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THE CAPITAL STRUCTURE OF YOUNG FIRMS AND THE WORKING EXPERIENCE OF NEW ENTREPRENEURS

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The capital structure of young firms and the working experience of new entrepreneurs

by

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The capital structure of young firms and the working experience of new entrepreneurs

Abstract

We use a simple model to analyze the funding stage of new firms and characterize the directional causality between their capital structure and the length of prior working experience that entrepreneurs possess. In this light, we test a set of predictions by considering a sample of firms founded by Italian entrepreneurs in the period 1992-2004. We obtain three main results. First, we confirm the evidence presented in the literature, whereby the size of the firm has a significant effect on capital structure. Second, we find that previous working experiences of entrepreneurs in full-time employment (before founding a new firm) have a positive impact on the debt-to-asset ratio of newly founded firms. Third, we show that firms with access to subsidized government debt are able to increase their share of debt in total liabilities, even when the size of the subsidy is small.

The capital structure of young firms and the working experience of new entrepreneurs

1. Introduction

Entrepreneurial activities (and the features of the start-up firms they create) have been a topic of interest to economic researchers for a number of years. Most of the research focused on the stage when new firms grow and seek to raise capital from financial investors in general and venture capitalists in particular. Indeed, the development of existing small firms has been covered extensively in both the theoretical and empirical literature. In contrast, there is relatively little systematic understanding of how new firms come to life. For instance, questions such as "how much work experience do founders of new firms possess?" and "what determines the capital structure of these firms at birth?" require further investigation.

Our main concern is the capital structure of newly founded firms. New start-ups typically start small , and their survival depends on the business skills of their owner managers as well as on the financial resources they can acquire. In this light, we re-examine the determinants of capital structure by looking at a sample of newly formed firms. In addition to the standard variables associated with capital structure, such as company size and profitability, we investigate the role of the working experience of first time entrepreneurs; and also the consequences of family support, when it applies.

The literature suggests that prior working experience is an important part of the individual's human capital and may increase the probability of success (Colombo, Delmastro and Grilli, 2004). First, it leads to the acquisition and development of management skills. Second, it affects the ability to identify business opportunities and

thus makes search more effective. Third, it enhances visibility within the business community (including potential providers of funds) and thus facilitates the process of raising capital for the establishment of a new company.

By capital structure we refer to the composition of debt and equity of firms. Debt includes various types of loans, to be served and reimbursed. Equity represents the funds invested by the owners. In principle, equity is a permanent source of capital. Owners of small firms signal their quality by investing a large share of their personal wealth as equity in their own company, which they frequently control and where they also serve as active managers[1]. Since in a privately held firm the owners (insiders) are expected to have better information than outsiders, their willingness to invest their own funds is a clear signal of self-confidence and commitment.

The academic literature is rich in contributions on agency problems and their implications for corporate finance. The empirical research that followed, however, focused mainly on large public corporations and ignored that corporate governance and agency issues in small private firms are different, as observed by Coleman and Cohn (2000) and Lopez-Garcia and Aybar-Arias (2000). For instance, in addition to the classical agency problems, minority shareholders also suffer from the lack of liquidity generated by the absence of a ready market for their holdings [2].

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[1] See Reynolds (1977) and Åstebro and Bernhart (2003). Moskowitz and Vissing-Jørgensen (2002) maintain that the return on private equity is not higher than that on public equities. In their opinion this is surprising, given that entrepreneurial private equity investments are highly concentrated and that households with private equity investments hold over 70% of their private asset holdings in a single company. They conclude that non-pecuniary benefits must compensate for this gap in declared returns and seem to overlook one crucial element: that the benefit for the private investor also includes the spread between debt service *without* and debt service *with* private involvement. Put differently, the fact that the returns on private investment are the same as those on debt should not make us forget that debt would be have been more expensive in the absence of private investment/commitment.

[2] Of course, the lack of liquidity raises the cost of outside equity for small private firms. Moreover, as argued in Shleifer and Vishny (1997), it favors the expropriation of minority shareholders by majority shareholders. For this reason, most equity in small private firms ends up by being owned by family and friends, who constitute the board and are the active managers. Not surprisingly in this case the board is *de facto* redundant.

The rest of the paper proceeds as follows. In the next section we briefly survey the literature on the capital structure of small firms. This section is followed by a description of the small business institutional environment in Italy. Section 4 describes the sample which forms the object of our empirical investigation. Section 5 defines the main variables in the analysis and how they are measured in this study. Section 6 contains some descriptive statistics. In section 7 we present our empirical results about the determinants of capital structure, which are then extended in section 8. Section 9 concludes.

2. The literature on the capital structure of small firms

According to the accepted view, the optimal capital structure depends on the cost of debt compared to its benefits. The former includes two components: agency costs and financial costs, which may ultimately result in bankruptcy. On the other hand, debt servicing reduces taxable income.

The trade-off between the cost of the expected financial outlays (including bankruptcy) and the benefits that emanate from the tax savings related to indebtedness defines the optimal capital structure of the firm. Modigliani and Miller (1958) explained how mature, publicly held firms with a large physical and productive capital. should select the combination of debt and equity that minimizes the cost of capital in the presence of low transaction costs and efficient capital markets.

However, when transaction costs and information asymmetries are substantial, the cost of issuing debt quickly increases, and may well become prohibitive for small firms. As a result, small firms rely heavily on bank loans, trade credit and in some cases also government subsidized lending. Equity financing is also expensive; since potential outside shareholders are relatively poorly informed and tend to underprice the shares. Therefore, when raising equity, insiders prefer to do so in the forms of retained earnings rather than looking for new shareholders.

These insights have been analyzed by Berger and Udell (1998), who develop a life cycle theory of the firm and argue that companies use different mix of financing

in different growth stages. When they are small, young companies suffer from a high informational disadvantage, which makes it hard for them to obtain funds from external sources. Hence, they tend to rely on "inside financing". Consistent with Myers (1984), Berger and Udell also claim that when the owners turn to external sources, they start with debt rather than equity, because debt implies a smaller loss of control on ownership. Along the same lines, Chittenden, Hall and Hutchinson (1996) study some 3,000 British firms and find support for the owners' reluctance to dilute ownership (the so-called "pecking order" theory put forward by Myers): profitable small firms fund their expansion primarily by retained earnings, while less profitable firms rely more on short-term bank loans [3].

Put differently, smaller firms tend to rely on internal sources of funds, while larger firms are more likely to use public equity (Cole and Wolken, 1995; Gregory et al., 2005). And when negotiating their debts, smaller firms react to the information asymmetry problems by accepting short term loans, which are less risky for the lender, and thus cheaper for the borrower; while larger firms exploit their higher credibility to borrow long term.

3. The small business environment in Italy

Compared to many other Western countries, Italy exhibits the largest share of working population categorized as self-employed or as business owners: 23% of the labor force is self-employed and another 44.5% works in small firms. Earlier researchers explained this unique Italian phenomenon by referring to the diminishing role of scale economies (and the increasing role of non-standardized production). Others have called attention to the tax advantages that accrue to autonomous workers and entrepreneurs. Rapiti (1997) added the relative advantage of small firms in managing turbulent industrial relations.

Italy also exhibits a remarkable stability in the number of newly formed small businesses. In fact, in Italy all political parties have always been supportive of small

[3] See also Michaelas, Chittenden and Poutziouris (1998), who study a sample of small US firms.

businesses, artisan production and self-employment. Since the 1950's self-employment and small business ownership were encouraged by the provision of subsidies, tax immunities, assistance in pension payments and also by specific legislation targeting start-ups, including lenient regulation[4].

4. Sample selection

The major source of information on the demography of Italian firms is the 'Registro delle Imprese' (Business Register), managed by the provincial Chambers of Commerce. It lists all existing firms by legal status and also includes some information about the owners and the members of their boards of directors. All new firms are required by law to register and all firms that cease to be active are de-listed.

We use information from a survey conducted in 2005 on a set of companies contained in the Business Register. This dataset has three advantages compared to other datasets on entrepreneurs. First, it contains information about the number of years of work of the founder before he became an entrepreneur. Second, it includes an easy to understand measure of size and breaking up by industry. Third, it contains detailed information on seven categories of funds. The categories for equity are owner's savings, family funds, family firm equity position and external equity. For debt we have separate information about bank loans, trade credit and government loans.

The sample was selected as follows. We gathered information on 828 Northern Italian[5] firms that had entered the Business Register between 1992 and 2004 and that were still the Register in 2004. Thus, our definition of youth is implicitly "12-year old

[4] For instance, part of the 'Statuto dei Lavoratori' is not applicable to firms with less than 15 employees, thereby making it easier for them to fire employees in case of redundancies. Another form of privilege in the labor market comes from the 1994 law that created what are currently known as 'Contratti di Formazione Lavoro', whereby the cost of hiring apprentices is drastically reduced. Another example is a law from 1982 that provides soft loans that cover between 40 and 50 percent of total investment (of small and medium firms) at rates that are 70 percent lower than the market rates.

[5] Three regions were considered: Piedmont, Lombardy and Veneto.

or less". From these 828 firms we retained only those which in 2004 had had at least 5 employees if they belonged to the service or construction sectors and at least 10 employees if they were in manufacturing . We then got in touch with the owner-manager of these 286 firms and asked them to answer a few questions about his/her "conversion" from an employee to a business owner[6]. Only 193 entrepreneurs responded (a response rate of 67.5 %). Some of them did not provide complete information about all the variables of interest, so that only 178 observations could be employed for the purpose of the present analysis.

Survey data have the advantage of covering more precisely the question at the core of this paper. Nevertheless, like many other surveys, our observations suffer from a few potential weaknesses. First, we cannot be sure that the respondents understood all the questions and that, if they did, they answered all of them truthfully. Second, we cannot rule out the presence of a non-response bias: One can never be sure whether the answers of those who responded are indeed representative of the views of the general population. Finally, the information that we have is subject to the survival bias. The information that we use is drawn from the successful firms, that is, from firms that existed in 2004. Firms that opened in the 1992-2004 period but closed before the survey was conducted were not interviewed.

5. Measuring the variables

A list of the variables that we use appears in **Appendix 1**. The definition of some of them merits attention.

- Risk is described by the actual rate of failure of firms with five or more workers during the year before the firm was founded. The presumption is that the actual average failure rate is known beforehand to those who plan to found new firms.

[6] If the firm had a single owner we directed the questions to the owner-manager. In multi-owner firms (21% of the sample), we identified one person as the primary owner. The primary owner is defined as the one who owns most of the equity. In general he is also the person who runs the business on a day-to-day basis.

- Our measure of experience is the number of years that the person worked full time as an employee before deciding to switch. The numbers were rounded up or down in the usual way.
- The age of the firm since it was registered and started to operate is also expressed in years.
- Information about the number of employees is used as a proxy for the size of the new firm, which on average turns out to be 6-year old [7]. Reports on the number of employees are considered to be more accurate than financial measures such as sales or size of assets[8].
- The new firms themselves are classified into eight different industry groups: Manufacturing; Construction (including real estate); Business services (maintenance, cleaning etc.); Hospitality (e.g. lodging, catering and restaurants); Commerce (retail trade in products such as furniture, clothing, durable goods and electronics); Personal services (gardening, education, beauty industry, house repairs); Transportation (shipping, packaging and storage); Miscellaneous services.

6. Descriptive Statistics

As noted earlier, and unlike what happens among large public firms, small companies do not usually have access to the public debt market. They resort to personal and family funds for equity and to loans from banks and suppliers (trade credits). Berger and Udell (1998) and others noted that small firms often have difficulties even in obtaining bank loans. Presumably, they establish a reputation only with the passage of time, so that only at a later stage it eventually becomes easier to borrow and thus increase financial leverage.

Table 1 presents the descriptive statistics of the companies and the owners included in the sample. As expected, Italian young companies are fairly small, with

[7] As mentioned in the previous section, the sample covers 178 firms aged between 12 and 1 years.

[8] In our survey we find that 46.5% of the firms employ a family member for at least 16 hours a week. We do not include them as employees in our measure of firm size.

an average number of employees of less than 16 units and a limited number of owners: The average company has 4.7 owners and only 1.5 owners take an active management role.

The capital structure is presented in **Table 2** Equity constitutes 65% of total financial resources and debt the remaining 35%. The standard deviation for both is slightly above 16, indicating that firms are financially diversified, especially when it comes to debt. Although the median values of overall equity and total debt are close to the mean, these statistics differ when we examine the components of debt and equity, as a result of the fact that some firms do not use certain equity or debt sources at all. Table 2 also provides information about the use of short term credit. It shows that, like established firms, new firms use trade credit as a fairly large source of finance[9].

In line with earlier theories we note that the main source of equity is the founder's own investment (about 44% of the total), whereas families provide some 9% of the total funds (about 13% of equity capital). However, as noted in **Table 3,** less than half of the entrepreneurs (9.13/19.35) obtain equity contribution from their families. Another 27% (53 owners out of 193) of equity is contributed by family firms.. Still, when positive, the contributions of family firms play a substantial role (almost 19% of overall financial resources). Outside investors such as unrelated industrial groups, financial institutions and venture capitalists provided a little above 6% of the funds in total. But when they are involved (46 cases) their contribution is very significant (24%).

As noted, on average debt constitutes about 35% of total capital, with banks contributing almost 20% (over half of total debt). As a matter of fact, Italian banks are major providers of funding across the board. Close to 85% (19.74/23.26) of the startup firms receive bank loans. Similarly, around 80% of the firms receive trade

[9] Trade credit – including factoring – plays an important role in Italy, the first market worldwide in relative terms (with respect to GDP) and the third in absolute terms. In 2001 factoring flows were about 10% of GDP. According to Benvenuti and Gallo (2004) the use of factoring is more common among transportation, mechanics, energy and communications. They also report about the use of "indirect factoring", another Italian peculiarity whereby firms not only transfer their own credits to factoring companies, but also their suppliers'.

credit. An interesting source of fund is government's loans. About one third of the firms obtained subsidized loans from the various branches of government.

The capital structure of firms in the various industries is summarized in **Table 4.** The highest share of overall equity in total funding appears in the transportation sector (74%). By contrast, the manager's own equity position is lowest in manufacturing, perhaps due to the need for larger amounts of physical capital. It is interesting to note that manufacturing firms are also more successful in attracting outside equity funds (almost 15% of total funds). In other European countries only 5%-10% of all start-ups have received capital contributions from third parties. Manufacturing firms are also different in their debt composition in that they obtain a larger share of funds from government loans (5% of total resources).

7. Empirical analysis

We try to explain capital structure in terms of characteristics such as age, size, risk, etc. The variables are defined in the appendix. The general equation takes the following form:

$$LEV = a + b_1SIZE + b_2AGE + b_3PRF + b_4RISK + e \qquad (1)$$

We use two measurements of leverage. One refers to the ratio of total debt to total assets (LEV1); the other to the debt/equity ratio (LEV2).

We use the number of employees as a scale variable (see also **table 5**). This is a more reliable measure than sales: It is more difficult to under-report the number of employees than the exact amount of revenues. Consistently with the line of reasoning presented earlier, the size variable is expected to be positively linked to the capital structure. This prediction is confirmed in columns 1 and 2 of the Table, which illustrate that larger new firms do have a higher component of debt in their liability structure than smaller firms.

According to earlier studies, firm age is another variable that is expected to affect the capital structure: Older firms supposedly suffer less from opaque information vis-à-vis lenders and are therefore more likely to enjoy better credit terms. As shown in

the first column of Table 5A, however, this variable does not have a significant impact in our sample and therefore has been dropped in the subsequent equations.

The variable "risk year" in Table 5A is the actual failure rate of firms in the three regions during the year that preceded registration. We expect the "risk year" variable to be negatively associated with leverage: More risky firms face fewer debt providers when they begin operations, which is what the estimates confirm.

As for profitability, simple return measures are not useful in our case. Few firms in this stage produce positive accounting profits. Instead, we prefer to use the annual income of the owner-manager as an indicator of profitability. As suggested by earlier research, we expect profitability to be negatively related to leverage: consistent with Myers's "pecking order" hypothesis[10], profitable firms use retained earnings instead of external resources. In our case (column 2 in table 5A), the variable is indeed negatively related to the debt/asset ratio, although hardly significant.

In panel B of Table 5 the independent variables are the same as in panel A, but leverage is now measured in terms of debt/equity ratio (LEV2). While the absolute values of the coefficients are different, the directions of causality are the same. That is, size carries a positive sign, while risk carries a negative sign. Once again, firm age and profitability do not have a statistically significant impact on leverage.

8. Extension: The Impact of Earlier Work Experience

In order to extend the analysis we add three variables to equation (1):

$$LEV = a + b_1SIZE + b_2PRF + b_3RISK + b_4EXP + b_5GOV + b_6FF + e \qquad (2)$$

As argued earlier, the previous working experience of the owners is expected to be positively correlated with leverage. The understanding of market processes and the web of links that are created before his conversion to entrepreneurship help the

[10] As mentioned earlier, this hypothesis suggests that the founders prefer internal over external financing in order to retain ownership and control. Furthermore, by using less debt, owners can reduce the risk of financial distress and avoid the operating restrictions that usually come with higher leverage.

founder to identify and obtain debt sources for his new firm. Hence, in column 3 of tables 5 we take into account the owner's previous experience (in years). As expected, its impact is positive and significant: more experienced entrepreneurs obtain more loans and use higher leverage. Put differently, the effect of previous work experience is an important way to acquiring human capital (including reputation) that is directly relevant to the acquisition of the funds needed to start a new company.

In column 4 of Table 5 we add a dummy variable for government loans. If the firm had used government loans as a source of capital, one was recorded; zero otherwise. It is worth emphasizing that the weight of government loans in the overall liability structure is very small, as government loans add only about 6.5 percent to total liability of the 37 percent of firms who manage to get it[11]. It appears, however, that firms that obtain subsidized government loans also get significantly higher amounts of bank loans.

There are three possible explanations for the high positive effect of government loans on leverage. First, it could be that the lending bank realizes that firms who passed a screening process by government agencies have better than average chances to be successful. Second, maybe the bank views government loans as a signal that the owner-manager of the firm knows his way around the bureaucratic maize and this will enhance the probability of success. A third possible explanation is that even though the government contribution usually amounts to a small share of the assets, it can be perceived as similar to equity: the government is unlikely to initiate bankruptcy procedures for firms who fail to repay in time and is more generous in granting extensions. This, in turn, reduces financial risk, not unlike an addition to equity.

A frequent finding in the literature is that the probability of business ownership is higher among the sons and daughters of business owners (Lendz and Labland, 1990; Hout and Rosen, 2000). These studies generally maintain that this is due to the acquisition of general business experience in family-owned businesses or to some specific experience. However, when looking at the US experience, Dunn and Holtz-

[11] Many Italian entrepreneurs seem to know pretty well how to take advantage of the generosity of the Italian government. This is also reflected in the capital structure of start-up firms, some of which include close to 7 percent of their liabilities in the form of government loans.

Eakin (2000) not only find that founders' relatives do not take on a managerial role at an early age – a phenomenon that is also confirmed but our Italian data – but that self-employed sons follow their fathers' occupation in only 32% of the cases. Once again, our findings seem to support the American experience: only 28% of the business owners in our sample had worked full time for their family business before they started their own firm. Most have gained their work experience in unrelated firms. As a matter of fact, in the course of our interviews we have observed that the owners of firms frequently encourage younger family members to form their own new company, rather than to work for the existing family firm and wait for control to be transferred to them sometime in the future. Nonetheless, older family companies sometime do contribute some of the equity in the form of a minority share. And parents may assist younger family entrepreneurs by using their own connections to provide inputs and ease the access to credit.

In particular, the data contained in our sample emphasize the role played by two distinct sources of equity. The first is a personal investment carried out by a relative into the company run by a young family member. The second is an investment made by a family firm (as long as the family already runs an independent business). Thus, in column 5 of table 5 we add another dummy variable, FF, equal to one if a family firm has invested in the new venture; zero otherwise. The coefficient of this variable is negative but not statistically significant.

9. Conclusions

This paper presents two major findings about newly founded firms. First, it appears that their capital structure is determined by their size, but not by their age: large firms do receive better terms from the lending banks, but age is virtually irrelevant as for the capital structure, contrary to Berger and Udell (1998). Similarly, larger firms also make larger use of trade credit. The observation that the larger firms are relatively more indebted than the small ones is in line with earlier research by Cole and Wolken (1995), as well as by Gregory, Rutherford, Oswald and Gardiner (2005).

Second, the length of the founder's previous working experience (measured in years) is positively related to the debt/equity ratio of his newly founded firm: more

experienced entrepreneurs obtain more loans from banks and use higher leverage. We also observe that the mere existence of government loans in the liability structure contributes positively to the size if the leverage: firms that obtains subsidized government loans also get larger loans from private financial institutions.

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Appendix - Definition of the variables

LEV1	A measure of the leverage defined as total debt over total assets.
LEV2	A measure of the leverage defined as total debt over total equity
PRF	A proxy for profitability measured as recent, 2004, annual income from ownership and management of the business
EXP	Number of years the manager-owner spent as an employee before opening the present firm.
AGE	Number of years of ownership and operation of present firm
HRS	Number of hours worked per week, on average, as owner-manager.
IND	**MAN**, manufacturing **CON**, building and real estate **BUS**, business services, maintenance, cleaning, printing, supplies **ACR**, hospitality, lodging, catering and restaurants **COM**, retail: furniture, food products, clothing, household goods **PES,** personal services: education, beauty industry, repairs, etc. **TSC,** transportation, shipping, packing and storage
SIZE	A measure of scale defined as the number of salaried (non-family) employees in the firm
EAGE	The age of the entrepreneur, in years.
RISK	Actual failure rate of small firms in the year prior to establishment of the firm.
ONR	Number of active owners of the firm.
FUNDS	All funding sources are expressed as percentage of total assets, using the first financial documentation following registration. 1. Personal equity out of owners' own funds 2. Equity investment obtained form other family members 3. Equity investment by a family-related firm 4. External equity from institutions including venture capital 5. Loans made by banks or bank subsidiaries (mortgage, leasing) 6. Government loans and assistance program (all levels of government) 7. Other loans such as trade credits, factoring and customer advances

COLL A 0-1 variable. One if collateral of any sort is pledged according to notes in the financial reports.

TABLES

Table 1 – Descriptive statistics of the owner and of the firm

	N obs	Mean	Std dev.	Median
Years as an employee	193	8.11	3.75	8
Age of the firm	193	6.74	3.88	6
Hours worked per week	193	45.56	19.06	50
Number of employees	192	15.67	14.03	11
Age of the active owner	189	45.83	11.65	49
Number of owners	193	1.47	0.75	1
Income of the owner (thousand euro, per annum)	193	58.20	27.76	50.69

Table 2 – Descriptive statistics of the capital structure (as a percent of total assets)

		N	Mean	Std dev.	Median
Total equity		178	65.26	16.19	65
Sources of equity:	Own funds	178	44.36	18.96	40
	Family funds	178	9.13	11.55	0
	Family firms funds	178	5.56	10.11	0
	Outside investors	178	6.21	11.50	0
Total debt		178	34.74	16.19	35
Sources of debt:	Government loans	178	2.50	4.45	0
	Bank loans	178	19.74	13.41	20
	Trade credits	178	12.50	10.34	10

Table 3 – Sources of funds by occurrence

	Total			By occurrence		
	N	Mean	Std dev.	N	Mean	Std dev.
Own funds	178	44.36	18.96	178	44.36	18.96
Family funds	178	9.13	11.55	84	19.35	9.19
Firm funds	178	5.56	10.11	53	18.68	9.91
Outside investors	178	6.21	11.50	46	24.02	9.09
Total equity	178	65.26	16.19	178	65.26	16.19
Bank loans	178	19.74	13.41	151	23.26	11.38
Government loans	178	2.50	4.45	66	6.74	4.99
Trade credit	178	12.50	10.34	145	15.34	9.35
Total debt	178	34.74	16.19	172	35.95	15.08

Table 4 – Capital structure by source of funds and industry (means , percent of assets)

	N	Total equity	Own	Family	Firm	Outside funds	Total debt	Gov loans	Bank loans	Trade credit
ACR	33	58.88	37.25	14.50	6.42	0.71	41.08	2.33	20.42	18.33
BUS	18	61.83	41.56	8.39	3.39	8.50	38.11	3.00	23.61	11.50
COM	34	68.94	52.19	4.71	6.84	5.19	31.10	2.32	17.74	11.03
PES	20	66.15	53.00	8.80	3.85	0.50	33.85	1.75	22.50	9.60
TSC	17	73.76	55.65	6.94	1.76	9.41	26.24	0.47	14.94	10.82
MIS	24	63.33	40.75	6.13	7.54	8.92	36.67	2.79	21.67	12.21
CON	20	69.11	47.21	10.79	9.95	1.16	30.89	1.26	13.58	16.05
MAN	27	61.72	30.20	13.36	3.44	14.72	38.28	5.16	22.64	10.48
Total	193	65.26	44.36	9.13	5.56	6.21	34.74	2.50	19.74	12.50

Table 5 – Determinants of the capital structure
Panel A – Dependent variable: debt/ assets ratio
(t values in parentheses)

Firm's age (log years)	-0.351 (-0.15)				
Firm's size (log # employees)	3.983 (1. 6)	6.770 (2.44)	7.860 (2.79)	5.446 (1.97)	5.522 (2.00)
Risk year	-1.094 (-1.64)	-1.104 (-1.77)	-1.018 (-1.64)	-1.357 (-2.25)	-1.492 (-2.43)
Profitability (income thousand euro)		-0.089 (-1.39)	-0.081 (-1.27)	-0.063 (-1.04)	-0.075 (-1.20)
Owner previous experience (years)			0.631 (1.90)	0.595 (1.87)	0.603 (1.89)
Government loans dummy				9.731 (4.05)	10.192 (4.19)
Family firm involved dummy					-2.871 (-1.12)
Constant	30.125 (4.34)	27.835 (4.16)	19.183 (2.38)	22.462 (2.89)	24.169 (3.06)
Number of obs	173	177	177	177	177
R-squared	0.059	0.076	0.095	0.174	0.180
Adj R-squared	0.042	0.060	0.074	0.150	0.151

Table 5 – Determinants of the capital structure
Panel B – Dependent variable: debt/ equity ratio
(t values in parentheses)

Firm's age (log years)	-5.334				
	(-0.72)				
Firm's size (log # employees)	11.253	15.528	19.912	14.054	14.411
	(1.62)	(1.81)	(2.30)	(1.63)	(1.68)
Risk year	-5.722	-5.222	-4.876	-5.698	-6.326
	(-2.78)	(-2.70)	(-2.55)	(-3.03)	(-3.32)
Profitability (income as entrepreneur, thousand euro)		-0.209	-0.178	-0.135	-0.187
		(-1.06)	(-0.91)	(-0.71)	(-0.97)
Owner previous experience (years)			2.537	2.450	2.487
			(2.49)	(2.46)	(2.51)
Government loans dummy				23.612	25.761
				(3.15)	(3.41)
Family firm involved dummy					-13.383
					(-1.69)
Constant	71.665	61.264	26.468	34.425	42.383
	(3.35)	(2.96)	(1.07)	(1.42)	(1.73)
Number of obs	173	177	177	177	177
R-squared	0.081	0.087	0.118	0.167	0.180
Adj R-squared	0.065	0.071	0.098	0.142	0.151