CAPITAL STRUCTURE OF FAMILY BUSINESSES IN COMPANIES SEATED IN THE WIELKOPOLSKA REGION

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Abstract:
The main objective of the article is to compare the capital structure of selected family and non-family businesses among the SMEs seated in the Wielkopolska region. Considering the research needs, a hypothesis was put forward that family businesses are more conservative in financial management, which results in a higher share of the equity capital and a higher rate of long-term liabilities to total liabilities. The definition of a family business is not explicit. For the needs of the study, the SFI (Substantial Family Influence) indicator proposed by S.B. Klein will be taken into account. For the research purposes, the financial results of 116 entities were taken into account. The sample included 29 non-family firms (16 producers and 13 service companies), the remaining 87 were family businesses (46 producers and 41 service companies). The research results confirm the hypothesis that family businesses are more conservative in terms of capital structure.

Keywords: family business, family firms versus non-family ones, SME, company's age, capital structure, debt structure

1 INTRODUCTION
Following the research conducted in Poland, European Union and other countries, family-run businesses make up a considerable share among SMEs, especially high among small business entities. It is mainly because a family does not usually guarantee a sufficient, for the needs of a given business entity, supply of individuals with proper skills and knowledge to run a company. Moreover, establishing and running a family business seem to be identified with the activities aimed at surviving unfavorable market conditions as family economic security (Więcek-Janka, & Kujawińska, 2010).

The main objective of the article is to compare the capital structure of selected family and non-family businesses among the SMEs seated in the Wielkopolska region.
Considering the research needs, a hypothesis was put forward that family-run businesses are more conservative in their financial management, which results in a higher share of their equity capital and a higher rate of long-term liabilities to total liabilities ratio.

2 THE DEFINITION OF A FAMILY-RUN BUSINESS

Either theoreticians or practitioners cannot agree as to the one and uniform definition of a family-run business since this category includes both small family-run entities as well as big enterprises controlled by one or a few families. There is also no consensus reached as to the criteria of distinguishing family firms, though most often the following factors are taken into account: family-owned business structure, family control over the company’s strategy, the participation of family members in management processes as well as the engagement of more than one generation in the company's business activity (Handler, 1989). After all, one of the most distinctive research tendencies touching upon family-run businesses is the search for the characteristics of such companies which may aim at a more precise definition of a family business (Marjański, 2011).

The discrepancies concerning the definition of a family business influence the research results of this category of enterprises. For example, considering the research conducted on the American market, the adoption of various definitions of a family business leads to, for example, the following conclusions (Shanker, & Astrachan, 1996):

- the number of family businesses changes within the range of 4.1 million to 20.3 million,
- the number of employed in family businesses ranges from 19.8 million to 77.2 million people;
- family businesses possess from 12% to 49% share in the produced GDP.

The review of available publications allows to distinguish four basic approaches to the family business based on the following criteria (Stradomski, 2010):

- ownership¹,
- ownership and management;
- legal nature;
- other.

According to the ownership criterion, a family business is a company where a family is the majority shareholder. However in practice there appear some methodological problems because private investors (families) sometimes take advantage of complex legal provisions to hide their presence as an owner in a given entity. Therefore, relatively frequently family succession is used as an auxiliary criterion supplementary to the ownership criterion which constitutes its distinctive feature.

Pursuant to the ownership and management criterion, a family firm is a business entity in which:

- a family is the majority shareholder or controls shareholding size directly or indirectly,
- the managerial functions are performed by one, dominant family members.

Pursuant to the legal criterion, family businesses are such entities whose owners belong to one family due to their capital contribution or the rights to the company were acquired by inheritance. It has to be emphasized, however, that this approach highlights only the capital element because the notion of a family business neither exists in the family law nor constitutes a separate category of commercial law.

The approaches to defining a family business enumerated above tend to be supplemented with other criteria, e.g. the application of the F-PEC scale (Family-Power, Experience and Culture Scale), which apart from encompassing the ownership, management and supervision criteria also takes into consideration succession and organizational culture (Stradomski, 2010).

¹ P. Dharma in cooperation with the team provides as many as thirty definitions of family-run businesses among which in more than twenty the family capital share is the key determinant (Dharma, 1996).
Having analyzed the collected empirical material on the basis of the information obtained from credit documentation compiled in banks for the purpose of the paper herein, the ownership and management criterion using the SFI (Substantial Family Influence) indicator proposed by S.B. Klein (Klein, 2000) will be adopted in the definition of a family-run business. Each entity will be considered a family company, pursuant to the assumptions made by the majority of analyses, in which the SFI indicator was applied (Stradomski, 2010), for which the SFI indicator will take the values higher than one.

3 THE REVIEW OF RESEARCH ON FAMILY BUSINESS CHARACTERISTICS

While characterizing family businesses it is worth emphasizing some of their properties. One of them is the fact that family owners will prefer controlling the growth of the total enterprise value. Moreover, they are distinguished by the succession element from other business entities (Martyniuk, 2013), whereas the mode of conducting business is, to a great extent, the subject of personal traits of their owners and successors. These preferences concern e.g. a lower risk tolerance (Winnicka-Popczyk, 2011). This fact is confirmed by other research which say that family businesses are characterized by a lower share of working capital (Stradomski, 2010), which would indicate a more conservative management of the net working capital.

The engagement of the family in running current affairs of the company may result in lower efficiency of the entity due to the fact that family members will have to realize simultaneously their business and non-business objectives. This may be reflected in lower profitability of the company. It is supported by the argument that assets and costs are often transferred between the company and private persons and the preference of long-term stabilization of the company to the profitability of capital equity (especially short-term). In the case of family-run businesses it is also emphasized that they are characterized by a low risk tendency which is well explained by preferable stabilization aimed at long-term (many-generations) survival. Consequently, they prefer higher capital equity, which does not allow to take a full advantage of the financial leverage to improve their profitability (Stradomski, 2010).

Such entities pass down some values from generation to generation contributing to a more conservative approach to financial management (Gallo, Tepies, & Cappuins, 2004), and their nature is of crucial importance to the level of debt, which is usually lower (Amperberger, Schmid, Achleitner, & Kaserer, 2009; Jewartowski, & Koldoński; 2012; Winnicka-Popczyk, 2005). So far, the majority of research proves that family-run businesses relatively rarely, due to their characteristics, take advantage of other, than their own capital, sources of financing. Nevertheless, if they do, they most often apply for bank’s loans (Różański, & Marszałek, 2012).

The key element to understand the peculiarity of a family business is to define the objective of its functioning. The superior goal of a company with a dispersed ownership structure and the division between ownership and managerial functions is to maximize the total enterprise value for the owner, while respecting the interests of other stakeholders, which, certainly, may differ e.g. depending on market conditions. In the case of family companies the situation is slightly different since, though respecting the necessity to maximize the total enterprise value, still such a monistic approach may lead to narrowing the horizon from which the company is perceived. For family-run businesses what counts most is usually business survival and stable development. It also seems that family owners will opt for controlled growth of the total enterprise value (Stradomski, 2010).

Family engagement in current affairs may result in decreased profitability of the entity due to the fact that family members will have to realize business and non-business objectives (Stradomski, 2010), which may find its reflection in lower profitability.

4 THE STRUCTURE OF FAMILY BUSINESS CAPITAL

The theory of capital structure presents three approaches to the structure definition. The first defines the capital structure as so called permanent financing, i.e. equity capital and long
While reviewing different structures and their features, using the capital structure with liabilities structure (Gajdka, 2002).

The third approach which will be applied in the analysis. Moreover, it will be crucial to distinguish equity capital, long-term and short term liabilities. In order to measure a specific capital structure, the following indicators will be used: the equity capital share in total liabilities ratio and the long-term liabilities share in total liabilities ratio, obviously with regard to scientific achievements in the theory of capital structures and their verification.

The arithmetic average values for both indicators will be calculated separately for family and non-family firms with respect to the line of business. In order to avoid the influence of some extreme observations, the medians of these indicators will be used as well. Next, the tests of differences significance will be performed between the average values and medians in both groups of the analyzed entities. The standard parametric test will be used for the difference in average values and non-parametric test (U Mann-Whitney) for the differences in medians.

The capital structure in SMEs has been studied many times, and most often it was proven that the structure itself is far closer to the pecking order theory of capital structure (Hall, Hutchinson, & Michaelas, 2000; Poutziouris, 2001; Zoppa, & McMahon, 2002). While reviewing different publications, there appear some sporadic research which do not confirm this thesis. Sometimes it has been suggested that the capital structure of small companies is similar to, using the same business branch criteria, the observations made on big companies (Korkeamaki, & Rutherford, 2006). However, the insufficiency of explicit conclusions drawn from capital structure studies may indicate that one of the possible directions of developing the research on capital structure may be the definition of capital structure determinants which are of the biggest importance for particular types of enterprises (Kubiak, 2013) including the family-run ones. Additionally, the research clearly define the determinants of capital structure as e.g. being the owner of the company as well as the person of the owner alone (Łuczka, 2013), which also justifies the interest in family-run businesses.

There are relatively few studies done which focus on the verification of capital structure in family-run firms. In such business entities some values are passed down from generation to generation and that may result in a more conservative approach to financial management (Gallo, & Vilaseca, 1996; Poutziouris, 2001; Gallo, Tapie, & Cappuins, 2004). And its character has a significant influence on the debt level, which is usually lower (Ampenberger, Schmid, Achleitner, & Kaserer, 2009; Lopez-Garcia, & Sanchez-Andujar, 2007). However, some opinions may be found that actually there are no differences in terms of financial characteristics between family and non-family businesses (Coleman, & Carsky, 1999; Anderson, & Rebb, 2003), and the structure of capital is influenced by the size, age and entity profitability.

The capital structure in family-run companies was also the subject investigated by Polish researchers (Sułkowski, 2004; Jeżak, Popczyk, & Winnicka-Popczyk, 2004; Róźański, & Marszałek, 2012, Jewartowski, & Kołdoński, 2012). On the whole, the research made on a group of family businesses seated in Poland indicate that such companies do not take advantage of foreign capital so eagerly. It is worth noticing that the majority of researchers surveying family-run firms uses the data concerning big, often public, entities. The studies on the capital structure of family-run businesses within the SMEs scope are almost nonexistent in professional publications. Therefore, the attempt to deepen the studies discussed in this article will modestly fill in this gap.

5 RESEARCH SAMPLE

The financial results of the entities were compiled in the project carried out in cooperation with SBG
Bank S.A. and associated cooperative banks. Thanks to the project it was possible to collect the data from 642 business entities excluding, however, individual farmers. In the entire population, there dominate entrepreneurs functioning as one-person companies (302 entities, i.e. 47%). The number of partnerships is equal to 147 (23% of the population) and limited companies comprise 30% of the population (193 entities in total, among which 152, i.e. 79%, comprise limited liability companies). The project was implemented in 2012, therefore the majority of financial data dates back to 2010. The group was divided into family and non-family entrepreneurs on the basis of the SFI indicator. The non-family firms included two most numerous lines of business in a given population, i.e. plastic producers (8) and machinery and equipment maintenance entrepreneurs (7). Hence, two economy sectors are represented here: production and services. Next, out of family-run firms the companies operating in the same lines of business were selected (respectively 38 and 21).

In order to make the research results impartial, since the first group of companies is represented by debtors, the entrepreneurs from selected businesses (using the REGON criteria, i.e. the National Register of Business Entities data base) were asked to give their financial results for the same year, i.e. 2010, and the data allowing for the assessment if the company was a family-run or not. This stage was carried out in cooperation with the Association of Private Employers in the Wielkopolska region. The request was sent to 400 entities. The answers were given by 47 entities, however, 5 were incomplete.

Finally, for the research purposes, the financial results of 116 entities were taken into account, 74 of which were provided by the banks. The sample included 29 non-family firms (16 producers and 13 service companies), the remaining 87 were family-run businesses (46 producers and 41 service companies).

6 RESEARCH RESULTS

The general results of the population surveyed for capital structure is included in Table 1 from which the following conclusion may be drawn. In family-run businesses there may be observed a slightly higher share of the equity capital. The difference between average equity capital in a balanced sum is equal to 4 percentage points, slightly higher when the median is used since it reaches 7 percentage points.

In terms of the liabilities structure indicator, there is a significant difference between family and non-family companies as well. The first has a higher share of long-term liabilities. If the arithmetic average is used, the difference equals 9 percentage points, and in the case of median – 8 percentage points.

Table 1. Arithmetic average values and medians of capital structure indicators in family and non-family firms (%)

<table>
<thead>
<tr>
<th>Enterprises</th>
<th>Equity capital share</th>
<th>Long-term liabilities share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>arithmetic average</td>
<td>median</td>
</tr>
<tr>
<td>Family</td>
<td>77</td>
<td>79</td>
</tr>
<tr>
<td>Non-family</td>
<td>73</td>
<td>72</td>
</tr>
</tbody>
</table>

Table 2. p-values for the tests of significance for the differences

| Statistical test | Equity capital share | Long-term liabilities |   |
|------------------|----------------------|-----------------------|
|                  | a.a.                | m.                    | a.a. | m.  |
| T.TEST           | 0.0983               | 0.2109                |
| Mann-Whitney U test | 0.0864               | 0.1711                |

For both values (arithmetic average and median) tests of differences significance were conducted between family and non-family run businesses.

2 “Researchers in the companies of the Wielkopolska region – research internship as a chance to improve innovativeness and competitiveness of the businesses crucial for the region” (POKL.08.02.01-30-004/11)
The calculation results are presented in Table 2. If the arithmetic averages are compared, the standard parametric test was applied (T.TEST) for the difference. Whereas while comparing medians, the non-parametric Mann-Whitney U value test. A 10% level of significance was adopted.

On the basis of the results obtained from the tests of significance for the differences, the conclusion may be drawn that only in the case of capital equity share ratio the differences observed are statistically crucial, which was verified both with a standard parametric test for the differences in averages as well as non-parametric Mann-Whitney U value test for the difference in medians. Similar results were achieved in both tests, i.e. at the level of 10% of significance one can find the reason to reject the hypothesis of equality between averages and medians between family and non-family businesses. In the case of the analysis of long-term liabilities share, the hypothesis about the equality between averages and medians in both selected groups of enterprises cannot be rejected.

The surveyed population reveals some variations in capital structure indicators depending on business sector. Table 3 depicts the values for analyzed indicators in enterprises groups selected with regard to the sector of the economy.

<table>
<thead>
<tr>
<th>Enterprises</th>
<th>Line of business</th>
<th>Equity capital share</th>
<th>Long-term liabilities share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>production</td>
<td>69</td>
<td>30</td>
</tr>
<tr>
<td>Family</td>
<td>services</td>
<td>86</td>
<td>14</td>
</tr>
<tr>
<td>Family</td>
<td>total</td>
<td>77</td>
<td>25</td>
</tr>
<tr>
<td>Non-family</td>
<td>production</td>
<td>70</td>
<td>21</td>
</tr>
<tr>
<td>Non-family</td>
<td>services</td>
<td>78</td>
<td>11</td>
</tr>
<tr>
<td>Non-family</td>
<td>total</td>
<td>73</td>
<td>16</td>
</tr>
</tbody>
</table>

In the group of production companies the capital equity share ratio is generally lower than in service companies. This observation refers to both family companies and other. But the differences between family and non-family businesses in terms of the value for the indicator of capital equity share can be noticed only in service companies (the difference between arithmetic average of the indicator equals 8 percentage points and in the case of median – 7 percentage points). In the producers group they fluctuate around 1 percentage point only.

Similarly, as in the case of capital equity share, in the liabilities structure one can notice the differences depending on the sector. A higher ratio is observed in production companies and, as above, the observation refers to both family and non-family companies.

A lower equity capital share ratio and simultaneous higher long-term indebtedness in the group of production companies can be explained by a greater absorption of costs of business activities and, consequently, the necessity to use other sources of financing.

Mean values for the indicators of family and non-family businesses structure depending on the number of employees are included in Table 4.

Table 4. Arithmetic average values and medians for indicators of capital structure in family and non-family businesses depending on the number of employees

<table>
<thead>
<tr>
<th>Enterprises</th>
<th>Number of employees</th>
<th>Equity capital share</th>
<th>Long-term liabilities share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>0-9</td>
<td>82</td>
<td>29</td>
</tr>
<tr>
<td>Family</td>
<td>10-24</td>
<td>83</td>
<td>25</td>
</tr>
<tr>
<td>Family</td>
<td>25-49</td>
<td>74</td>
<td>19</td>
</tr>
<tr>
<td>Family</td>
<td>50 and more</td>
<td>73</td>
<td>21</td>
</tr>
<tr>
<td>Family</td>
<td>total</td>
<td>77</td>
<td>25</td>
</tr>
<tr>
<td>Non-family</td>
<td>0-9</td>
<td>82</td>
<td>24</td>
</tr>
<tr>
<td>Non-family</td>
<td>10-24</td>
<td>69</td>
<td>17</td>
</tr>
<tr>
<td>Non-family</td>
<td>25-49</td>
<td>74</td>
<td>15</td>
</tr>
<tr>
<td>Non-family</td>
<td>50 and more</td>
<td>70</td>
<td>14</td>
</tr>
<tr>
<td>Non-family</td>
<td>total</td>
<td>73</td>
<td>16</td>
</tr>
</tbody>
</table>

Analyzing the data included in Table 4, it can be easily observable that generally the bigger the size of a family company is, measured by the
number of employees, the smaller capital equity share ratio (the value for ratios in the companies employing up to 10 people and from 10 to 25 people actually remains at the same level, which does not question the conclusions). In the case of non-family businesses such a correlation cannot be put forward. For this population the highest value for the indicator was recorded in the group of companies employing up to 10 persons and the lowest in the group of firms employing between 10 and 24 people. However, a generally higher share of capital equity is observed in smaller companies. It is compatible with common practice and scientific research which indicate a limited access of smaller companies to foreign sources of financing and, simultaneously, capital equity preferred by such entrepreneurs.

Such conservative approach of smaller business entities, especially in the group of family companies, was confirmed by the values for the indicator of long-term liabilities share. Its higher values are observed in the group of family businesses especially in the case of smaller companies. The highest share of long-term liabilities in family companies is recorded among the entities employing up to 10 people, the mean value for the indicator equals 29% and is by 8 percentage points higher than in the biggest family firms selected among the analyzed groups. However, it is worth noticing that the lowest ratio was observed in the group of firms employing between 25 and 49 people, i.e. 19%. Similar correlations are observed in the group of non-family companies. Also here the smallest companies base their business activities on long-term liabilities.

Interesting conclusions can be drawn from the analysis of company structure indicators depending on the age of the entity. The data concerning this part of the analyzed population are included in the table 5.

In the case of family-run businesses, the highest share of capital equity is observed in the companies operating on the market for up to two years (87%). Also a high level of indicators is seen in the oldest companies which conduct their business activity for at least ten years (83%). The lowest values for the indicator was recorded in the group of companies functioning between 4 and 6 years. The results indicate the necessity to use mainly their own financial means at the beginning of their business activity, whereas next the external financial support is observable, which facilitates their further development or acceleration, hence lower values for this indicator. Simultaneously, in the group of the oldest companies again the percentage of capital equity increases, which may be connected with a greater financial stability of these entities, and at the same time, is a sign of their conservative approach.

Table 5. Average values and medians for capital structure indicators in family and non-family businesses depending on the entity’s age

<table>
<thead>
<tr>
<th>Enterprises</th>
<th>Entity’s age (in years)</th>
<th>Equity capital share</th>
<th>Long-term liabilities share</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a.a.</td>
<td>m.</td>
<td>a.a.</td>
</tr>
<tr>
<td>Family</td>
<td>(0-2&gt;)</td>
<td>87</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>(2-4&gt;)</td>
<td>73</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>(4-6&gt;)</td>
<td>66</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>(6-8&gt;)</td>
<td>81</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>(8-10&gt;)</td>
<td>78</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>&gt;10</td>
<td>83</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>77</td>
<td>79</td>
</tr>
<tr>
<td>Non-family</td>
<td>(0-2&gt;)</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>(2-4&gt;)</td>
<td>65</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>(4-6&gt;)</td>
<td>75</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>(6-8&gt;)</td>
<td>82</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>(8-10&gt;)</td>
<td>70</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>&gt;10</td>
<td>67</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>73</td>
<td>72</td>
</tr>
</tbody>
</table>

In the group of non-family businesses, in the initial years of their operating on the market, the share of capital equity is also high, though not the highest since this was observed for the companies operating from 6 to 8 years (82%). Similarly, in the subsequent years (2-4 years of functioning) the share of capital equity decreases dramatically and reaches its bottom (65%). On the contrary to family companies, in the group of the oldest companies the share of capital equity does not increase, but conversely is close to the minimal value in the population, which results
from deriving benefits from achieved financial performance by the owners who are not family representatives. It may suggest that in the case of family businesses the objectives connected with securing the sustainability of conducted business activity are more emphasized and realized to a greater extent.

Surprising results refer to the share of long-term liabilities in the structure of foreign capital. In the group of family companies, huge variations in this indicator are observed. The entities functioning for up to 4 years do not take advantage of long-term financing, which is probably related to the necessity of focusing their attention on sustaining company’s liquidity and taking advantage of operating lease as a source of financing capital assets. The highest share of long-term liabilities is recorded in the companies which function from 4 to 6 years and between 8 and 10 years. In the case of non-family businesses the distribution of the mean value for the indicator is more differentiated. It may be observed that older entities more eagerly take advantage of long-term financing which may be well explained by a greater credit score of such entities.

In the analyzed population there is no significant difference noted in the structure of capital taking in the consideration the legal nature of the entity though slightly (by 2 percentage points if arithmetic average is used and by 1.5 percentage points in the case of median) lower share of capital equity in the companies pursuant to the commercial law.

7 CONCLUSIONS

Summarizing the results of conducted analysis it can be stated that among family-run businesses the share of capital equity is higher than in the case of non-family firms. Smaller family firms (employing up to 10 people) use capital equity more often, which are either at the beginning of their business activity development or are the companies of an established position and conduct their business activity for many years (more than 10 years).

In terms of the share of long term liabilities to total liabilities ratio, family-run companies are characterized by a higher, than in the case of other entities, indicator and there are generally no significant differences depending on the number of employees in these firms. Whereas taking into consideration the age of the company, then in the case of a family business it is hard to decide explicitly on the evaluation since there are huge variations in the values for the indicator in particular companies groups. In the case of non-family companies, smaller companies show a significantly higher share of long-term liabilities and the indicator grows together with the age of such entities.

It is worth noticing that there exist significant variations in the values for capital structure indicators depending on the line of business and irrespectively of whether the company is a family one or not. A higher share of capital equity was observed in the group of service companies rather than production ones, whereas the share of long-term liabilities was higher in the case of producers.

Concluding, the research results confirm the hypothesis that family businesses are more conservative in terms of capital structure. Due to the research sample the results cannot, however, constitute the basis for further generalizations.

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