Poor Managerial Competences :
Three Typical Failure Patterns for Small Firms

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Abstract
After an in-depth review of the scientific literature dedicated to (small) business failure causes (Crutzen and Van Caillie, 2008), it comes out that mismanagement is, by far, the failure cause which is the most commonly evoked by previous researchers (Argenti, 1976; Wichman, 1983; Newton, 1985; O'Neill and Duker, 1986; Thornhill and Amit, 2003). Nevertheless, the concept of « mismanagement » is relatively vague and large (Bruno et al., 1987; Sheldon, 1994). It is thus now necessary to clarify it if one wants to better understand the causes of small business failure and, in fine, to better prevent this phenomenon (Argenti, 1976). In particular, it is essential to distinguish between the main categories of managerial problems small businesses can be faced to in order to be able to better anticipate their failure (thanks to adequate trainings, for example) and in order to propose adequate remedies to specific managerial problems small distressed firms are confronted to.

In this context, the current article identifies, on the basis of two complementary statistical analyses, three specific patterns for badly-managed firms, amongst a sample of 91 small distressed firms.

Key words : Failure, Small firms, Mismanagement

Résumé
Après un examen approfondi des recherches scientifiques portant sur les causes de défaillance des (petites) entreprises (Crutzen and Van Caillie, 2008), force est de constater que la mauvaise gestion de l'entreprise est, de loin, la cause de défaillance la plus fréquemment citée dans la littérature (Argenti, 1976; Wichman, 1983; Newton, 1985; O'Neill and Duker, 1986; Thornhill and Amit,
Cependant, la notion de « mauvaise gestion » est relativement vague et large (Bruno et al., 1987; Sheldon, 1994). Il est donc impératif de préciser cette notion si l'on veut mieux comprendre les causes de défaillance des petites entreprises et, in fine, mieux prévenir ce phénomène (Argenti, 1976). En particulier, il est essentiel de distinguer les principales catégories de problèmes en gestion rencontrés par ces entreprises afin de pouvoir mieux anticiper leur défaillance (via des formations adéquates, par exemple) et afin de proposer aux dirigeants d'entreprises en difficulté des remèdes adaptés aux problèmes de gestion auxquels ils sont confrontés.

Dans ce contexte, le présent article identifie, grâce à deux analyses statistiques complémentaires, trois profils-types de petites entreprises mal gérées, parmi un échantillon de 91 petites entreprises en difficulté.

Mots-clés : Défaillance, Petites entreprises, Compétences en gestion
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Introduction

After an in-depth examination of the scientific research dedicated to the study of (small) business failure and of its causes (Crutzen and Van Caillie, 2008; Crutzen and Van Caillie, 2009), it comes out that the poor management of the (small) firm is generally presented as its major failure cause. Indeed, the “poor managerial competences” of the entrepreneur are, by far, the business failure causes which are the most frequently evoked in previous literature (Argenti, 1976; Peterson et al., 1983; Wichman, 1983; Newton, 1985; Koenig, 1985; O'Neill and Duker, 1986; Haswell and Holmes, 1989; Liefhooghe, 1997; Thornhill and Amit, 2003). As an example, already in 1983, Altman states that “the overwhelming reasons for business failure are managerial incompetence and inexperience”.

In addition, a scientific research dedicated to the analysis of the failure causes of 203 small Belgian distressed firms confirms this statement (Crutzen, 2009). Actually, it comes out from this research that the major cause for small business failure is the bad management of the firm due to poor managerial competences. More precisely, amongst the five explanatory business failure patterns (EBFPs) identified by Crutzen (2009), one pattern is specifically dedicated to small firms which are “badly managed”. This pattern is the dominant one because it concerns more than 45% of the sampled firms.1

Nevertheless, the notions of “poor management” and “poor managerial competences” are relatively vague and large. They can encompass a wide array of managerial problems (Bruno et al., 1987; Sheldon, 1994) such as :

- Insufficient competences in marketing or in commercial management (Wichman, 1983)
- A missing or inadequate strategic management of the firm (Hall and Young, 1991)
- An inability to (adequately) anticipate the future of the firm and the evolution of its environment (Keats and Bracker, 1988; Hall and Young, 1991)
- An inability to (correctly) adapt the firm to changes, to external or internal pressures (Thornhill and Amit, 2003)

1 91 firms out of the 203 small firms which were analyzed by Crutzen (2009) were engaged in a failure process because of poor managerial competences.
– Insufficient competences in operational and day-to-day management (Hall and Young, 1991)


– Difficulties to control, monitor the activities, the personnel or the costs (Sheldon, 1994).

Therefore, it is necessary to clarify and to specify the notions of “poor management” and of “poor managerial competences” if one wants to better understand the origins of small business failure and, in fine, to better prevent this phenomenon (Argenti, 1976). In particular, it is essential to distinguish between the main categories of managerial deficiencies small firms can be faced to in order to better anticipate their failure (via adequate formations for example) and in order to propose to the leaders of small distressed firms adequate remedies, i.e. corrective strategies based on the resolution of the problems they are really confronted to.

In this context, the current paper is founded on a sample of 91 small Belgian distressed firms which entered a failure process because of poor managerial competences and it aims at proposing to distinguish several patterns of “badly-managed small firms”. In order to reach this objective, the current paper is based on two complementary statistical analyses : a cluster analysis and a correspondence analysis. Focused on the analysis of the fundamental failure causes of the sampled firms, these analyses stress homogeneous groups of small distressed firms regarding the specific managerial deficiencies at the origins of their failure.

The paper is organized as follows :

The first section clarifies the key-concepts mobilized along the paper. The second section exposes the methodology of the present research : the sample of 91 small distressed firms as well as the data collection and data analysis methods used are presented. The third section explains the results coming from the two complementary statistical analyses which were carried out : three typical failure patterns for badly-managed small firms are distinguished. Finally, the last section discusses these results on the basis of the study of Sheldon (1994) and it highlights some relationships between the extracted patterns and the intrinsic characteristics of the sampled firms.
1. Clarification of key-concepts

1.1. Small firms

As Julien (2005) underlines it, there are lots of different definitions of small and medium-sized firms (SME's). In the recent literature, there is nevertheless a large tendency to differentiate between micro, small and medium-sized firms².

As medium-sized firms have a structure and an organization that tend to be closer to the ones of large firms (larger set of resources, less centralization, more formalization, etc.) and as the impact of human and psychological factors is less important in these firms than in smaller ones (Julien, 2005), this research focuses on small businesses, i.e. micro and small firms, regarding the European Commission's definition (2003). Indeed, these small firms have specific characteristics (Keats and Bracker, 1988; Julien, 2005), which make them particularly vulnerable and which have an impact on why and on how these firms do fail (Birch, 1987).

Mintzberg (1979) and Julien (2005) summarize the most common characteristics of small firms as follows:

- These firms are organizations of “small size”. Referring to the resource-based theory of the firm (Wernerfelt, 1980; Barney, 1991), the quantity of available resources (immaterial, human, technical and financial resources) in these firms is thus small compared to larger firms.

- In most of the cases, the power is centralized in the hands of ONE entrepreneur³: the chief executive or the owner himself (Mintzberg, 1979). Small businesses are thus generally under the preponderant influence of one individual who is at the center of the firm (Mintzberg, 1979; Keats and Bracker, 1988; Julien, 2005): organizational activities largely depend on the personal tastes, experiences and competences of this individual who is able to control other agents within the firm by direct supervision and who is generally responsible for the various aspects of the management of the firm (strategic, commercial, operational, financial aspects, etc.).

- Due to their small size, these organizations are 'structurally simple' in Mintzberg (1979) sense:

² The present research is based on the definition of SMEs adopted by the European Commission in 2003, which is effective since January 1, 2005.

³ or one small circle of people such as couples, families or partners (Chowdhury and Lang, 1993; Lambrecht and Pimay, 2008)
There is at most a loose division of labor, a small managerial hierarchy and hardly any formalization of behaviors and activities (Preisendörfer and Voss, 1990).

The strategy is intuitive and/or little formalized.

The internal and external information-systems are relatively simple. There is no formal and written mechanism to transfer internal or external information: the entrepreneur directly discusses with workers, customers, bankers, etc.

- The firm has less power vis-a-vis customers and competitors compared to larger counterparts (Keats and Bracker, 1988). It is thus particularly dependent on its external and evolving environment.

1.2. Failure

As recognized by many authors, a clear and generally-accepted definition of the concept of business failure does not exist in the literature (Sharma and Mahajan, 1980; Koenig, 1985; Guilhot, 2000). Nevertheless, in a preventive perspective, a relatively broad definition of failure is necessary in order to understand and explain why (causes) and how (process) firms do fail. That is why we retain the following definition:

Firms enter a failure process when they fail to anticipate, recognize, avoid, neutralize or adapt to external or internal pressures that threaten their long-term survival (Weitzel and Jonsson, 1989). Business failure relates thus to a misalignment between the firm (its resource set and its deployment) and its environment (Chowdhury and Lang, 2005): failure occurs when there is a misalignment of the firm to the environment's realities and when, under these circumstances, the firm can not create or sustain a viable strategic position (Greenhalgh, 1983; Weitzel and Jonsson, 1989). This misalignment may be caused by various explanatory factors that have been widely exposed in the literature since the late 1970's.

Once entered in a failure process, if no corrective actions are taken, the failing firm evolves in a downward spiral (Hambrick and D'Aveni, 1988; Chowdhury and Lang, 2005): its organizational situation, and later its financial situation, deteriorates more and more. In fact, when the firm evolves in a failure process, its increasing (organizational) deterioration gives rise to failure symptoms, which are mainly visible in the financial indicators. Financial symptoms are thus only the translation in the financial accounts of more fundamental (organizational) problems.

This failure process eventually ends up with the bankruptcy of the firm if the solvency and liquidity ratios are critically affected. Other (negative or positive) issues are also possible: companies
involved in an economic failure process may disappear through different ways (such as a bankruptcy, a liquidation or a merger (Balcaen and Ooghe, 2007)) but they may also recover if the adequate corrective actions are taken within the firm.

1.3. Failure patterns

Even if common stages can be identified in the failure process of each firm, some researchers as Argenti (1976), D’Aveni (1989) and Laitinen (1991) argue that all firms do not enter a failure process for the same fundamental reasons and that they do not behave the same way when they are engaged in a failure process. Considering this scientific observation, different failure patterns can thus be distinguished amongst failing firms, notably according to some of their inherent characteristics, such as their age (Thornhill and Amit, 2003) or their size (Hambrick and D'Aveni, 1988).

Nevertheless, even if the term “failure patterns” has already been used by several researchers such as Moulton and Thomas (1996) or Thornill and Amit (2003), they have not clearly defined this concept in their research. In addition, various terms such as failure syndromes (Miller, 1977) or failure scenario's (Malecot, 1981) are used in previous literature as synonyms of patterns. As this concept is not commonly defined in previous studies, it is therefore necessary to clarify how it is perceived in the current research. With reference to the definition proposed in the “Merriam-Webster” dictionary\(^4\), the term “business failure patterns” refers to homogeneous sets of traits, acts, tendencies or characteristics which significantly portray firms along the failure process.

As the present paper focuses on the analysis of the managerial deficiencies at the origins of the failure of small firms, it proposes thus to distinguish explanatory business failure patterns, i.e. a series of homogeneous sets of managerial deficiencies that explain the failure of firms.

2. Methodology

2.1. Sample

The current research is based on the analysis of the failure causes of a sample of 91 small firms, which, because of a poor management, were observed by the Court of Commerce of Liège (Belgium) as distressed\(^5\) firms in the year N (year at which they were observed in the framework of their financial problems).\(^5\)

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\(^4\) With reference to the “Merriam-Webster” dictionary, a pattern is “a reliable set of traits, acts, tendencies or other observable characteristics which significantly portray a person, group or institution”.

\(^5\) Firms with externally-visible and serious financial problems (Laitinen, 1991)
The sample on which the current research is based has the following characteristics:

(a) It is focused on “small firms”, i.e. firms employing less than 50 workers regarding the definition of the European Commission (2003).

(b) “Badly-managed firms”, i.e. firms that entered a failure process because of insufficient or inadequate managerial competences and that were classified as “badly-managed firms” by Crutzen (2009).

(c) “With serious and externally-visible financial difficulties in N”, i.e. considered as “failing” or “distressed” firms by the Court of Commerce of Liège (Belgium) because they show external signals of failure (such as a poor liquidity or a poor solvency).

More precisely, in order to ensure the diversity of the data, the sample is composed with small distressed firms investigated by the Court of Commerce of Liège in the framework of:

- A Commercial Inquiry⁶ (48 firms or 53% of the sampled firms) between September 2006 and December 2006 and between January 2008 and June 2008.

- A Legal Reorganization⁷ (26 firms or 28% of the sampled firms) between 1998 and 2004.

- A Legal Bankruptcy⁸ (17 firms or 19% of the sampled firms) between September 2007 and January 2008.

Table 1 provides some descriptive data concerning this sample.

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⁶ Since 1997, in each Belgian Court of Commerce, a specific department has been dedicated to the detection of distressed firms in order to prevent bankruptcy, but also in order to encourage distressed firms entering a legal reorganization procedure. The work made by this department is organized in four steps: the data collection (1), the detection of distressed firms (2), the Chamber of Commercial Inquiry (3) and the Commercial Inquiry (4). In the framework of this preventive system, the leaders of distressed firms can be invited to explain their problems during a Commercial Inquiry (4) (Bayard and Lonhienne, 2003). This official meeting between judges from the Court of Commerce is presided by a professional judge who is assisted by 2 consular judges. They analyze the situation of the detected distressed firms and they can make three distinctive decisions: (1) to close the file if they consider that the firm’s continuity is not in peril, (2) to organize a Commercial Inquiry if further investigation is necessary or (3) to engage into a bankruptcy procedure if the conditions for it are fulfilled.

⁷ The Belgian legal reorganization procedure “freezes” the creditors’ actions for a given period, in order to save distressed firms (Moniteur Belge, 1997a and 2009).

⁸ The Belgian Bankruptcy law (Moniteur Belge, 1997b) is a formal insolvency procedure whereby a receiver is appointed for the purpose of collecting in and realizing the assets of a firm and distributing the realizations to satisfy, as far as possible, its liabilities.
2.2. Data collection

For each type of files (Commercial Inquiry, Legal Reorganization and Bankruptcy), data concerning their intrinsic characteristics (age, size, life cycle, industry, etc) and data explaining the fundamental reasons (fundamental managerial deficiencies/problems) at the origins of their failure were collected. In order to ensure the validity and the homogeneity of the data collection, specific data collection grid were constructed for each type of files (Commercial Inquiry, Legal Reorganization and Bankruptcy), on the basis of the theoretical model (Crutzen and Van Caillie, 2009) presented in Appendix 1.

Different data collection methods were used in function of the type of distressed firms.

Concerning the firms convoked to a Commercial Inquiry, the data collection process consists in the observation of the meeting between the judge and the leader(s) of the distressed firms.

- Before each meeting, the file was analyzed by the scientific researcher and by the consular judge: pertinent information was already drawn from the diverse documents which the

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>NUMBER OF FIRMS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of file</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Inquiry</td>
<td>48</td>
<td>91</td>
</tr>
<tr>
<td>Legal Reorganization</td>
<td>26</td>
<td></td>
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<tr>
<td>Legal Bankruptcy</td>
<td>17</td>
<td></td>
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<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
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<tr>
<td>Less than 3 years</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Between 3 and 5 years</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Between 5 and 10 years</td>
<td>18</td>
<td></td>
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<tr>
<td>More than 10 years</td>
<td>15</td>
<td>91</td>
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<tr>
<td><strong>Legal Form</strong></td>
<td></td>
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<tr>
<td>Private Limited firms</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Public Limited firms</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Cooperative firms</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>5</td>
<td>91</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td></td>
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<tr>
<td>Manufacture</td>
<td>14</td>
<td></td>
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<tr>
<td>Construction</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>15</td>
<td></td>
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<tr>
<td>Commerce</td>
<td>24</td>
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<tr>
<td>Horeca</td>
<td>13</td>
<td>91</td>
</tr>
<tr>
<td><strong>Size (Personnel)</strong></td>
<td></td>
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<tr>
<td>0 workers</td>
<td>7</td>
<td></td>
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<tr>
<td>1 to 5 workers</td>
<td>50</td>
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<tr>
<td>6 to 10 workers</td>
<td>8</td>
<td></td>
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<tr>
<td>11 to 20 workers</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>21 to 50 workers</td>
<td>10</td>
<td>91</td>
</tr>
</tbody>
</table>

Table 1: Description of the sample
Department disposed of (financial annual accounts, possible answer of the entrepreneur to a questionnaire, failure symptoms identified, etc.).

- Then, the meeting took place and the judge asked questions to the entrepreneur regarding the failure of his firm and the reasons for this situation. Sometimes, depending on the personality of the judge, the researcher had the opportunity to ask some questions.
- Finally, after the meeting, the information collected was discussed with the judge (feedback).

Concerning the other two kinds of distressed firms, the data collection process consists in a documentary analysis: the analysis of bankruptcy and legal reorganization (court) records. These documents have to be written by the (bankruptcy or legal reorganization) administrators and they contain crucial information about the firm's characteristics and about the fundamental factors that explain its failure.

Finally, as a lot of qualitative variables compose the database, a code (a number) was assigned to the answers so that the responses could be grouped into a limited number of classes. When the modalities of the qualitative variables could be sorted, discrete ordinal data were assigned to these variables. In many other cases, discrete nominal data were assigned to the variables. The classifying of the qualitative data into limited categories sacrificed some data details but this was necessary for an efficient statistical analysis (Cooper and Schindler, 2000).

Concretely, the codes -2, 0 or 2 were assigned to each managerial competences considered in the current research. These codes mean respectively that the managerial competences are very good, non problematic or poor (or problematic) within the sampled firm considered.9

With reference to the theoretical model of the origins of small business failure presented in Appendix 1, Appendix 2 proposes a dictionary of the various variables included in the present research.

2.3. Data analysis

Two complementary statistical analyses were carried out in order to identify several patterns of badly-managed small firms (Bouroche and Saporta, 2005).

In a first step, firstly, a cluster analysis of cases (Everitt, 1974; Statsoft, 1995b, Bouroche and

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9 As an example, « CG-Mktg : 2 » is the abbreviation for « competences in marketing – code 2 » and it means that the firms is confronted to poor competences in marketing.
Saporta, 2005) was carried out in order to determine homogeneous groups of small firms according to the collected characteristics that explain their failure. In the present study, this non-parametric statistical analysis aims at grouping together cases (i.e. small distressed firms) that are the most similar to each other when a series of variables are considered (i.e. the managerial problems/deficiencies at the origins of their failure).

The cluster analysis we carried out had the following characteristics:

- The distance measure used to amalgamate cases is \((1 – \text{Pearson r})\) or \((1-\text{correlation})\) : the more important the correlation between two cases, the more reduced the distance between these two cases.
- The amalgamation rule chosen to amalgamate clusters is the Ward’s (1963) criterion (the nearest clusters are associated at each step). This method uses an analysis of variance approach to evaluate the distances between clusters. In short, this method attempts to minimize the Sum of Squares (SS) of any two (hypothetical) clusters that can be formed at each step (Statsoft, 1995b).
- On the basis of the choice of a relevant linkage distance, several clusters, i.e. homogeneous groups of firms, in function of the managerial deficiencies which fundamentally explain their failure, are finally retained.

In a second step, a correspondence analysis (Benzécri, 1973; Lebart et al., 1977; Lebart et al., 1984; Greenacre, 1984; Bouroche and Saporta, 2005) was carried out in order to explain the clusters/patterns identified in Step 1. More precisely, this second analysis helps to determine which modalities of the active variables (considered as dependent variables, i.e. managerial problems/deficiencies that explain the failure) are related to each cluster, the taxonomy being considered as a passive variable in the analysis (i.e. a variable that has to be explained by the different modalities of the active variables, without any interference with them). This statistical analysis is traditionally considered as complementary to the cluster analysis and as the privileged method to describe qualitative variables (Bouroche and Saporta, 2005) : it helps thus to explain the nature and the determinants of each cluster (or pattern).

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10 Remember that the term cluster analysis (first used by Tryon, 1939) encompasses a number of different algorithms and methods allowing to group objects into categories. This data analysis technique aims at sorting different objects into groups in a way that the degree of association between two objects is maximal if they belong to the same group and minimal otherwise. So, a cluster analysis discovers structures in data but does not explain why they exist.

11 The variables which were included in the cluster analysis (i.e. variables that may – directly or indirectly - explain failure) are underlined in Appendix 8.

12 This non-parametric multivariate data analysis technique allows to highlight the proximities between the modalities of discrete variables considered as active (i.e. explaining a phenomenon) and the modalities of discrete variables.
3. Results

The cluster analysis, aiming at regrouping together small distressed firms in function of the managerial deficiencies which explain their failure, leads to the identification of three clusters (or three patterns of badly managed small firms) at a linkage distance of 2.79 (Figure 1).

As explained in Section 2, a correspondence analysis was carried out in a second time in order to describe each of the three clusters/patterns identified.

With reference to the plot of eigenvalues presented in Figure 11, two main dimensions were retained. Figure 3 represents on a 2D graph the results of the correspondence analysis: it shows which modalities of each variables are associated with each cluster/pattern (EBFP 1, EBFP 2 and EBFP 3).

 considered as passive (i.e. explained and dependent from the active variables). The results of this analysis are multi-dimensional graphs, allowing to understand the proximities between modalities of some variables and allowing to reduce the information contained in a database into some synthetic dimensions. The results provide information which is similar in nature to those produced by a Factor Analysis (Statsoft, 1995b). The mathematical model underlying to this technique is similar in its principles to the one used in a principal components analysis but is adapted to the very nature of the data which are transformed (these data being ordinal and not continuous).
Plot of Eigenvalues
Input Table (Rows x Columns): 78 x 78
Total Inertia=1,2286

Figure 2: Plot of eigenvalue associated with the dimensions considered by the correspondence analysis
Figure 3: Results of the correspondence analysis (2D Graph)

Input Table (Rows x Columns): 78 x 78 (Burt Table)

2D Plot of Column Coordinates; Dimension: 1 x 2

Dimension 1; Eigenvalue: 0.15266 (12.43% of Inertia)

Dimension 2; Eigenvalue: 0.14073 (11.45% of Inertia)
In order to interpret these results, Appendix 3 presents the variables which are the most correlated to each of the two dimensions considered and the column coordinates of the different modalities of the variables (by discarding all neutral coordinates) on Dimension 1 and on Dimension 2.

From Appendix 3, it comes out that:

- Dimension 1 refers to **managerial competences related to business administration**. This category of managerial competences groups together managerial competences which have an internal orientation and, thus, which relate to the internal management of the firm. Financial, accounting and administrative management and operational management are the most significant factors associated to this dimension.

  On the left side, Dimension 1 relates to a problematic business administration (Fin-Stru:2; Fin-Recup:2; CG-Op:2; Fin-PR:2; CG-Cpta:2; CG-Adm:2).

  On the right side, it is linked to a non problematic business administration (CG-Fin:0; CG-Adm:0; CG-Cpta:0; Fin-PR:0; EE-CG:0; Fin-BFR:0; Fin-Stru:0; MR-Fin:0).

- Dimension 2 refers to **strategic managerial competences**. These managerial competences have an external orientation and, therefore, they relate to the management of the interaction between the firm and its environment. Examples of strategic managerial competences are:
  - The (in)ability to anticipate events (CG-Ant) that leads to an (in)adequate investment (MR-Inv) or to an (in)adequate business plan (CG-BP).
  - Competences in strategy (MR-Strat), in marketing and in other commercial activities (MR-Comm).
  - Competences in Research and Development.
  - Relational resources (RRel).
  - Etc.

  From Appendix 13, it comes out that, on this second dimension, the extremes oppose firms without particular problems in strategic management to firms with (fundamental) problems in strategic management.

  - On the upside, this dimension relates to non problematic strategic managerial competences (RRel:-2; CG-R&D:-2; EE-Motiv:-2; MR-Comm:-2; CG-Ant:0; CG-BP:0; MR-Inv:0; MR-Strat:0; CG-Mktg:-2; etc).
- On the downside, Dimension 2 relates to problematic strategic managerial competences (MR-Inno:2; CG-Adapt:2; RRel:2; MR-Comm:2; MR-Strat:2; MR-Inv:2; CG-BP:2; CG-Mktg:2; CG-BP:2; CG-Ant:2)

This first observation is consistent with the results of Sheldon's study (1994). As Sheldon did (1994), this correspondence analysis highlights the importance of two distinctive kinds of managerial competences: strategic managerial competences (which have an external orientation) and business administration managerial competences (which have an internal orientation).

An examination of the modalities of the explanatory variables which were associated to each cluster permits to explain each pattern (see Figure 3 and Appendix 3).

Concretely, three types of badly managed small firms were isolated: firms with deficiencies in strategic management (a), firms with deficiencies in business administration (b) and firms which are totally badly managed (c).

Firstly, **EBFP 1** (28 firms) refers to firms with **deficiencies in strategic management** because it is associated with non problematic competences in business administration (non problematic financial, accounting and administrative management, for example) and it is related to problematic competences in strategic management. More precisely, this pattern is connected with a poor ability to analyze the environment, a poor ability to anticipate events, a wrong strategy, an inadequate marketing and, more globally, with a problematic commercial management.

All the managerial competences, with an external orientation, that relate to the **management of the interrelation between the firm and its environment** are aggregated under the term “competences in strategic management”. These competences include:

- The ability to analyze the environment of the firm (strategic, technological, competitive awareness/intelligence, etc.).
- The ability to anticipate the future of the firm and the evolution of its environment.
- The ability to adapt the firm adequately to predictable or unpredictable changes.
- The ability to elaborate a strategy (strategic planning, strategic and operational objectives, etc.)
- Competences in marketing (analysis of the demand, responses to the needs of clients, etc.).

**Secondly, EBFP 2** (37 firms) relates to firms with **deficiencies in business administration**. Actually, these firms are led by motivated technicians, i.e. entrepreneurs who have good technical competences, but they have insufficient competences in business administration. In these firms, the strategic management is not problematic. Indeed, this sub-pattern is associated with a satisfactory marketing and, more globally, with a satisfactory commercial management. Examples of factors that fundamentally explain their failure are a poor ability to control the firm, a problematic financial management (such as an inadequate cost pricing or an insufficient management of working capital requirements) or a poor accounting management.

All the managerial competences, with an internal orientation, that relate to the *(internal)* administration of the firm are aggregated under the term “competences in business administration”. These competences include:

- The financial management of the firm (methods of financing, etc.)
- The accounting management of the firm (calculation of cost prices, regular accounting monitoring, budgeting, etc.)
- The administrative management of the firm (follow-up and ordering of administrative documents, payment delays, etc.)
- The operational and day-to-day management of the firm (organization/planning of work, monitoring, human resource management, etc.)

**Thirdly, SEBFP 3** (26 firms) concerns firms which are **totally badly-managed** because their strategic management and their business administration are problematic. Actually, as the correspondence analysis shows, this EBFP refers to firms which are created and conducted by entrepreneurs who are not profoundly motivated by the development of the firm. The correspondence analysis associates to this pattern factors which are related to a problematic strategic management, such as a poor ability to anticipate changes and to adapt to them, a wrong strategy or an inadequate marketing. Moreover, factors linked to a problematic business administration, such as an inadequate operational management or a problematic financial, accounting or administrative management, are also related to this (sub)SEBFP.
To sum up, Table 2 underlines the relationship between the two categories of managerial competences which can explain small business failure and the three patterns identified by the statistical analyses.

<table>
<thead>
<tr>
<th>Competences in Business Administration</th>
<th>Competences in strategic management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non problematic</td>
<td>X</td>
</tr>
<tr>
<td>Problematic</td>
<td></td>
</tr>
</tbody>
</table>

**EBFP 1**  
Firms with deficiencies in strategic management

**EBFP 2**  
Firms with deficiencies in business administration

**EBFP 3**  
Totally badly-managed firms

Table 2: Relationship between the managerial competences and the pattern of badly-managed small firms

4. Discussion

Firstly, it is important to mention that the results coming from the current analyses are consistent with the research published by Sheldon (1994). Indeed, this researcher stresses two types of managerial problems which can be at the origins of a small business failure:

- Problems in the management of external factors (problems in business strategy, inability to anticipate events, etc.)

- Problems in the management of internal factors (poor internal organization, lack of planning, control, etc.).

The three patterns identified by this research and, in particular, the two main dimensions highlighted by the statistical analyses (two major categories of managerial problems) seem thus pertinent, as they are validated by previous literature.

Secondly, based on Pearson Chi-Square tests, this last section highlights two relationships between the EBFPs and the intrinsic characteristics of the sampled small firms, which appear to us as the most interesting ones.

On the one hand, as Table 3 shows, “firms with deficiencies in strategic management” (EBFP 1) are
overrepresented in the Commerce sector while “firms with deficiencies in business administration” (EBFP 2) are overrepresented in the Construction sector. As an example, a lot of the small firms which compose EBFP 2 are building firms that work for big companies or for the Belgian government\textsuperscript{13} without having adequately determined their working capital requirements and without controlling their costs.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Manufacture</th>
<th>Construction</th>
<th>Services</th>
<th>Commerce</th>
<th>HORECA</th>
<th>Row</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBFP 1</td>
<td>-0.307692</td>
<td>-3.69231</td>
<td>-2.61538</td>
<td>4.61538</td>
<td>2.00000</td>
<td>0.00000</td>
</tr>
<tr>
<td>EBFP 2</td>
<td>0.307692</td>
<td>0.83516</td>
<td>-0.09890</td>
<td>0.24176</td>
<td>-1.28571</td>
<td>-0.00000</td>
</tr>
<tr>
<td>All Grps</td>
<td>0.000000</td>
<td>-0.00000</td>
<td>0.00000</td>
<td>0.00000</td>
<td>0.00000</td>
<td>-0.00000</td>
</tr>
</tbody>
</table>

\textit{Pearson Chi-square: 14.0063, df=8, p=0.081616}  

\textbf{Table 3:} Relationship between EBFP 1, EBFP 2 and Industry

On the other hand, Table 4 shows that, in “totally badly-managed firms” (EBFP 3), it is very difficult to implement corrective actions in order to recover and, as they can be considered as “ugly ducklings” (Crutzen, 2009), they are much more rapidly bankrupt than other firms. Indeed, they are highly represented in the “Bankruptcy” files of the Court of Commerce of Liège. Thus, few of them succeed in recovering or in continuing their activities during the months or the years which follow their entrance in a failure process.

<table>
<thead>
<tr>
<th>Missing data</th>
<th>Recovery</th>
<th>Bankruptcy</th>
<th>Voluntary Liquidation</th>
<th>Still handled</th>
<th>Other outputs</th>
<th>Row</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBFP 1</td>
<td>0.076923</td>
<td>0.923077</td>
<td>-0.61538</td>
<td>-1.53846</td>
<td>1.76923</td>
<td>-0.615385</td>
</tr>
<tr>
<td>EBFP 2</td>
<td>-0.219780</td>
<td>-0.065934</td>
<td>-4.95604</td>
<td>2.96703</td>
<td>2.08791</td>
<td>0.186813</td>
</tr>
<tr>
<td>EBFP 3</td>
<td>0.142857</td>
<td>0.857143</td>
<td>5.57143</td>
<td>-1.42857</td>
<td>-3.85714</td>
<td>0.428571</td>
</tr>
<tr>
<td>All Grps</td>
<td>-0.000000</td>
<td>0.000000</td>
<td>-0.00000</td>
<td>0.00000</td>
<td>0.00000</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

\textit{Pearson Chi-square: 16.3275, df=10, p=0.090651}  

\textbf{Table 4:} Relationship between the EBFPs and the exit of the failure process (Balcaen and Ooghe, 2007)

**Conclusion**

This paper identifies three patterns of small distressed firms regarding the managerial deficiencies which were at the origins of their failure.

1. Firms with deficiencies in strategic management (external orientation).

\textsuperscript{13} The payment delays of these organizations are often very long compared to other organizations.
(2) Firms with deficiencies in business administration (internal orientation).
(3) Firms which are totally badly-managed and which cumulate the deficiencies of patterns 1 and 2.

As mentioned in the Introduction, “poor managerial competences” are presented as the major cause of (small) business failure in previous literature. Nevertheless, this statement was very vague and it was necessary to specify it. The current research is a first step in this direction because it clarifies this statement in highlighting two major categories of managerial deficiencies which can originate small business failure: deficiencies in strategic management and deficiencies in business administration. Based on these two types of managerial deficiencies, this study identifies three original patterns for small distressed firms which are badly managed.

Besides its scientific interest, this paper provides interesting information for a better practical prevention of small business failure. As Argenti stated (1976), the identification of the fundamental causes of failure is the key to the prevention of this phenomenon because only remedies to these fundamental problems may lead to a durable recovery of a failing firm.

As it is largely demonstrated in the literature that “poor management” is the main cause for small business failure, the distinction of three typical patterns for small firms which are badly managed is very pertinent. Indeed, the identification of these patterns gives the opportunity (to the entrepreneur or to other interested parties):

- To anticipate the pitfalls in which the firm could fall (anticipation of failure) and,
- If the firm is already engaged in a failure process, to determine, in function of its pattern,
  - if it still has a potential on its market and,
  - if yes, which adequate remedies can be implemented in order to recover.

An upper work (via a more rigorous control of business plans or via more systematic training in management) could improve the prevention of small business failure. More precisely, trainings (before and after business creation) on specific themes that would look over and detail the two categories of managerial competences identified by the current research are necessary in order to improve small business failure.

14 Even before the creation of the firm
Globally, the findings of this research could thus be used as a theoretical basis to improve and enrich public and private actions aiming at “preventing” small business failure, at various stages of their life cycle (creation, growth, distress, transmission, etc.).
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