Habitual Entrepreneurship and Family Business: Exploring the Connections

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Sanna Tihula (University of Kuopio, Finland)

Abstract

This study examines the prevalence of different types of entrepreneurs in the context of family business. The research of habitual entrepreneurship is typological research in which the entrepreneurs are divided into portfolio, serial and first-time entrepreneurs based on the number of the owned firms. Family business, instead, has usually been seen as a commitment to only one firm. This is because the family entrepreneurs have been seen loyal to their original firm, whereas relinquishing a firm is substantially connected to the habitual entrepreneurs. In this light, it could be imagined that there are not many family entrepreneurs among the habitual entrepreneurs, which may also be one reason why these entrepreneurial dimensions have not been largely connected in previous studies. However, the lack of previous studies does not necessarily mean that habitual entrepreneurship would not exist in family business. Thus, this study offers an interesting perspective for studying quantitatively the connections of habitual entrepreneurship and family business.

The aim of this study is to explore the connections between habitual entrepreneurship (i.e. portfolio and serial entrepreneurship) and family business by examining, firstly, how many family entrepreneurs there are among portfolio, serial and first-time entrepreneurs, and secondly, what kinds of similarities and differences there are between habitual entrepreneurship and family business (e.g. personal background factors and businesses). The final sampling size was 245 small firms and a total of 119 firms took part in the research (i.e. over 48 per cent). There were altogether 77 family firms and 42 non-family firms in the sample. 62

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of all the entrepreneurs in the sample were habitual entrepreneurs and 56 were first-time entrepreneurs. The data was analysed by using chi-square test, t-test and analysis of variance.

The research revealed that there were more family entrepreneurs among portfolio entrepreneurs than among the other types of entrepreneurs. This is fascinating because portfolio entrepreneurs have often found to be more growth intensive than other types of entrepreneurs. Contrary to what has been found in several studies, the results of this study highlight the exciting notion that family firms may be growth intensive after all. In addition, growth objectives may be realised in several firms instead of one firm (i.e. through firm portfolio). Moreover, the results challenge the traditional perspective of family business where the entrepreneur is committed to only one firm. The family firms differed from the other firms in terms of ownership, owner’s education and sales growth. Compared to the non-family firms, there were fewer owners in the family firms and the owners had also lower educational qualifications. However, family firms reached greater sales growth than their counterparts. Interestingly, statistically significant differences in the educational background of the portfolio, serial and first-time entrepreneurs or the characteristics of their ventures were not found.

**Keywords**
habitual entrepreneurship; serial, portfolio and first-time entrepreneurs; family business, small firms

**1 Introduction**

Habitual entrepreneurship and family business are two central research topics in the field of entrepreneurship. So far, however, the connection between these dimensions has not been studied. Previous studies on habitual entrepreneurship have indicated that habitual entrepreneurs were often raised either in entrepreneur families or in clerical families (Westhead & Wright 1998a), and that there are both serial and portfolio entrepreneurs among the owners of family firms. For example Rosa (1998) observed in his case study that portfolio entrepreneurship often occurred in family businesses when either the founder-entrepreneurs or other members of the family founded new firms alongside the original one. Sten (2006) in his turn was interested in serial entrepreneurship families who after selling a family business continued as entrepreneurs in some other firm. Both the aforementioned studies were, however, qualitative ones and so far, to our knowledge, quantitative researches of the connections between habitual entrepreneurship and family businesses have not been conducted. This study interferes with this research gap and indicates with the means of quantitative research to which extent family firms are included in the firms owned by the
different types of entrepreneurs, and how the firms owned by different types of entrepreneurs differ from each other.

It is thought that loyalty generally exists in family firms and that the ownership should remain in the family. In most cases the sincere hope of family entrepreneurs is to transfer the firm to the next generation of the family, thus keeping the ownership in the family. In family firms it is important to honour the family traditions and to remain a face for the owners and the management (Koiranen 2000, 9-10). The desire to keep the family firm going, the desire of self-fulfilment and the desire for independence are often the motivations of the successor (Stenholm 2003; Stavrou 1999). Regardless of harmony and idyll, which often come across the term, family business is not, however, easy business but among the most complex forms of business (Neubauer & Lank 1998) because of the overlapping of operational and strategic issues of ownership, control, and management.

These days also habitual entrepreneurship has become one of the central research areas of the entrepreneurial research. Several studies have observed the prevalence of serial and portfolio entrepreneurship in different areas and industries (e.g. Alsos & Kolvereid 1998; Scholhammer 1991; Westhead & Wright 1998a). As noticed above, to date only little is known, however, of the prevalence of serial and portfolio entrepreneurship among family firms, meaning the number of relinquished firms in the context of family firms (i.e. serial entrepreneurship), or how common operations in several firms simultaneously are (i.e. portfolio entrepreneurship). Thus, the aim of this study was to explore the connections between habitual entrepreneurship and family business by examining, firstly, how many family entrepreneurs there were among portfolio, serial and first-time entrepreneurs, and secondly, what kinds of similarities and differences there were between habitual entrepreneurship and family business (e.g. educational background of the owners, ownership and performance of the firms).

The paper starts with defining the terms habitual entrepreneurship and family business. Then the data collection and the empirical data will be presented. The results and key findings of our study are discussed thereafter as well as the conclusions. The implications and limitations of our study are presented at the end of the paper.

2 Habitual entrepreneurship

Habitual entrepreneurship is not a new phenomenon and it has gained great attention among researchers during the last two decades. Still it is difficult to define habitual entrepreneurs, and there still is no commonly accepted definition of these highly experienced entrepreneurs (e.g. Alsos & Kolvereid 1998; Starr &
Bygrave 1991; Westhead & Wright 1998a; Wright et al. 1998). For instance MacMillan (1986) and Kolvereid and Bullvåg (1993) define a habitual entrepreneur as a person who has experience in founding enterprises and who is simultaneously committed to at least two enterprises. Hall (1995) first divided habitual entrepreneurs into two groups, serial and portfolio entrepreneurs. According to Hall a serial entrepreneur is a person who owns many enterprises after another but only one at the time, whereas a portfolio entrepreneur owns at least two enterprises simultaneously. Perhaps the most versatile definition of habitual entrepreneurship given to date was provided by Westhead and Wright (1998a), according to whom a portfolio entrepreneur founds, inherits or buys a second enterprise in addition to his/her original one, whereas a serial entrepreneur founds, inherits or buys a second enterprise after the original one is sold or closed down.

The miscellaneous definitions and terminology in the research of habitual entrepreneurship has complicated the comparison of the results (Alsos & Kolvereid 1998; Kolvereid & Bullvåg 1993; Westhead & Wright 1998a). Several definitions have been used and they have changed, diversified and become more specified along with new research information of the phenomenon (Alsos & Kolvereid 1998; Starr & Bygrave 1991; Wright et al. 1998). In most researches all such persons who have entrepreneurial experience of more than one enterprise have been considered habitual entrepreneurs. There are, however, exceptions like for example in the research of Carland et al. (2000), where habitual entrepreneurship required entrepreneurial experience of at least three independent enterprises either temporally one after another or simultaneously. In addition to the differences in definition also the terminology used in the research of habitual entrepreneurship has been diverse. For instance the terms habitual entrepreneur and serial entrepreneur have in many studies been used as synonyms, which has made the comparison of the results difficult.

This study exploits in the previous studies most commonly used definition of habitual entrepreneurship, according to which a habitual entrepreneur is everyone who owns or has owned at least two independent enterprises (see e.g. Hall 1995; Westhead & Wright 1998a). In this study the habitual entrepreneurs are further divided into serial and portfolio entrepreneurs according to the number of owned enterprises at the time of the study. The time of the study is used as a basis of division because often the same person may in different phases of his/her entrepreneurial career fit into both serial and portfolio entrepreneur categories (e.g. Pasanen 2003, 91). In this study a portfolio entrepreneur is a person who at the time of the study was owner in at least two different enterprises. A serial entrepreneur is a habitual entrepreneur who at the time of this study only owned one enterprise.

In most studies on habitual entrepreneurship the characteristics, backgrounds and entrepreneurial attitudes of serial, portfolio and first-time entrepreneurs have been compared to each other. Several similarities and differences have been found in
previous studies. For example the educational level of the entrepreneurs, examined also in this study, has been found to be dissimilar in the different types of entrepreneurs. Traditionally, habitual entrepreneurs have been considered having a higher level of education than other entrepreneurs (e.g. Donckels et al. 1987). Especially portfolio entrepreneurs who develop at least two enterprises simultaneously seem to have a higher level of basic education than other entrepreneurs (Niittykangas & Niemelä 2006). At the same time the results in the previous research on habitual entrepreneurship regarding the educational background seems contradictory since some studies suggest that habitual entrepreneurs have a longer vocational education than first-time entrepreneurs (Carter 1998; Niittykangas & Niemelä 2006; Wagner 2002) whereas some studies found no differences in the educational background of the different types of entrepreneurs (Flores-Romero 2004; Westhead & Wright 1998b; Birley & Westhead 1995).

Birley and Westhead (1995) also observed that habitual entrepreneurs more often than first-time entrepreneurs came from entrepreneur families. This may also partly explain why habitual entrepreneurs often are relatively young when becoming entrepreneurs (see e.g. Birley & Westhead 1995; Wagner 2002; Westhead & Wright 1998b). So far, however, relatively little is known of the relationship between habitual entrepreneurship and family business. Some qualitative studies indicate that there may be number of portfolio entrepreneurs as well as serial entrepreneurs among the owners of family businesses (Rosa 1998; Sten 2006). According to Rosa (1998) it might be misleading to focus on the habitual entrepreneur alone and the family context must be taken into account in the search for explanations for different kinds of behaviour.

3 Family business

Family business is a relatively new field, but the business research has gained increased attention recently. Comparing various research results is, however, problematic, because there is not a single, coherent definition of a family business. This may be because of the slight consensus of the young research field, but also because of different elements, which affect the varying definitions (see Neubauer & Lank 1998, 5-6). Moreover, the homogeneity of these firms can be questioned, because every family business has its own history, culture and idiosyncrasy that differ in various ways. However, regardless of the legal form, sector or age, a firm needs to meet the following conditions to be considered as a family business (Heinonen & Toivonen 2003, 14-15; Koiranen 2000, 18; Finnish Family Firms Association 2006): firstly, a family (i.e. an extended family or at most a small number of families) controls the ownership. Secondly, persons belonging to the family, or extended family, are on the board or participate otherwise in the activities of the firm. Finally, the owner-manager considers a firm as a family
business, which was the main criterion used in this study. Typical of all family businesses is the integration of a firm, ownership and business. One central element is also the continuity of the business, i.e. there is a conscious intent to transfer the firm (leadership and control) to the following owner generation (Koiranen 2000, 18; Perheyritystyöryhmä 2005, 29; Kelly et al. 2000). For example, for Neubauer and Lank (1998, 8), a family business is a proprietorship, partnership, corporation or any form of business association where the voting control is in the hands of a given family.

The majority of new jobs created in the last decade can be attributed to family firms (Neubauer & Lank 1998, 10-13; Cabrera-Suárez 2005). Evidence from several studies underlines the importance of family business in the worldwide economy (wealth creation, competitiveness etc.) (Neubauer & Lank 1998; Westhead & Cowling 1998). It has been found that in western countries family businesses account for over two-thirds of all businesses (e.g. Gersick et al. 1999; Mussolino & Viganó 2005; Finnish Family Firms Association 2006; Koiranen 2000, 18-19). Family businesses promote the economic growth and maintain and improve employment. They are often engine firms, playing a major role in regional and local economies (Heinonen & Toivonen 2003, 35, Perheyritystyöryhmä 2005).

Family participation can strengthen the business because family members are usually very loyal, innovative, responsible and dedicated to the family firm (Koiranen 2000, 18, 106; Tagiuri & Davis 1996; Neubauer & Lank 1998, 13-17). Such loyalty can reduce struggling for power in the firm, give rise to great communication, cooperation and trust, and create understanding. The spirit of enterprise and efficient actions also belong to the strengths of the family business (Tagiuri & Davis 1996; Neubauer & Lank 1998, 13-17). Decision making is more centralized and efficient because of simultaneous roles in the family firm (Tagiuri & Davis 1996). However, simultaneous roles can also have negative outcomes such as family, ownership and business issues possibly have been mixed up, firms suffering from a lack of marketplace objectivity and poor profit discipline. The family business may also have problems in internationalization and growth, special organization structures, succession process and emotional charge (conflicts based on the ownership and the exercise of power) (Tagiuri & Davis 1996; Koiranen 2000, 71, 107; Neubauer & Lank 1998, 13-17). However, recent studies (e.g. Pajarinen & Ylä-Anttila 2006; Perheyritystyöryhmä 2005) have found some evidence that small firms, usually family-owned firms, have performed on average better than large ones measured by profitability and growth. In addition to growth, because of the age structure of the entrepreneurs, succession has lately been an especially significant issue in the field of family business.
4 Data collection and methodology

The Salesleads -register maintained by Blue Book TDC Indexes was exploited in the sampling of the research. This register is national, and its information has been gathered by various sources such as Business Register of Statistics Finland, Suomen Asiakastieto Oy and Finnish Tax Administration in addition to direct contacts to enterprises. Small firms with 20-49 employees operating in the regions of Northern Savo, Southern Savo and Northern Karelia were chosen to the population. The focus is on small firms with 20-49 employees because the objective data was better available in this firm size. There were altogether 287 of this kind of firms in the register. In addition to the subjective data gathered from the firms also objective information of financial statements was used. The summaries of the information of the financial statements were taken from the Inoa database, which is a public database of Finnish firms.

Additionally, some industries like electricity, gas and water supply firms owned by municipalities or central-corporation-led retail trades, and subsidiaries of large corporations were outlined from the study. This made the sampling more presentable, and assured that the studied firms would be comparable to each other. After this outlining the final sampling size was 245 firms. The responsible persons in the firms participated in the study either by returning a questionnaire by mail or by filling in the form designed for this purpose in the Internet. After the second questionnaire, the response percentage was over 48, when altogether 119 firms took part in the research. There were altogether 77 family firms and 42 non-family firms in the sample. 39 of all entrepreneurs in the sample were portfolio, 23 were serial and 56 were first-time entrepreneurs. The data was analysed by using chi-square test, t-test and analysis of variance. Both subjective and objective data was used.

5 Findings

Of all the characteristics related to entrepreneurship this study focuses on the educational background, because in some previous studies the educational background of family entrepreneurs has been found to be lower than that of other entrepreneurs (e.g. Littunen & Hyrsky 2000). Also in the studies of habitual entrepreneurs differences have been found, and the educational level of portfolio entrepreneurs has been indicated to be higher than that of others (e.g. Niittykangas & Niemelä 2006). When it comes to family businesses, also the results of this study support the assumption that the educational level of the owners of a family business often is lower than that of other entrepreneurs. Only every fourth (27.6 per cent) of the family entrepreneurs participating in this study had completed at least a polytechnic, whereas nearly half (47.6 per cent) of the owners of other
kinds of firms had polytechnic or university degrees (chi-square test, p<0.05). At the same time no statistically significant differences could be found in the educational backgrounds of first-time, serial and portfolio entrepreneurs (see Appendix 2), regardless of the fact that portfolio entrepreneurs more often than other entrepreneurs act in family businesses. As high a number as four out of five portfolio entrepreneurs (82.1 per cent) reported to own a family business, when two out of three serial entrepreneurs (60.9 per cent) and about the half of the first-time entrepreneurs (55.4 per cent) saw themselves as family entrepreneurs. Table 1 describes the existence of first-time, serial, and portfolio entrepreneurs in family and non-family firms.

Table 1. Incidence of first-time, serial and portfolio entrepreneurs in family and non-family businesses

<table>
<thead>
<tr>
<th>Variables</th>
<th>First-time N</th>
<th>First-time %</th>
<th>Serial N</th>
<th>Serial %</th>
<th>Portfolio N</th>
<th>Portfolio %</th>
<th>Chi-square statistic</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>31</td>
<td>55.4</td>
<td>14</td>
<td>60.9</td>
<td>32</td>
<td>82.1</td>
<td>7.47</td>
<td>0.024**</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>44.6</td>
<td>9</td>
<td>39.1</td>
<td>7</td>
<td>17.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As to the portfolio entrepreneurs the results may naturally be interpreted in many ways. Firstly, the high number of portfolio entrepreneurs among family entrepreneurs may result from different kinds of ambitions of the previous and the present generations (e.g. Handler 1992). In such cases the successor of a family business may take over the firm mainly out of obligation, when his/her own interests lie in other activities. In these circumstances it is rather natural that the operations are more directed towards these interests. It is often more reasonable to found a new firm than to expand the family business to an entirely new industry and thus maybe jeopardise its existence. On the other hand, it may be a question of growth orientation, which is often related to portfolio entrepreneurs (e.g. Huovinen 2007; Iacobucci & Rosa 2005; Westhead et al. 2005), and portfolio entrepreneurship may be seen as a result of the desire of family firms to expand. This is supported by the observation of this study according to which the growth percentage of the turnover of family businesses was significantly higher than that of non-family businesses (t-test, p<0.10). This observation challenges the traditional viewpoint of family businesses growing more slowly than other firms (e.g. Donckels & Lambrecht 1999), and is parallel to the results of some recent studies (Pajarinen & Ylä-Anttila 2006; Perheyritystyöryhmä 2005). Additionally, growth may occur through several firms even if a single firm didn’t grow significantly. A statistically significant difference could not be found in the speed of growth between different types of entrepreneurs, although portfolio entrepreneurs were overly represented in the group of family entrepreneurs (see Appendix 3). The prevalence of portfolio entrepreneurs among family businesses may indicate that especially entrepreneur-like persons are in the head of family businesses. For example Westhead et al. (2005) observed that portfolio
entrepreneurs more than other types of entrepreneurs were more capable of recognising and exploiting new business opportunities.

Table 1 also reveals the observation that the present firm of the serial entrepreneurs is often a family business as well. This observation is interesting, because serial entrepreneurship always requires renouncement of firms, which has not, in spite of some exceptions (e.g. Sten 2006), been related to family entrepreneurship. It may simply be a question of the entrepreneur having taken his/her chances with a firm of his/her own and returning later to continue the existing family business, or founding a new firm with family members. The result may also partly be explained with business mergers or business acquisitions, where the original family business has merged with another business and the entrepreneur has remained as a part-owner in the new firm. This is also supported by the observations in this study according to which there were more owners in the firms owned by serial entrepreneurs than in those owned by other types of entrepreneurs. However, the difference was not statistically significant (see appendix 2).

Instead the results explicitly indicate that the ownership was clearly more divided among several persons in the non-family businesses than in the family firms, and that often none of the owners had more than 50 per cent of the shares (chi-square test, p<0.05). It would appear that in family businesses the ownership is often concentrated on one or two successors the possible other shareholders being family members with no particularly active role in the activities of the firm. In other words, real entrepreneurial teams may be more common in other firms than in family businesses. The responsibility has then been shared evenly by several persons, and making the difference between the dominant entrepreneur and other shareholders is not as easy.

Regardless the type of entrepreneur or enterprise the firms in this study made good financial results. When comparing different types of entrepreneurs the firms owned by portfolio entrepreneurs made slightly better results per financial year than those owned by other types, whereas the results of first-time entrepreneurs were the worst. Respectively, of all types of firms the family businesses made slightly better results than the non-family firms. However, the differences were not statistically significant (see Appendix 3 & 4).

6 Conclusions

In this study the connections between habitual and family entrepreneurship were examined. No differences between the different types of entrepreneurs could be found, whereas several statistically significant differences were found between family and non-family firms. Altogether the results indicate that family
entrepreneurship does not necessarily mean a commitment to only one firm, but start-ups and renouncements can be a significant part of it.

The study clearly indicated that first-time entrepreneurs more often than other entrepreneurs operated in non-family firms, whereas portfolio entrepreneurs were over presented in family firms. In this way the results seem natural, since there are often a myriad of emotional bonds connected to a family business, and its operations won’t be jeopardised in any circumstances. In such a case the owner of a family business rather founds a new firm to exploit a new business opportunity than directs the existing family firm to an unfamiliar industry. It can be speculated that portfolio entrepreneurship is more common among the second generation family firms, because the founder-entrepreneurs do not necessarily carry the same kind of emotional “baggage” as the successor-entrepreneurs. In the future it would be interesting to study the occurrence of portfolio entrepreneurship in family businesses in different phases of their life span.

The study revealed that there were a nearly equal number of serial and first-time entrepreneurs among the family firms (Table 1). The results are interesting, because there are also other similarities in the operations of these types of entrepreneurs, the clearest naturally being the observation that both types tend to concentrate their operations into one firm, whereas portfolio entrepreneurs tend to share their resources between several firms. Additionally, some studies indicate that serial and first-time entrepreneurs are alike, for instance, in respect of achievement motivation (e.g. Huovinen 2007).

In practice the prevalence of portfolio entrepreneurship among family firms raises interesting thoughts concerning the promotion of entrepreneurship and the regional development. Firstly, the common conception of the non-growth of family firms may be explained by the observation that a single firm does not necessarily grow, but the growth occurs through many firms (firm portfolio). However, the growth of family firms in this study was realized through both firm portfolios and single firms. Secondly, this raises a thought of allocating the development procedures more to the growth-orientated portfolio-family entrepreneurs who own several firms simultaneously. In such case, especially in a small region, the combined employment effect of these firms may be relatively significant. Thirdly, portfolio entrepreneurs might be considered as a solution in cases where a functioning family firm lacks a successor. This kind of a situation is typical at least in Finland, where successions are realised yearly in 60 000-80 000 firms, only a fraction of which have a successor (Finnish Family Firms Association 2006; Federation of Finnish Enterprises 2007). In such a situation a portfolio entrepreneur who has already made his/her name could take over a family firm, if it were suitable for his existing firm portfolio.

When the results are analysed from the viewpoint of networks there are several interesting issues (presented in Figure 1) which should be taken into account in the future studies. First of all, firm portfolios can be considered as the networks of
firms because firms belonging to the certain portfolio are usually connected to each other at some level. In practice, despite independency of the firms they often are each others' suppliers, customers and so on. At the same time, the firms often have entrepreneurial teams and/or management teams which are responsible for the firm management. Usually there are some dominant entrepreneurs who are the key players of forming the networks of owners and/or managers. In future both qualitative and quantitative studies are needed to find out what is the real nature of these relationships, firstly between key persons and secondly between firms in the context of the portfolio entrepreneurship.

In interpreting the findings of this study, some limitations should be observed. We acknowledged that since the study was restricted to firms of a certain size in Eastern Finland, caution must be exercised in generalising the results across other firms and areas in Finland. Future studies, conducted with bigger samples from a wide-range of firms and areas, would yield more conclusive findings. It is worth noticing that the limitations may partly explain the generality of portfolio entrepreneurship. This is because portfolio entrepreneurs have been seen in some studies more growth oriented than other entrepreneurs (e.g. Huovinen 2007; Iacobucci & Rosa 2005; Westhead et al. 2004). Thus it is very likely that there were more portfolio entrepreneurs in the sample of firms (20-49 employees) compared to the smaller sized firms.
References


Appendix 1. Results of chi-square tests (family vs. non-family businesses)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Family business</th>
<th>Non-family business</th>
<th>Chi-square statistic</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N %</td>
<td>N %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education of owners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not over college</td>
<td>55 72,4</td>
<td>22 52,4</td>
<td>4,77</td>
<td>0,029**</td>
</tr>
<tr>
<td>At least polytechnic</td>
<td>21 27,6</td>
<td>20 47,6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ownership1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. 49 per cent</td>
<td>18 27,7</td>
<td>19 67,9</td>
<td>13,18</td>
<td>0,000**</td>
</tr>
<tr>
<td>At least 50 per cent</td>
<td>47 72,3</td>
<td>9 32,1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ownership2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. 2 owners</td>
<td>28 36,4</td>
<td>7 16,7</td>
<td>5,08</td>
<td>0,024**</td>
</tr>
<tr>
<td>3 or more owners</td>
<td>49 63,6</td>
<td>35 83,3</td>
<td></td>
<td></td>
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</table>

Appendix 2. Results of chi-square tests (type of owners)

<table>
<thead>
<tr>
<th>Variables</th>
<th>First-time</th>
<th>Serial</th>
<th>Portfolio</th>
<th>Chi-square statistic</th>
<th>Significance level</th>
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</thead>
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<tr>
<td></td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td>0,20</td>
<td>ns</td>
</tr>
<tr>
<td>Not over college</td>
<td>36 64,3</td>
<td>16 69,6</td>
<td>25 65,8</td>
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<td></td>
</tr>
<tr>
<td>At least polytechnic</td>
<td>20 35,7</td>
<td>7 30,4</td>
<td>13 34,2</td>
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<td></td>
</tr>
<tr>
<td>Ownership</td>
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<td></td>
<td></td>
<td>0,95</td>
<td>ns</td>
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<tr>
<td>Max. 49 per cent</td>
<td>16 42,1</td>
<td>8 47,1</td>
<td>13 34,2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least 50 per cent</td>
<td>22 57,9</td>
<td>9 52,9</td>
<td>25 65,8</td>
<td></td>
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</tr>
<tr>
<td>Ownership2</td>
<td></td>
<td></td>
<td></td>
<td>3,79</td>
<td>ns</td>
</tr>
<tr>
<td>Max. 2 owners</td>
<td>19 33,9</td>
<td>3 13,0</td>
<td>13 33,3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 or more owners</td>
<td>37 66,1</td>
<td>20 87,0</td>
<td>26 66,7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p<0,05  
* p<0,10  
ns = not significant (p>0,10)
### Appendix 3. Results of t-tests (type of firm)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Family</th>
<th></th>
<th>Non-family</th>
<th></th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>S.D</td>
<td>N</td>
<td>Mean</td>
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<tr>
<td>Profit (1000 €)</td>
<td>62</td>
<td>253,15</td>
<td>418,61</td>
<td>34</td>
<td>231,85</td>
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<td>Sales growth (%)</td>
<td>56</td>
<td>20,28</td>
<td>36,08</td>
<td>32</td>
<td>9,69</td>
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</table>

### Appendix 4. Results of variance analysis (type of owner)

<table>
<thead>
<tr>
<th>Variable</th>
<th>First-time</th>
<th></th>
<th>Serial</th>
<th></th>
<th>Portfolio</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>S.D</td>
<td>N</td>
<td>Mean</td>
<td>S.D</td>
</tr>
<tr>
<td>Profit (1000 €)</td>
<td>47</td>
<td>210,70</td>
<td>327,38</td>
<td>17</td>
<td>242,65</td>
<td>626,50</td>
</tr>
<tr>
<td>Sales growth (%)</td>
<td>44</td>
<td>17,16</td>
<td>28,05</td>
<td>17</td>
<td>20,79</td>
<td>22,64</td>
</tr>
</tbody>
</table>

** p<0,05  
* p<0,10  
ns = not significant (p>0,10)