Ooghe, 2006).

Fundamentally, this second kind of studies on business failure intends to explain why (causes) and how (dynamic process) companies fail. It focuses thus on the ability to avoid serious problems and not only on their simple diagnosis (Daubie and Meskens, 2001). A previous

examination of research written in a preventive perspective (Author, 2004) shows that the literature on business failure prevention has currently two important limitations.

On the one hand, this research field is fragmented, due to the fact that most authors have constructed their results through inductive reasoning, with little (or even no) reference to previous theories and research. As a result, researchers have approached business failure with complementary organisational or financial points of view which have not been really integrated. So, as already stated by Dimitras in 1996, to date, a convergence is needed to build a true integrative framework explaining how firms may fail, especially if we want to make further progress in the study of business failure from a preventive perspective.

On the other hand, few researchers have worked on the identification of typical failure profiles or paths whereas it is obvious that all firms are not failing for the same reasons and do not behave equally when they are involved into a failing process (Argenti, 1976).

So, the objective of this contribution is to propose a review of literature on business failure prevention and to highlight the main gaps it would be interesting to fill in future research if researchers wish to make further progress in the prevention of business failure.

To reach this objective, the paper is divided into five sections :

In the first section, due to the confusion that exists in the accounting literature about the concept of business failure, we suggest a clarification of this notion.

In the second section, an explanation on how business failure literature has evolved from a predictive to a preventive perspective is discussed.

In the third section, the main characteristics of representative studies on business failure prevention (i.e. preventive studies) are analysed with reference to five criteria : the dynamics of their results, the failure stages they take into consideration, the organizational or financial approach they favour, their research object and their methodology.

In a fourth section, a typology of this literature on business failure prevention is proposed by considering both the dynamics of their results and the failure stages they take into consideration.

Finally, in a fifth section, important current limitations of research on business failure prevention as well as opportunities for future research are discussed.

I. The concept of business failure : a clarification

This paper being connected to the phenomenon of business failure, it is important to have a clear insight into this notion. Indeed the accounting literature doesn't propose a clear and generally-accepted definition of business failure (Sharma and Mahajan, 1980 ; Koenig, 1985 ; Guilhot, 2000). As a result, in any study about business failure, it is always necessary to consider the meaning of the business failure concept (Morris, 1997). In fact, the accounting literature has considered this notion from many perspectives (Weitzel and Jonsson, 1989), according to the context and the characteristics of the studied companies as well as according to the specific interests of each researcher (Dimitras et al., 1996). Furthermore, several expressions such as "organizational decline", "business failure", "bankruptcy" or "organizational death" are used and explained differently by the authors. So, there is a apparent confusion around the definition of business failure in the literature.

In many studies, business failure is defined as an all-embracing concept that gathers a series of situations that conduct to the disappearance of the firm because of important financial problems (Morris, 1997). So, a failing firm is often recognized as a firm that is unable to meet its financial obligations either on the long or the short run (Malecot, 1981). However, this definition only concentrates on the financial consequences of more fundamental problems (Malecot, 1981) and does not deal with business failure in its early stages (Weitzel and Jonsson, 1989), whereas "*problems a firm can encounter can be placed on a continuum beginning from slight difficulties to more serious problems*" (Daubie and Meskens (2001)).

Why this narrow and financial definition of business failure is often used originates in the fact that early stages of failure are extremely difficult to characterize and materialize and that it is thus extremely difficult to identify and to reach the population of “early” failing firms (Daubie and Meskens, 2001).

Nevertheless, a broader definition is needed when a research has a more global and preventive scope, because only remedies to problems occurring in the early phases of failure will fundamentally permit the implementation of efficient prevention or recovery strategies (Argenti, 1976).

In addition, an analysis of the accounting literature on business failure shows that an useful distinction has to be made between two main components of the definition of business failure, namely the economic and juridical components.

About the economic side, Ooghe and Van Wymeersch (1986) estimate that a company is failing as soon as it is no more able to reach its organisational goals in a continuous perspective (economic, financial, social and other goals), while according to Weitzel and Jonsson (1989) firms enter into the state of decline or failure when they fail to anticipate, recognize, avoid, neutralize or adapt to external and internal pressures that threaten their long-term survival.

About the juridical side, in most Western countries, business failure is strongly linked to bankruptcy, namely a juridical procedure that leads to the juridical disappearance of the company when serious liquidity and solvency problems are detected (Gerard et al., 1998).

But legal bankruptcy is only one of the potential outcomes of a broader progressive economic degradation of the wealth of a firm and, even if most researchers concentrate on bankruptcy as the (negative) outcome of the economic business failure, other (negative or positive) issues are possible. Indeed, companies engaged into an economic failure process may disappear

through different ways (bankruptcy, voluntary liquidation, merger or splitting) but they may also recover if adequate corrective actions are taken.

So, while (legal) bankruptcy is only one amongst many resulting outcomes for a failure process, economic business failure refer to an idiosyncratic process that progressively leads a firm to its disappearance if no corrective or preventive action is taken. When the firm enters into the latter stages of the failure process, its organisational and structural problems become more and more obvious, namely via external manifestations of problems (notably in its financial reports) and it is then more and more difficult to implement corrective actions that will conduct to the long-term survival of the firm (Weitzel and Jonsson, 1989). As such, in the ultimate stages of a failure process, a real convergence between the economic side of business failure and its juridical side appears.

Another consequence of the dominant economic conception of failure is that business failure is not a sudden event and that the potential final bankruptcy of a failing firm is the result of the combination of multiple and diverse factors over time. As mentioned by Luoma and Laitinen (1991), “*the failure process of a firm can be compared with the evolution of a disease in a human being. In the same way, failure itself is comparable to death. The causes of failure are often associated with management adequacy. These causes lead to the occurrence of symptoms which are observable from the deterioration of financial ratios. This deterioration factually forms the failure process*”. So, “*problems a firm can encounter can be placed on a continuum beginning from slight difficulties to more serious problems and perhaps finally bankruptcy which is the final stage of financial distress*” (Daubie and Meskens, 2001).

Finally, the accounting literature on business failure also shows clearly (Argenti, 1976) that all failing companies do not have the same profile and that they do not follow the same path in their evolution towards bankruptcy : the origin of their problems and their consequences

are almost systematically quite different and each business failure process is fundamentally idiosyncratic but similarities between these processes exist (Laitinen, 1991), so it is possible to characterize some typical failure profiles or paths. Furthermore, the typical failure profile of a firm as well as the specific failure path on which it evolves may differ according to its age (Thornhill and Amit, 2003 ; Ooghe and De Prijcker, 2006), to its size (Bercovitz and Mitchell, 2007) or to its industry (Wolfs and Van Wymeersch, 1996 ; Thornhill and Amit, 2003) and it is then relevant to distinguish several typical failure profiles or failure paths leading firms to bankruptcy (Liefhooghe, 1997).

II. The evolution of literature on business failure : from prediction to prevention

For decades, the study of business failure has been an important issue in the fields of corporate finance, of accounting and of strategy. Year after year, hundreds of studies linked to this thematic have been published and thousands of research projects have been conducted without being published.

Author (2004) considers that the evolution of business failure research may be classified into three chronological phases.

In a first time, researchers have identified relevant financial variables to formulate a default risk prediction and to classify firms on the basis of a dichotomy “failing” or “non failing” (Altman, 1968, for example). So, these researchers have adopted a predictive approach towards business failure.

In a second time, they have oriented their research on the identification and on the analysis of different failure causes and symptoms (Koenig, 1985, for example). The research perspective has then moved from a predictive orientation to a more preventive one.

Nowadays the current research focus evolves towards the identification and the analysis of the business failure process(es). The absence and the value of this last kind of studies were

stressed by Morris (1997) : “*What is generally missing in most studies is a systematic attempt to identify patterns of events which characterize companies that go into financial decline*”.

Beside these three kinds of studies, two main chronological perspectives to the phenomenon of business failure can be distinguished: the short-term predictive perspective and the long-term preventive perspective.

Over the last 35 years, most business failure studies have been focused on the elaboration of the best prediction model in a credit-risk estimation perspective (Balcaen and Ooghe, 2006). These studies are essentially interested in the diagnosis of the situation of the firm (Daubie and Meskens, 2001). The basic goal of business failure prediction is to obtain, via judicious statistical analyses, a good discrimination between failed (bankrupt) and non-failed (healthy) firms (Zopounidis and Doumpos, 1999) on the basis of failure symptoms, i.e. signals of failure that are observable by external stakeholders. Mostly based upon a function combining exclusively financial ratios, these studies are static so that business failure prediction can be considered as a simple classification problem in a short run perspective (Daubie and Meskens, 2001).

But this approach to business failure appears to be subject to major limitations. This is why the real value added and the usefulness of these predictive models should be carefully considered (Balcaen and Ooghe, 2006).

On the one hand, failure prediction studies only concentrate on symptoms of failure, often represented by financial ratios (Daubie and Meskens, 2001). But Argenti (1976), Koenig (1985) or Morris (1997) argue that financial ratios are merely symptoms of the fundamental causes of business failure and do not allow to go back to the origin of the problems. So, predictive studies are unable to prevent a firm from failing and they generally only offer a static and short-term view of business failure. They do not allow for a complete and global understanding of this phenomenon (Cybinski, 2001), while a global and dynamic approach

stressing how and why companies fail is required to understand completely the phenomenon of business failure and to be able to anticipate it (Argenti, 1976).

Moreover, when bankruptcy approaches, financial information tends to become less reliable due to “creative accounting” practices used by the management in order to hide the poor financial health of the company to investors and creditors (Argenti, 1976).

On the other hand, despite the popularity of some statistical methods, significant problems related to their application to business failure prediction remain, such as data instability, variables selection and sampling selectivity (Balcaen and Ooghe, 2006).

So, in the mid 1970's and in a second chronological phase, considering the important limitations of business failure prediction, some researchers adopted a more preventive approach to failure (Author, 2004). An evolution of the research focus from corporate failure prediction to the explanation of business failure in a preventive perspective emerged (Keasey et Watson, 1991; Balcaen and Ooghe, 2006b) and, instead of trying to discriminate between failed and non-failed companies in the short run, researchers tried to understand and explain why (i.e. causes) and how (i.e. process(es)) companies fail (Dimitras et al., 1996) in order to avoid successive serious problems. Formally these studies concentrate on two elements.

On the one hand, they try to go back to the origins of the failure because only remedies to the fundamental causes of the difficulties may really lead to a durable recovery of the firm (Argenti, 1976).

On the other hand, in line with the literature, which suggests that the concepts of failure “process” and failure “path” are extremely important in the study on business failure (Luoma and Laitinen, 1991), they search for taking into account the dynamics of the failure process, i.e. how constitutive factors (causes, consequences or symptoms of business failure) combine over time.

In summary, business failure prevention is thus interested in the causes, processes and remedies allowing to prevent failure (Daubie and Meskens, 2001).

To date, there is no review of this second kind of literature whereas the number of preventive research is continuously increasing. So, the aim of the next section contribution is to propose a review of the literature on business failure prevention and, especially, to analyse its main characteristics, to explain how it is currently organised and to present its main current limitations in order to underline the research questions that would be interesting to explore in the future.

III. The literature on business failure prevention : an analysis

In this section, the main characteristics of representative studies on business failure prevention are analysed with reference to five criteria : the dynamics of their results, the failure stages they take into consideration, the organizational or financial approach they favour, their research object and their methodology.

3.1. The dynamics of the results proposed : static versus dynamic contributions

As Author (2004) underlines it, two kinds of failure prevention studies can be distinguished : the static and the dynamic ones.

In the first category, researchers as Koenig (1985), Morris (1997), Keasey and Watson (1991) and Jaminon (1986) make an inventory of failure factors, i.e. causes and symptoms reflecting business failure. They generally propose a static list that classifies failure factors into some classical categories (mostly organizational, structural, environmental and financial factors) and that presents them as independent elements without any chronological consideration : the relations between factors are not clearly pointed out and one or several possible combinations of the diverse elements are not proposed (Argenti, 1976).

In the second category, researchers as Argenti (1976), Hambrick and D'Aveni (1988) or Laitinen (1991) go further in the analysis of business factors and propose one or several

dynamic models that show how events combine over time. These models propose different chronological phases through which companies evolve when they are failing. Amongst them, two subcategories of dynamic studies can be distinguished.

On the one hand, researchers as Sharma and Mahajan (1980), Weitzel and Jonsson (1989), Marco (1989) or Ooghe and Van Wymeersch (1986) represent globally the failure process. They point out some possible business failure factors and some important steps through which all failing companies evolve but they do not present different specific combinations of these factors. On the other hand, after having demonstrated the evidence of multiple and diverse failure paths, few researchers as Argenti (1976), Laitinen (1991) or Ooghe and De Prijcker (2006) propose a description of some different failure paths (Balcaen and Ooghe, 2006b). In this perspective all failing firms do not behave the same when they are engaged into a failure process, because the causes of the failure can be diverse and because the deterioration of the firm situation can differ according to its intrinsic characteristics (age, size or industry) as well as according to the origin of its difficulties (Ooghe and De Prijcker, 2006).

3.2. The failure stage(s) taken into consideration : early stage(s) versus last stage(s)

The accounting literature frequently proposes a distinction between the early stage(s) and the last stage(s) of the failure process (Hambrick and D'Aveni, 1988 ; Weitzel and Jonsson, 1989). The early stages refer to the period before any sign of distress, namely before the appearance of any symptom that would be observable externally, while the last stages refer to the period between the appearance of observable failure symptoms and the disappearance of the firm. Ooghe and Balcaen (2006b) name the first phase(s) of a failure process as the “phase of economical failure” and the last phase(s) as the “exit phase”.

Considering the failure process, the accounting literature considers its different phases either globally (essentially the first studies) or sequentially (more frequent in recent studies).

On the one hand, authors as Argenti (1976), Sharma and Mahajan (1980) and Weitzel and Jonsson (1989) present their research as global and study the global sequence of factors, starting from the beginning of the difficulties and ending with the potential bankruptcy of the firm. Nevertheless, an in-depth analysis of these studies shows they generally concentrate more specifically on one or several stage(s) of the failure process : for example, Argenti (1976) is not very precise in his description of the last stage(s) of failure, namely how failure symptoms deteriorate, while Malecot (1981) does not clearly and explicitly reconcile the early stages and last stages of the failure process.

On the other hand, other recent researchers explicitly concentrate on specific stage(s) of the failure process (Weitzel and Jonsson, 1989) : Thornill and Amit (2003) or Sheppard (1994) concentrate on the early stages of failure and examine the origin of the difficulties while Ooghe and Van Wymeersch (1986) focus on the last stages of the process and analyse the chronological combination of factors from the appearance of failure symptoms to the potential bankruptcy of the firm.

3.3. The privileged approach : an organisational versus a financial approach of failure

The accounting literature on business failure prevention favours almost systematically either an organisational or a financial approach of the business failure process and combines rarely these two complementary views. Argenti (1976), Malecot (1981), Hambrick and D'Aveni (1988) or Thornill and Amit (2003) are examples of researchers who study business failure from an organisational point of view whereas others as Ooghe and Van Wymeersch (1986) or Laitinen (1991) analyse it from a financial point of view.

This characteristic of studies on business failure prevention is strongly linked with the previous one : indeed the approach chosen by the authors generally depends on the failure stage(s) taken into consideration.

On the one hand, the early stages of the failure process are characterized by a deterioration of the organisation and of the structure of the failing firm, which is not externally observable : so researchers who have focused on these stages have generally adopted an organisational approach of the failure process.

On the other hand, when a firm enters into the last stages of a failing process, the increasing internal deterioration of its organisation and of its structure gives rise to clear failure symptoms, which are mainly materialized by financial indicators. So researchers working on the last stages of business failure have usually selected a financial approach to study business failure.

3.4. The research object

Researches proposed in the accounting literature about business failure prevention have different research objects, even if the firm may be considered as the dominant research object. Indeed, most researchers focus their research on a specific kind of firms.

The criteria they generally take into consideration are the age, the size of the firm or the industry in which it operates. For example, Hambrick and D'Aveni (1988) and Sheppard (1994) study large firms whereas Peterson and al. (1983) concentrate on small ones. Laitinen (1992) focuses on young firms while Sheppard (1994) examines firms older than 5 years.

3.5. The methodology

From a methodological point of view, two main categories of research on business failure prevention can be discerned.

On the one hand, some researchers as Guilhot (2000) and Turner (2005) describe and summarize previous literature. In fact they propose a descriptive state of the art but do not provide any new contributions.

On the other hand, some researchers propose studies that provide new lessons for understanding the business failure process. Their studies are based either on a deductive reasoning or on an inductive reasoning (Morris, 1997).

Studies based on a deductive reasoning deduct hypotheses from previous literature, integrate them into a conceptual model and the validity of the deducted lessons is then generally empirically tested. For example, on the basis of their review of the literature on organisational decline, Weitzel and Jonsson (1989) integrate important underlying factors into a conceptual framework that refines the definition of decline in organisations.

Simultaneously, studies based on an inductive reasoning gather empirical evidence with little or no reference to previous research and rationalise inductively which phenomena may have led to bankruptcy. The studies proposed by Argenti (1976), Marco (1989), Ooghe and Van Wymeersch (1986) are examples of inductive studies proposing new lessons.

Furthermore, when considering the empirical evidence proposed in a study, a clear distinction appears between qualitative data analysis and quantitative ones. For example, Argenti (1976), Jaminon (1986) or Ooghe and De Prijcker (2006) conduct case studies to obtain or to validate their results while Ooghe and Van Wymeersch (1986) or Laitinen (1991) got their results via the statistical treatment of empirical quantitative data (which is also the approach dominating the literature on business failure prediction).

The data analysis technique which is used is strongly linked to the failure stage(s) taken into consideration in the research (section 3.2.). Indeed researchers who have worked on the early stages of failure have generally conducted case studies to gather empirical evidence, because data linked with these stages are difficult to observe externally (Morris, 1997). Simultaneously, researchers who focus on the last stages of the failure process have usually gathered empirical evidence through the statistical analyses of financial indicators, because

these stages are characterized by the appearance of financial symptoms which are easier to observe externally and quantitatively (Morris, 1997).

The main characteristics of representative studies on business failure prevention are summarized in Table 1.

The presentation and the analysis of the main characteristics of the research on business failure prevention open nowadays the way for two original contributions.

First a typology of this literature is proposed by considering both the dynamics of the results proposed in the main contributions and the failure stages they take into consideration.

Second current limitations of the research on business failure prevention are discussed on the basis of an analysis of the main features of representative studies.

Table 1 : Main features of representative preventive studies

	Dynamics of the lessons - Static - Dynamic	Stage(s) of the failure process	Main approach - Organisational - Financial	Research object	Main methodology	Data analysis technique
Argenti (1976)	Dynamic (Failure process + 3 specific paths) Time horizon: 2 to 20 years	Global (link between causes and financial symptoms) but stress on origin of failure	Organisational	Large firms	Inductive reasoning	Case studies
Sharma and Mahajan (1980)	Dynamic (Failure process)	Global but little precision	Organisational	-	Deductive reasoning (adaptation of Argenti's model)	No information
Malecot (1981)	Dynamic (1.Entry paths + 2. Financial failure process)	1. Origin of the failure 2. Degradation of financial symptoms	1. Organisational 2. Financial	-	Inductive reasoning	French national surveys
Peterson and al. (1983)	Static	Origin of the failure	Organisational	Small firms	Inductive reasoning	Interviews and statistical technique
Marco (1984/5)	Static	Origin of the failure	Organisational	-	Inductive reasoning	Statistical technique
Newton (1985)	Dynamic (Failure process)	Global but stress on the origin of failure	Organisational	-	State of the art	-
Koenig (1985)	Static	Origin of the failure	Organisational	-	State of the art	-
Jaminon (1986)	Static	Origin of the failure	Organisational	-	State of the art + deductive reasoning	Case studies
O and VW (1986)	Dynamic (Financial failure process)	Last stage(s) : Degradation of financial ratios	Financial	-	Inductive reasoning	Statistical technique
Hambrick and D'Aveni (1988)	Dynamic (Failure process) Time horizon : 10 years	Identification of 4 stages but concentration on the consequences of the first stage (causes)	Organisational	Large private firms	Inductive reasoning But the main constructs are chosen according to the literature	Statistical technique

	Dynamics of the lessons - Static - Dynamic	Stage(s) of the failure process	Main approach - Organisational - Financial	Research object	Main methodology	Data analysis technique
D'Aveni (1989)	Dynamic (Several patterns of decline) Time horizon : 5 years	Consequences of the decline (how events may combine when a firm is involved in a failure process)	Organisational	Large firms	Deductive reasoning	Statistical technique
Weitzel and Jonsson (1989)	Dynamic (Failure process)	Global : “ <i>from early stages of decline to later stages</i> ”	Organisational	-	State of the art + deductive reasoning	-
Marco (1989)	Dynamic (Failure process)	Global but few details	Organisational	No info	Deductive reasoning	No complete published empirical validation (Author, 1992)
Smallbone (1990)	Static	Origin of the failure	Organisational	Young firms	Inductive reasoning	Case studies
Cromie (1991)	Static	Origin of the failure	Organisational	Young firms	Inductive reasoning	Interviews
Hall and Young (1991)	Static	Origin of the failure	Organisational	Small firms	Inductive reasoning	Document analysis (reports of the Official Receiver), interviews
Laitinen (1991)	Dynamic (3 financial paths) Time horizon: 4 years	Degradation of financial ratios – last stages	Financial	-	Inductive reasoning but the financial variables are chosen according to the literature	Statistical technique
Laitinen (1992)	Dynamic (Failure process)	Last stages	Financial	Young firms	Inductive reasoning	Statistical technique
Amburgey and al. (1993)	Static (link between changes and failure)	Origin of the failure	Organisational		Inductive reasoning	Statistical technique

	Dynamics of the lessons - Static - Dynamic	Stage(s) of the failure process	Main approach - Organisational - Financial	Research object	Main methodology	Data analysis technique
Sheppard (1994)	Dynamic (Failure process) Time horizon : 5 years	Origin of the failure	Organisational	Large firms older than 5 years	Deductive reasoning	Statistical technique
Van Wymeersch and Wolfs (1996)	Dynamic	Last stage(s)	Financial	Large commercial and industrial firms	Inductive reasoning	Statistical technique
Liefhooghe (1997)	Static + Dynamic (Failure process)	Global – stress on origin of the failure	Organisational	-	State of the art	-
Guilhot (2000)	Static	Review of different phases	Organisational + financial	-	State of the art	-
Tornhill and Amit (2003)	Static	Origin of the failure	Organisational	-	Deductive reasoning	Statistical technique
Ooghe and Waeyaert (2004)	Static (list of failure causes)+Dynamic (conceptual model of the relationship between causes)	Origin of the failure	Organisational	-	State of the art + deductive reasoning	-
Sheth (2005)	Static	Origin of the failure	Organisational	« Good » companies that failed	Inductive reasoning	Document analyses, interviews, case studies
Turner (2005)	Static	Origin of the failure	Organisational	-	State of the art	-
Sheppard and Chowdhury (2005)	Dynamic	Global but few details	Organisational	-	Deductive reasoning	Case studies
Ooghe and De Prijcker (2006)	Dynamic (4 failure paths)	Global	Organisational	-	Deductive reasoning (Test of Argenti's hypotheses)	Case studies
Balcaen and Ooghe (2006b)	Static	Last/exit stages	Financial	Belgian firms	Deductive reasoning (Test of hypotheses from the literature)	Statistical technique

IV. The research on business failure prevention : towards a typology

A typology of the research on business failure prevention can be elaborated by considering both the dynamics of the results and the failure stage(s) taken into consideration by the most referred studies. An in-depth analysis of the five characteristics highlighted in Table 1 indicates effectively that these two characteristics appears to be as the meaningful differentiating criteria of the most representative studies on business failure prevention, because on the one hand the dynamics of the results is indivisible by definition from the concept of prevention and because the failure stages taken into consideration by the different studies determine generally both the approach chosen and the methodology used to obtain the final results.

The first benchmark, namely the dynamics of the results obtained, may be divided into static vs. dynamic lessons, while the second benchmark, namely the failure stages taken into consideration, may be divided into a focus on the early stages of the process and on a focus on the last stages of the failure process.

Failure stage(s) Dynamics of the lessons	Early stage(s) (origin of the failure)	Last stage(s) (symptoms and warning signals)
Static lessons	A	B
		C
Dynamic lessons	D	E
		F

Table 2 : A typology of the research on business failure prevention

On the basis of these two benchmarks, the research on business failure prevention may be splitted into six classes :

Class A : This research is focused on the early stage(s) of the failure process and proposes static contributions. In this first and abundant category, the works of Peterson et al. (1983), Marco (1984), Koenig (1985), Jaminon (1986), Smallbone (1990), Cromie (1991), Hall and Young (1991), Amburgey and al. (1993), Liefhooghe (1997), Thornhill and Amit (2003), Sheth (2005) and Turner (2005) are representative.

Class B : Less frequent, the research is focused on the last stage(s) of the failure process and proposes static results. For example, as a first step in their failure path analysis, Balcaen and Ooghe (2006b) study the relationship between several firms' characteristics and the length of their exit path.

Class C : Present in some doctoral researches or in some unpublished works, this research is focused as well on the early stage(s) as on the last stage(s) of the failure process and proposes static contributions. To date, however, no study has been published in the recognized accounting literature.

Class D : This research is focused on the early stage(s) of the failure process and proposes dynamic results. The studies of Sheppard (1994) and Ooghe and Waeyaert (2004) are representative works of this fourth category.

Class E : This research is focused on the last stage(s) of the failure process and proposes dynamic lessons. In this fifth category, the contributions of Ooghe and Van Wymeersch (1986), Laitinen (1991, 1992), Van Wymeersch and Wolfs (1996) and Balcaen and Ooghe (2006b) are representative.

Class F : This research is focused on the whole failure process and proposes dynamic contributions. This last category contains primarily the work of Argenti (1976). Later, Sharma and Mahajan (1980), Malecot (1981), Newton (1985), Weitzel and Jonsson (1989), Marco (1989), Liefhooghe (1997) and Ooghe and De Prijcker (2006) go further in the global investigation of the failure process in a dynamic perspective.

V. The current limitations of the research on business failure prevention

To date, despite the increasing interest shown by politicians, researchers and practitioners for the theme of business failure prevention, the dedicated literature published in accounting literature has received a relatively minor attention (Author, 2004), especially because of some considerable limitations (Balcaen and Ooghe, 2006b).

From Table 1 as well as according to the different statements made by some important researchers in the literature, the following limitations may be distinguished :

5.1. The limits related to the dynamics of the results proposed

On the one hand, static studies appear to have a preventive ability less important than dynamic ones because they do not describe the sequence in which causes and symptoms of failure may follow each others and because they do not consequently allow to anticipate how events should evolve over time (Argenti, 1976). Furthermore, the causes of failure are often inventoried subjectively in static studies (Jaminon, 1986) : some specific causes are not mentioned at all by several authors, some causes are particularly stressed by some authors while others do not emphasize them at all. As a result, these subjective and diverse presentations may mislead readers when they interpret the data (Sharma and Mahajan, 1980 ; Jaminon, 1986).

On the other hand, dynamic studies present also important limitations. First most researchers analyse the business failure process in general (Sharma and Mahajan, 1980 ; Hambrick and D'Aveni, 1988) : fundamentally, they stress important steps through which all failing firms should evolve but they do not present different specific combinations of factors whereas the literature considers as obvious that diverse specific failure paths have to be distinguished (Daubie and Meskens, 2001 ; Balcaen and Ooghe, 2006b). Second dynamic studies do rarely take the time dimension into account : researchers generally do not insert the time dimension as an obvious variable in their research and, when a time scale is proposed, it differs from one

research to another. For example, Argenti (1976) proposes a time horizon of 20 years to study business failure whereas Sheppard (1994) proposes a time horizon of 5 years.

5.2. The limits related to the failure stage(s) taken into consideration

Another limitation is linked to the fact that few researchers analyse explicitly all the different stages of the failure process (Weitzel and Jonsson, 1989). Actually they generally focus on one particular phase of the process (namely the early stages (Koenig, 1985 ; Cromie, 1991) or the last stages (Ooghe and Van Wymeersch, 1986 ; Laitinen, 1991 ; Balcaen and Ooghe, 2006b)) while when some authors present their research as being global, few of them actually concentrate on the succession of the different stages of the failure process. For example, Argenti (1976), Sharma and Mahajan (1980), Newton (1985) and Marco (1989) concentrate more specifically on the early stages of the failure process whereas Malecot (1981) does not clearly and explicitly reconcile the early and last stages.

5.3. The limits related to the conceptual approach chosen

Even if the organisational and the financial approaches appear to be complementary for understanding and explaining completely the phenomenon of business failure, they have still not yet been really combined in the considered studies (Bilderbeek, 1973 ; Author and Dighaye, 2002). This third limitation is strongly linked with the previous one : because researchers generally concentrate either on the early stages or on the last stages of the failure process and because the conceptual approach they adopt generally depends on the failure stages taken into consideration in the study, it is methodologically logical that the organisational and financial approaches have still not been reconciled and are considered separately.

5.4. The limits related to the research object

Most existing studies tend to focus on a specific type of companies according to their age, size and/or industry. More specifically, Thornhill and Amit (2003) consider that most of the

attention has been paid to early failures (namely failure of new and adolescent small firms) as well as to large, dramatic corporate collapses (Argenti, 1976 ; Hambrick and D'Aveni, 1988 ; D'Aveni, 1989) while many firms exit between these extreme positions. As a result, there is a considerable gap in the understanding of how and why less extreme types of firms fail (Thornill and Amit, 2003). In addition, some authors (such as Wolfs and Van Wymeersch, 1996)) focus on specific industries and industries such as service or commercial activities are only considered in unpublished works.

5.5. The limits related to the methodology used

Business failure prevention models tend to be derived on an ad-hoc basis with little theoretical underpinning, whereas there is an important number of “normative” theories in social sciences (economy, finance, corporate strategy, contracting or agency theory) which may usefully contribute to a global and general understanding of corporate failure and of its potential causes (Morris, 1997).

Actually studies on business failure prevention are generally constructed on the basis of inductive reasoning (against empirical evidence) with little or no reference to any theoretical framework (Dimitras e.a., 1996). So, most researchers have chosen to gather empirical evidence and to rationalise inductively which phenomena may have led to bankruptcy (Morris, 1997) while few contributions are based on a deductive reasoning, namely a test of theoretical hypotheses (Sharma and Mahajan, 1980; D'Aveni, 1989; Thornill and Amit, 2003).

This inductive methodological trend notably explains why the business failure literature may be considered as highly fragmented. Indeed, most researchers propose their own results without really taking previous research into consideration : they choose to study some particular aspects or stages of the business failure process according to their experience or interests and their results are inferred from the analysis of empirical data they have collected

on specific samples. So, disparate results are proposed in the literature and this is notably caused by the fact that a large part of the authors have used inductive reasoning to elaborate their model with little or no reference to previous research (Morris, 1997).

To date, nobody has really suggested to reconcile and integrate the fragmented results in order to propose an unifying conceptual framework. Nevertheless, as several researchers underline it (Dimitras et al., 1996), if we want to make further progress in the study of business failure (Weitzel and Jonsson, 1989), there is a need for convergence and thus for a unifying conceptual framework on business failure, particularly on the business failure process.

Simultaneously, even if Table 1 shows that most studies on business failure prevention have been constructed via inductive reasoning, this tendency seems to have been decreasing in the last years. This could indicate that the research on business failure prevention is maturing : there are more and more contributions focused in this research field and authors tend to refer themselves more and more to previous research. This reverse methodological tendency should naturally guide business failure prevention research towards convergence

From a methodological point of view, another limit has to be pointed out. A large part of the empirical studies are conducted on very small datasets of firms (Balcaen and Ooghe, 2006b) and doubts can thus be expressed concerning the real relevance of their results. For example, Laitinen (1992) conducts his empirical study on a set of 20 failing firms while Hambrick and D'Aveni (1988) study 57 failing firms.

Summary and implications

This review of the accounting literature on business failure prevention underlines two essential gaps that would be interesting to explore in future research.

First an analysis of representative studies focused on business failure prevention (and of their limitations) shows that, even if different authors have studied business failure in this perspective (Argenti, 1976 ; Malecot, 1981 ; Koenig, 1985 ; Newton, 1985 ; Ooghe and Van

Wymeersch, 1986 ; Marco, 1989 ; Laitinen, 1991 ; Sheppard, 1994 ; Liefhooghe, 1997 ; Ooghe and Waeyaert, 2004 ; Ooghe and De Prijcker, 2006), to date this literature remains fragmented : indeed most authors suggest similar, complementary or supplementary results with little (or even no) reference to previous research. Moreover to date nobody has studied in details and in the same published research the different chronological stages of the failure process and the organisational and financial approaches of business failure have still not been combined (Author and Dighaye, 2002). In addition some researchers study a type of firms in particular and propose results that are specific to them.

As a result, even if different researchers have worked on the prevention of business failure, this literature is composed with disparate results because little reference has been made to previous research. So, if researchers want to make further progress in the understanding and in the explanation of business failure in order to better prevent it, a consensus and an integration of the disparate results into one unifying model that would stress why and how companies fail is necessary.

Second this review of the literature on business failure prevention shows that few researchers have worked on the identification of different failure profiles or paths whereas it is obvious that all the failing firms do not have the same characteristics and that the origins of their difficulties as well as the combination of events in their failure process largely differ (Argenti, 1976; Ooghe and Balcaen, 2006b).

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