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The relationship between successor and planning characteristics and the success of business transfer in Dutch SMES

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Key words: business transfer, planning behaviour, small business performance

Research Area: Family and founders owned enterprises
This study examines the relationship between successor and planning characteristics and post-transfer profitability in small businesses. A few simple hypotheses are proposed: The more work experience and business training of the successor, the more profitable the post-transfer period will be; If the successor is an insider or if the successor is related to the predecessor, the post-transfer period will be more profitable; Firms relying on written succession plans, outside advisors, formal solicitation procedures and extensive planning will be more profitable on average. These hypotheses are tested on a panel of micro-data on Dutch SMEs. Planning (by means of a written plan) is found to positively relate to profitability, particularly for non-family-firms. This study suggests that certain variables, especially the use of outside advisors may have an opposite effect on profitability. The paper suggests a few interpretations, e.g. that professional leadership suppresses profitability (for tax reasons and due to investment levels). Future research is needed to measure profitability more carefully. Also, more detail about how and when outside advisors and planning are used in the business transfer process is desired. Current results are consistent with Morris et al. (1997) who find a negative relationship between (tax) planning and post-transfer profitability.
INTRODUCTION

The importance of successful business transfer and the pervasiveness of the business transfer challenge among small businesses is well documented. European estimates are that approximately 30% of firms in a transfer situation are on the brink of going bankrupt due to a bad preparation of the succession (European Commission, 2001). The European Observatory for Small and Medium-Sized Enterprises estimates that this results in 6.3 million jobs that are at risk in Europe as a result of poor succession planning. The European commission has taken initiative with a package of measures to make sure that the succession problem gets more attention in the member states. According to several authors the inability to manage the succession process is one of the most important reasons for the high-failure rate among first- and second-generation family businesses (Corbetta & Montemerlo, 1998; Fleming, 1997; Leach, 1994; Magretta, 1998; Matthews et al., 1999; Morris et al., 1997; Neubauer and Lank, 1998; Pilversack and Scharf, 1994).

Figures also suggest that the problem of business transfer is only likely to become more pervasive in the next decade. For instance, in the Netherlands, the average age of entrepreneurs is steadily rising. In 1998 the average age of the Dutch business owner was 46. In 2003 this has risen to 51 (Kikkert, 2003). Since most of the Dutch businesses were founded in the 1960s and the ongoing problem of “greying” of the Dutch CEO population these numbers are expected to increase even more in the future (Engelenburg and Kommers, 2001; Koning et al., 1999).

In spite of a growing body of empirical research on this subject (e.g. Chrisman, Chua and Sharma, 1998; Morris et al., 1997; Morris et al., 1996; Sharma et al., 2001; Sharma, Chrisman, Chua, 2003a; and Venter, Boshoff and Maas, 2003) our knowledge of the topic of succession is still quite limited. A good empirical study in this field can thus be very useful. This study aims to find which factors influence the success of business succession. A ‘business transfer’ is in this study defined as a major change in either ownership or management of the business. Business transfers can consist of a transfer to someone within the family, to a third party, or to another company. Management buy-ins and management buy-outs can be considered examples of business transfers as well, as long as the existing economic entity survives. The current owner-manager of the business who passes the baton will be referred to as ‘the predecessor’. The person that takes over the firm is referred to as ‘the successor’.

This study concentrates on business transfers of SMEs within the Netherlands. A company is considered an SME in this study if it has less than 100 employees. Of a total of almost 670,000 private businesses in the Netherlands, 655,000 have less than 100 employees (EIM, 2005). This means that 98% of all the businesses in the Netherlands is an SME. Succession problems among SMEs can therefore have a large influence on economic growth and employment in the Netherlands (6 out of 10 jobs are within an SME). The present paper focuses primarily on successor characteristics and aspects of planning which may influence the business transfer process. These variables are used to predict post-transfer profitability of the firm.
FACTORS INFLUENCING THE SUCCESS OF BUSINESS SUCCESSION

An overview of the business transfer process

Succession is a process that can be broken into stages, and that has specific pre-arrival and post-arrival phases (Handler, 1989; Welsch, 1993). Several academics have developed models that divide the succession process into different phases. Longenecker and Schoen (1978) were among the first to create a theoretical model of intergenerational transitions. It involves the following stages: pre-business, introductory, introductory-functional, functional, advanced functional, early succession, and mature succession. Although this model clearly treats succession as a process, it omits any reference to the post-succession issues (Harvey and Evans, 1995).

Keating and Little (1997) also developed a multiple stages model for succession, which has similarities with the Longenecker and Schoen model. Keating and Little distinguish the following stages: watching for interest, reducing the pool of eligibles, assessing commitment, compensating the others and placing the successor. Again, no reference is made to post-succession. Stavrou (1996) simplifies the succession process into three levels of involvement of offspring: part-time employment, full-time employment and leadership role. Whilst, Handler (1989) also uses three phases of succession that next-generation family members experience: personal development phase, business involvement phase and the succession phase.

The discussions above show that most models depicting the succession process fail to accommodate the post-succession process. Here, the categorization of Harvey and Evans (1995) will be used. They distinguish the following three phases in the succession process:

- pre-succession phase; phase in which the potential successors have not entered the business yet;
- succession phase; phase in which the successor moves through the formal hierarchy of the business; and
- post-succession phase; phase in which conflict or damage in relationships and ambiguity that result from the previous phase are assessed and managed.

Figure 1 presents an overall schema of the business transfer process. This model was further developed for the Dutch Ministry of Economic Affairs by Meijaard, Diephuis and Uhlaner (2003). The present study reports on a test of only a part of this model: in particular, the relationships between planning and successor characteristics and performance changes. Some of the literature at the basis of these predictions is discussed in the remainder of this section.
Influence of planning characteristics on the success of business transfer

Succession is something that inevitably has to happen to a business. As Lansberg (1999) states: “Succession is driven by a biological clock”. This emphasizes the importance of timing the succession planning process (Brown, 1998; Kimhi, 1997). Arranging for succession takes time, mainly because so many people are involved (Donckels and Lambrecht, 1999). Sometimes (minor) health problems can be incentives to start planning for the succession process (Handler, 1989; Kets de Vries, 1993). Notwithstanding the inevitability of aging and ultimately death, there is a lack of succession planning in family businesses (among others Goldberg and Wooldridge, 1993; Kets de Vries, 1993; Kirby and Lee, 1996; Lansberg, 1988; Mandelbaum, 1994; Rue and Ibrahim, 1996; Seymour, 1993; Stavrou, 1996). In the Netherlands for instance, only 27 percent of all family businesses have prepared a succession plan (Flören, 1998). Even when the family business approaches a management transition, the succession planning continues to be limited. Older owner-managers do not plan more for succession than do their younger counterparts (Malone, 1989; Seymour, 1993).

There are many events that can force the succession. To some degree planning is possible for these events as well. Failure to plan for succession has been cited as the primary cause for the poor survival rate of family firms (Beckhard and Dyer, 1983; Dyer, 1986; Handler, 1989; Poutziouris, 2000). However, Astrachan and Kolenko (1994) find no correlation between succession planning and the long-term survival of the family business in their study of over 600 family businesses. Similarly, File and Prince (1996) find that inadequate estate planning is more often associated with family business failure than poor management succession planning in their study of 749 failed family businesses. Still, much attention in business transfer research has been paid to formal succession plans and the need for early estate planning (Kets de Vries, 1993; Ward, 1987; Ward and Aronoff, 1992). Morris et al. (1997) and Morris et al. (1996) find in their empirical research that tax and wealth planning and a written succession plan are positively related to the smoothness of the transition. Nevertheless, past research is not altogether straightforward in predictions with respect to the effects of planning on post-transfer performance. For instance, Morris et al. (1997) also find that tax planning is negatively related to post transition performance.

An important part of the planning for a successful business transfer is the education and external work experience prior to the successor’s career in the family business (Flören, 2002). However, after the successors finish their education they might desire to start working for the company immediately (Goldberg and Wooldridge, 1993; Stavrou, 1996). Both Baring (1992) and Lank (1997) find that it is not uncommon for successors to enter the family business with very limited work experience. In a study of 280 successors on Dutch family farms, Flören (2002) finds that almost 44 percent of the successors have less than one year external work experience. Furthermore, most family businesses lack formal entry criteria and strategies for family members (Harvey and Evans, 1994; Stavrou, 1996).

Family businesses have an inward orientation and might need outside review, which is illustrated by their lesser use of outside directors and of external consultants (Donckels, 1996). Clearly the succession process for family businesses can be very emotional and fraud with taboo subjects that might impede communication between family members. Consultation with outsiders and advisors and use of expert information sources can therefore be extremely useful for business families (De Bruin, 1991; Rosenblatt, 1991).
Influence of successor characteristics

Past research on leadership suggests that although certain traits such as intelligence (Dipboye, Smith and Howell, 1994), extraversion (Barrick and Mount, 1991; Tett et al., 1991), conscientiousness (Barrick and Mount, 1991; Tett et al., 1991) may predict management effectiveness, the degree to which they predict management effectiveness varies across managerial positions and organizations (Tett et al., 1991).

In studies more specific to business transfer, characteristics of the successor leader have often been found linked to successful transfer. For instance, in an empirical study on 177 American family businesses, Morris et al. (1997) find that the successors’ self-perception of preparation has a positive relationship with the smoothness of the succession. Morris et al. (1996) find that the number of years the successor worked in the firm has a positive relationship with the smoothness of the succession.

Another important characteristic may be the formal education of the successor. Past studies find a positive relationship between education and post-transfer profit (Chrisman, Chua, and Sharma, 1998; Morris, et al., 1997). Ibrahim et al. (2003) find that there are three factors critical to an effective successor: (1) the successor’s capacity to lead, (2) his management skills and competencies, and (3) the willingness and commitment of the successor to take over the family business and to assume his leadership role. According to Sharma and Rao (2000) personality traits are the most important characteristics, but lower ranking attributes are: outside management experience, current ownership share, technical skills, successor relationship to the incumbent CEO, age, gender and birth order. According to Van Witteloostuijn (2003) successful succession is more likely when predecessor and successor characteristics are more similar in terms of style and competencies.
RESEARCH QUESTIONS AND HYPOTHESES

The research objective of this paper can be stated as follows:

To determine factors influencing the success of business succession within SMEs and analyse the extent of influence they have.

Based on this research objective, the study focuses on the main research question:

“How important are the influences, if any, of planning and successor characteristics on the post-transfer profitability?”

Translating the research question into testable hypotheses, we propose the following:

Hypothesis 1: The more work experience and business training of the successor, the more profitable the post-transfer period will be.

Hypothesis 2: In firms where the successor is an insider and in firms where the successor is related to the predecessor the post-transfer period will be more profitable.

Hypothesis 3: Firms that rely more heavily on a written succession plan, outside advisors, a formal solicitation procedure and extensive planning, in general, will be more profitable in the post-transfer period.

Regarding Hypothesis 1, Dipboye, Smith and Howell (1994) find that the factor most clearly related to managerial effectiveness is intelligence. Intelligence might be roughly measured by education level. An empirical study from Morris et al. (1997) on 177 American family businesses also finds a positive relationship between formal education and post-transition performance.

Regarding the argumentation for Hypothesis 2, past research suggests that a clear vision of the firm may be important in a smooth transition. Vision may play a crucial role for a successful development of a business as “a guiding star which gives information on which types of strategic actions have priority and will be legitimised” (Melin and Hellgren, 1994; Mintzberg and Westley, 1992). The vision is built on the values of the leader. By way of internalisation individuals can take values and make these into their own. The strongest way of internalisation takes place through primary socialisation (Berger and Luckmann, 1966). This is a process during which values are transmitted from the parents to the children. Children are therefore likely to share a lot of values with their parents. In a family business the successor is more likely to have the same values as the predecessor if he is the child of the predecessor. The vision of this new leader is thus more likely to refer to the same underlying values as the vision of the predecessor. If the underlying values stay the same the employees are more likely to accept this new vision because this applies to the core values they regard as their own. Because the whole family shares these values interaction with the family can be valuable to evaluate the vision of the leader. Visionary leadership can be seen as a collective phenomenon driven by family interaction (Hall and Melin, 2003). In a family business a strong
and constant vision is more likely to exist and to survive new generations in the firm. Past research points out that trust-based relationships among family members have a positive relationship with the ease of the succession (Morris et al., 1997). Morris et al. (1996) find that trust, openness, co-operation, respect, lack of defensiveness, lack of conflict, and lack of resentfulness all positively related to the ease of the transition. Sharma and Rao (2000) find in their research that family has a great influence on the ease and success of the succession. Furthermore, a leader needs trust and shared beliefs of his employees to motivate them. The employees are more willing to trust someone they know than an outsider they have never seen before. If the successor has worked in the firm before he becomes the new leader, he is more likely to be trusted and believed in. Morris et al. (1996, 1997) find a positive relationship between whether the heirs worked their way up through the ranks and the post-transition performance.

Regarding Hypothesis 3, past results are mixed. As mentioned in the literature review, some evidence suggests that failure to plan is a primary cause for poor survival of family firms. On the other hand, in empirical research, Morris et al. (1997) find a negative relationship between tax planning and post-transfer performance, whilst Astrachan and Kolenko (1994) found no correlation between succession planning and the long-term survival of the firm. Nevertheless, we posit a positive relationship with the use of planning, procedures and outside advisors given the overarching emphasis in the literature on the importance of advance preparation in succession to assure smooth transfer of power.

**METHODOLOGY**

**Sample**

This study was based on microdata collected from a longitudinal panel survey carried out at EIM Business and Policy Research, a research institute in the Netherlands. From a total panel wave of 1,900 firms, data was collected from 628 firms that detailed business transfers and its characteristics. The total panel is a representative sample of 3,000 companies that have been tracked by EIM since 1998. Surveying occurs primarily through a series of telephone interviews (three times per year). For this study, a subset of the total panel was interviewed. One of two criteria had to be met: (1) the respondent was not one of the founders, or, (2) the firm was founded before 1986. Data was collected in 2003, thus firms younger than 17 years old and still run by the founder were excluded from the study. 628 firms met these criteria and were thus included in the study.
Variables

Two clusters of independent variables were included in this study: successor characteristics and planning characteristics. Figure 2 includes a list of the questionnaire items used. Because of low Cronbach Alpha reliability coefficients between items, each item was treated as a separate variable. In addition to the independent variables, control variables were included to measure family ownership, company size, and sector. The dependent variable was formed as a composite of 2001 and 2002 profitability data, based on self reports by the entrepreneurs. The profitability data was converted to a logarithmic scale because of the initially skewed distribution.

Data analysis

Bivariate relationships are first examined using Pearson product-moment bivariate correlation statistics. A multivariate model is then developed using Ordinary Least Squares multiple regression. A variety of models were tested in deriving the final model.

RESULTS

Results of the bivariate correlation analysis are presented in Table 1.

Among successor characteristics, in companies where the successor and predecessor are related (the family relationship variable), the successor tends to report having fewer years of work experience ($r=-.44; p<.001$). The successor is more likely to be an insider ($r=.23; p<.001$) and the company is more likely to remain in the control of one family (i.e. greater than 50% ownership) after succession ($r=.44; p<.001$).

With respect to planning, when the successor and predecessor are related, the firm is less likely to have a formal solicitation procedure ($r=-.27; p<.001$) and the firm is smaller as well ($r=-.14; p<.01$). There are also some slight sector differences, but with relatively small correlation coefficients. Some parallel results are found for family ownership. For instance, when family control is maintained after succession, the successor is also likely to have fewer years of work experience when taking over the position ($r=-.22; p<.001$), is more likely to be an insider ($r=.15; p<.001$) and the firm is less likely to have a formal solicitation procedure ($r=-.20; p<.001$).

Although these findings make intuitive sense, other findings seem to run counter to expectations. For instance, family-owned firms are slightly more likely to use outside advisors ($r=.11; p<.01$). Even more surprisingly perhaps is the direct negative correlation between post-transfer profitability and a variety of independent variables, including business training ($r=-.19; p<.001$), use of outside advisors in the business transfer ($r=-.17; p<.001$) and size ($r=-.26; p<.001$).
In the bivariate analyses, no relationship is found between family ownership and profitability. In the multiple regression, controlling for other factors, a statistically significant positive effect of family ownership is found on post transfer-profitability. In the regressions planning (formulation of a written plan) is also clearly significantly related to profitability. It is interesting to note that the positive effect of planning is cancelled out by the interaction effect for family firms, while for non-family firms planning remains to have a strongly positive effect on post-transfer performance. It is also important to note that when sectors and size are controlled for, the negative effects of outside advisors and business training become insignificant. The outside advisor effect remains an interesting and notable result.

DISCUSSION

Most results of the present study, including interrelationships among the different independent and control variables as reported, are plausible and in the expected direction. Several of the proposed hypotheses predicting post-transfer profitability are largely unsupported. Without controlling for size and sector, business training and the use of outside advisors in the transfer process are negatively associated with post-transfer profitability. After controlling for these important context variables the effects remain to be negative but are insignificant.

A possibility regarding the initial negative effects is that there is reverse causality in the sense that previously underperforming companies are more likely to hire outside advisors and successors with business training. A second possibility is that the use of outside advisors (most frequently cited being accountants) and/or internal business expertise has the effect of suppressing profit figures for tax purposes. Indeed Morris et al. (1997) find a negative relationship between tax planning and post transfer profitability. In the Netherlands, for instance, there are two types of profitability: commercial profit and that reported for tax purposes, the latter taking into account such expenses as depreciation expenses.

In summary, we conclude from these results that the effects of successor characteristics and planning characteristics on post-transfer profitability are more complex than previously thought and that in and of themselves, simple definitions of these characteristics do not lead us to ready conclusions. Future research may want to incorporate more complex factors such as the quality of emotional relationships between family members, as did Morris, et al. (1997) in his study, the types of communication taking place before and after transfer, or perhaps more detailed information about the type of and approach to planning taken. Including other performance measures may also be considered.
CONCLUSIONS AND SUMMARY

This study examines the relationship between successor and planning characteristics and post-transfer profitability in SMEs. A few simple hypotheses are proposed: The more work experience and business training of the successor, the more profitable the post-transfer period will be; In firms where the successor is an insider, and in firms where the successor is related to the predecessor, the post-transfer period will be more profitable; and firms which rely more heavily on a written succession plan, outside advisors, a formal solicitation procedure and more extensive planning, in general, will be more profitable in the post-transfer period. These hypotheses are tested on a sample of Dutch SMEs, representative of all the major industries. Except for the positive effect of planning, these hypotheses are not confirmed. In fact, the results of this study suggest that certain variables, especially business training and the use of outside advisors for business transfer, may have the opposite effect on profitability. The paper suggests a few possible interpretations of these results, one of which may be that more professional leadership suppresses profitability for tax reasons. In the Netherlands, for instance, there is a distinction made between the profitability reported for commercial reasons and for the tax report. The measure taken in the current study was too limited to distinguish which type the respondents were considering in their responses. Future research is needed to measure profitability more carefully, as well as more detail about how and when outside advisors and planning is used in the business transfer process. Nevertheless, current results are consistent with findings by Morris et al. (1997) showing a negative relationship between tax planning and post-transfer profitability.
Figure 1: Business transfer schema

I. Firm characteristics
- Age
- Size
- Industry or sector
- Location
- Governance structure
- Family firm
- Number of generations
- Relationships
- Performance

II. Predecessor characteristics
- Founder
- Age
- Sex
- Education / experience
- Destination after transfer
- Outside interests
- Trust successor’s abilities
- Willingness to step down

III. Planning
- Legal / tax planning
- Succession plan
- Plans approved by board of directors
- Use of outside advisors
- Stepping down announced

IV. Reason for transfer
- Trigger event
- Forced or natural

V. Successor characteristics
- Age
- Sex
- Education / experience
- Training
- Motivation
- Relation to predecessor
- Insider or outsider
- Willingness to take over
- Person or committee

VI. Transfer
- Duration / completed
- Smoothness
- Type of transfer (management and/or ownership)

VII. Organisational changes
- Strategic changes
- Structural changes
- Orientation changes

VIII. Attitudinal changes (for stakeholders, i.e. predecessor, successor, employees etc.)
- Satisfaction with the transfer
- Commitment to the business
- Motivation to continue the business

IX. Performance changes
- Employment growth
- Sales growth
- Profit growth
- Productivity growth

Note: Relationships and dependencies between categories I through IV are left out for transparency. Also for the links between categories V and VI, and for the links between categories VII, VIII and IX.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Question</th>
<th>Scale used</th>
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<tbody>
<tr>
<td><strong>Successor characteristics</strong></td>
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<tr>
<td>Experience</td>
<td>How many years experience did the successor (you) have at the time of the business transfer?</td>
<td>(Range 0 to 40)</td>
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<td>Outside advisors</td>
<td>Were there external advisors involved in the succession process?</td>
<td>(0=no; 1=yes)</td>
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<tr>
<td>Business training:</td>
<td>Did the successor (you) have business and/or management education or training?</td>
<td>(0=no; 1=yes)</td>
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<td>Family relationship:</td>
<td>Do you have a family relationship with your successor (predecessor)?</td>
<td>(0=no; 1=yes)</td>
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<td>Insider:</td>
<td>How many years did the successor (you) work in this business before the succession?</td>
<td>(0=worked less than 5 years in the business; 1=worked more than 5 years in the business)</td>
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<td><strong>Planning Characteristics</strong></td>
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<td>Written Plan:</td>
<td>Did you formulate a written succession plan?</td>
<td>(0=no; 1=yes)</td>
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<td>Solicitation procedure</td>
<td>Was there a formal solicitation procedure preceding the succession?</td>
<td>(0=no; 1=yes)</td>
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<td>Outside advisor</td>
<td>Were there external advisors involved in the succession process?</td>
<td>(0=no; 1=yes)</td>
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<td>Extent of planning:</td>
<td>Was the succession planned? (yes/no) How would you describe the planning of the succession? Was there a minimum planning, normal planning or intensive planning?</td>
<td>(0=no planning; 1=minimum planning; 2=normal planning; 3=intensive planning)</td>
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<td>Control Family Business</td>
<td>After the succession was more than 50% of the ownership in the hands of one family?</td>
<td>(0=no; 1=yes)</td>
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<td><strong>Family ownership</strong></td>
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<td>Size:</td>
<td>Number of employees in 2003.</td>
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<tr>
<td>Sector:</td>
<td>A dummy variable was created for each sector variable</td>
<td>(0=no; 1=yes)</td>
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<td>Ln (Mean (Profit2001-2002)):</td>
<td>A variable was created that takes the average natural log of the reported return on sales for 2001 and 2002 (“-ln</td>
<td>profit2001-2002</td>
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Table 1: Pearson Correlation between All Variables for the Total Sample

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<td>1. Experience</td>
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<td>2. Business Training</td>
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<td>3. Family relationship</td>
<td>-0.44&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-0.07</td>
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<td>4. Insider</td>
<td>0.01</td>
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<td>5. Solicitation procedure</td>
<td>0.16&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.15&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-0.27&lt;sup&gt;c&lt;/sup&gt;</td>
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<td>-0.12&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>-0.13&lt;sup&gt;c&lt;/sup&gt;</td>
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<td>-0.07</td>
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<td>-0.14&lt;sup&gt;c&lt;/sup&gt;</td>
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<td>-0.11&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>19. ln (mean (profit 2001-2002))</td>
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<td>-0.19&lt;sup&gt;c&lt;/sup&gt;</td>
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<td>-0.03</td>
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<td>0.11&lt;sup&gt;b&lt;/sup&gt;</td>
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**MEAN**

|          | 7.1   | 4.8   | 5.2   | 11.1  | 20.2  | 27.3  | 73.1  | 31.4  | 45.5  | 46.0  | 39.81 | 31.0  | 34.0  | 39.3  | 33.3  | 31.3  | 34.2  | 26.2  | 29.9  |

**STD. DEVIATION**

|          | 7.84  | 4.5   | 5.0   | 5.0   | 3.1   | 4.0   | 3.11  | 0.45  | 0.46  | 39.81 | 0.31  | 0.34  | 0.39  | 0.33  | 0.33  | 0.34  | 0.26  | 0.26  |

**N**

|          | 489   | 493   | 494   | 491   | 616   | 550   | 552   | 619   | 609   | 628   | 628   | 628   | 628   | 628   | 628   | 628   | 628   | 628   | 507   |

*a Correlation is significant at the 0.05-level (2-tailed); b Correlation is significant at the 0.01-level (2-tailed); c Correlation is significant at the 0.001-level (2-tailed);*
Table 2: Results of Ordinary Least Squares Multiple Regression Analysis predicting Post-Transfer profitability (logarithmic function)

<table>
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<tr>
<th>Explanatory Variables</th>
<th>Successor Characteristics</th>
<th>Planning</th>
<th>All variables</th>
<th>Interaction effects</th>
<th>Δ R² entered first/last in model 3 (All Variables)</th>
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<td>t-value</td>
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<td>Written plan</td>
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*** Significant at the 0.001-level; ** Significant at the 0.01-level; * Significant at the 0.05-level.
REFERENCES


Handler, W.C., 1989, ‘Managing the family firm succession process: The next generation family members’ experience’, Doctorial dissertation, Boston University, Boston, MA.


Lansberg, I., 1999, Succeeding generations: realizing the dream of families in business, Boston, Massachusetts.


Meijaard, J., B. Diephuis and L. Uhlaner (2003), Bedrijfsoverdrachten in het MKB, Report M200316, Zoetermeer: EIM.


