
SELECTED CONSTRAINTS TO DEVELOPMENT OF ENTREPRENEURSHIP IN POLAND

WIOLETTA CZEMIEL-GRZYBOWSKA*

Abstract

Small enterprises are a key source of employment, economic growth, innovation and productivity in advanced as well as emerging economies and as such they are a crucial sector of an economy. Access to financing plays an important role for the small enterprise sector in any economy. Based on previous empirical studies, it is known that small enterprises tend to suffer from limited access to financial resources across the globe. This study aims to investigate the current state of small enterprise financing although the data within the Polish context appears to be limited. While not every small enterprise has an opportunity to grow at a fast pace and turn into a much bigger entity, most owner-managers are concerned about financing their business, in order to sustain their business operations. The reality is that every business can experience some sort of financial trouble. Small enterprises are the ones that require more attention as they constitute a vital part of the Polish economy, their survival rate can have a significant impact on the economy. As such, analysis of small enterprise financing is called for due to the high vulnerability of these businesses.

JEL Classification: I230, J240, M130, R510

Keywords: enterprise, finance, business, small-medium Sized Enterprise

Received: 28.04.2014

Accepted: 26.06.2014

INTRODUCTION

In a turbulent socio-economic environment, such as the one facing contemporary enterprises, it is harder and harder to seek new sources of competitive predominance. Nowadays, it is not enough to adapt to the environment. It is essential to be able to change quickly, even more quickly than competitors. An enterprise is only able to survive on the condition that there is constant growth. Only dynamic growth, consistent with customer expectations, oriented towards innovation and new technologies, guarantees generation of profit. Nevertheless, an enterprise, in order to develop, should optimally use its all tangible and intangible assets and maximize use of all sources of external financing of its activity. Unfortunately, the most popular source of financing for small and

medium enterprises remains their own resources. Hence, this research was conducted on the sample of the class of micro, small and medium enterprises which included only enterprises benefiting from external sources in order to estimate the structure of external capital sources in the examined industrial, trade and services sectors for small and medium enterprises.

The recent global financial crisis affected, in one way or another, credit flows to all sectors in economies (Hodorogel, 2009, p. 79-80). Further to this fact, small enterprises have been considered as most affected by the economic climate due to the effects of this credit crisis (Hodorogel, 2009, p. 80-88).

* Ph.D. Wioletta Czemieli-Grzybowska, Białystok University of Technology, Wiejska Street 45A, 15-351 Białystok, e-mail: w.grzybowska@pb.edu.pl.

The purpose of this study is to address some of the issues that surround small enterprise financing in general. Firstly, there is very little available data on the type of financing used by smaller enterprises (Cosh & Hughes, 2000, p. 22-30), and it is not uncommon to find small enterprises having liquidity problems (Drever, 2006, p. 56-70). Secondly, the existence and reasons for a 'finance gap' among smaller enterprises have been on the research agenda for decades, ever since the Macmillan Report (1931, p. 34-80) and more recently investigated by Watson (2006b) and Hutchinson and Drever (2007, p. 60-76). Thirdly, it is widely held that banks are the main source of finance for small enterprises (Cosh & Hughes, 2000, p. 22-30). As a consequence, bank assessment of the creditworthiness of loan applicants and their resulting decisions to grant credit (or not) are important for smaller enterprises, as has been noted by Jacobson, Linde and Roszbach (2005, p. 43-75).

It is envisaged that this study will contribute to the existing literature on small enterprise financing, with an emphasis on financial constraints in the Polish small enterprise sector but not limited to it. Analysis of the data will present an insight into the actual reasons for constraints among small enterprise associated with debt financing arrangements. As a result, it will make a contribution to the disputes over the effectiveness of small enterprise-bank lending arrangements found in the research literature.

To address the research questions, this article is organized in the following manner. First, a concise review of relevant literature follows this introductory section and specifies more precisely how the research conducted here adds to the existing body of knowledge. This is followed by a conceptual discussion of small enterprise finance behavior and an investigation of the possible effect of the small business-bank lending process on access to financing. The work concludes with a presentation of the empirical findings and a discussion of implications, limitations, and directions for future research. The paper presents only part of the research. As such, the need for analysis of small enterprise financing arises due to the high vulnerability of these businesses.

DATA AND LITERATURE REVIEW

Historically, the theory of capital structure represents one of the most extensive literatures in finance. In the context of large public firms, the classical works of Modigliani and Miller (1958, p. 261-297)

– subsequently amended by many researchers, with notable seminal papers including the works of Miller (1977, p. 261-275), Myers (1984, p. 575-592), Myers and Majluf (1984, p. 187-221) – and others have debated the question of capital structure as it relates primarily to firms about which information is relatively abundant. However, as Romano, Tanewski, and Smyrniotis (2001) point out, new and small firms do not usually operate in the public equity and debt markets that are typically the paradigm of financial theorists.

The informative materials comprise reference scientific studies from the international specialty literature, documents and reports of different research projects (Czemieli-Grzybowska, 2011, p. 45-82), the author's own research works inclusively, statistical data and information.

Due to the prominent role of such firms in the economy, the source of finance to support their business is a crucial question. In particular, Storey (1994, p. 12-30) suggests that company growth is affected by the availability and cost of funding. The availability of finance for investment is vital to the sustainability and viability of small and medium-sized firms.

Usually, small businesses are likely to suffer most from information and incentive problems and thus are particularly constrained in their capacity to obtain external financing (Berger et al. 1998, p. 613-673, Czemieli-Grzybowska, 2013, p. 1-12). For example, Carpenter et al. (2002, p. 298-309) show empirically that the growth of small firms is constrained by the source of finance. Therefore, much of the attention surrounding the growth of small and medium-sized firms is affected by capital structure decisions (Gregory et al. 2005, p. 382-392).

While there is a large and unresolved debate in the literature over the existence and materiality of financing constraints, access to financing may also be the result of owners' choices. Brierley (2001, p. 41-86), for example, suggests that some firms may not be able to access the capital they seek because they seek the wrong form of capital. He maintains that higher risk firms should seek equity capital and ought not to depend on bank financing. Likewise, Kon and Storey (2003, p. 37-49) define discouraged borrowers as firms that do not apply for financing out of a fear that they will be turned down.

Lopez-Gracia and Sogorb-Mira (2008, p. 117-136) also addressed the debate, noting that factors

associated with the observed capital structures of SMEs include growth opportunities, size and age of firms and that SMEs ‘clearly behave differently to large firms where financing is concerned’ (p. 117). Uzzi and Gillespie (1999, p. 107-126) added that social capital and the inseparability of entrepreneurs from their businesses make obtaining financing for small enterprises a different undertaking than securing capital for major corporations. To the extent that this is true, previous studies of financing preferences may be lacking key variables associated with entrepreneurs’ goals and preferences. It is therefore worth considering what factors might influence SME owners’ financing preferences.

A further contribution of this article is that it uses actual applications for various forms of financing. Most prior empirical studies of the capital structure of SMEs (for example, Baldwin, Gellatly & Gaudreault, 2002, p. 120-134; Ben-Ari & Venortas 2007, p. 475-488; Berggren 2009, p. 309-323) employ data based on the types of finance firms have actually obtained. However, applications for various forms of financing are often turned down; thus, funds actually obtained can differ from funds for which firms had originally applied, thereby obscuring information about preferences. By relying on applications for financing, this work averts this problem and provides a better assessment of financing preferences.

METHODOLOGY AND CONCEPTUAL RATIONALE

An analysis of international literature concerning the sources of external capital (including public support) in small and medium enterprises indicated that the main priority of building an optimal capital structure by entrepreneurs is an attempt to apply the theory of this area. Owners and managers try to apply the knowledge of benefits resulting from using external capital in an enterprise. Unfortunately, common access to bank loans does not apply to small and medium

enterprises. The loaning sector is reluctant towards the SME sector, because the costs of monitoring credit proceedings for small and medium enterprises are higher than for large enterprises in relation to the amount of debt in the bank. Furthermore, the procedures for granting new loans are accompanied by high risk because of a low rate of these enterprises’ survival. Among different sources of financing, public support directed at the SME sector is worth noticing. It is commonly perceived as an important source of improvement of the competitive market position of an enterprise. Simultaneously, public support is depicted in the context of economic policy as a way of realizing the macroeconomic objectives of the state. The aim of the author was to concentrate on presenting public support not from the angle of the state but of the enterprise, presenting the way that the state may influence financial effects of enterprises benefiting from public support. Hence, the analysis will take into consideration the financial standing of enterprises both before and after receiving public support. The publication systematizes functioning conditions of small and medium enterprises in an innovative way – initially identifying their definitional connotations, emphasizing the role of entrepreneurship in the development of the SME sector. This entails a detailed presentation of the kinds, forms and principles of granting public support, including national and community regulations. It was the author’s intention to connect theoretical knowledge in the area of financing for small and medium enterprises, especially public support, with practical aspects of using it in order to improve the financial standing of an enterprise. The book especially emphasizes a presentation of the correlation between expended public support and development of an enterprise. The analyzed period 2000-2009 includes both data concerning establishment of new enterprises and barriers of their functioning; nevertheless, it also refers to supply and demand barriers of the already existing enterprises.

Table 1: Assumptions concerning dependence of the analyzed variables in accordance with the QCA model

No.	Dependent variables	Independent variables	Measurement rates
1.	Membership in trade or industry		Entrepreneur questionnaire
2.	Membership in micro, small or medium-sized enterprises		Entrepreneur questionnaire
3.	Period of enterprise activity		Entrepreneur questionnaire
4.	Ways of establishing enterprises		Entrepreneur questionnaire
5.	Markets		Entrepreneur questionnaire
6.	Profit margin		Entrepreneur questionnaire
7.	Debt of enterprises		Entrepreneur questionnaire
8.	Financial liquidity of enterprises		Entrepreneur questionnaire
9.	Contribution of the SME sector in creating GDP		GUS data: 2000-2009
10.	Number of employees in the SME sector		GUS data: 2000-2010
11.	Gross turnover profitability of enterprises		Gross turnover profitability rate with division into voivodships – GUS data 2002-2010
12.	Number of created enterprises		GUS data: 2000-2010
13.	Number of active enterprises		GUS data: 2000-2010
14.	Number of bankrupting enterprises		GUS data: 2000-2010
15.		Value of obtained public support by the SME sector (scope of support)	Boundary variable
16.		Object of obtained support to the SME sector	Boundary variable
17.		Form of public support	Boundary variable
18.		Period of obtaining public funds	Boundary variable
19.		Effectiveness of public funds in an individual enterprise	Boundary variable
20.		Number of enterprises in the micro, small and medium sector	Boundary variable
21.		Contribution of public funds in external sources of financing	Boundary variable

Source: Own elaboration based on own research of 2012

To conduct the analysis, the scheme of scientific methodology based on the principles of *Qualitative Comparative Analysis* – QCA was applied, together with some elements of quantitative research. As a result of the conducted research, the author identified the phenomena and tendencies which require a more detailed interpretation on the basis of the theory of small and medium enterprises, entrepreneurship and public support, but also the functioning prosperity of the SME sector in Poland (the Delhi method, cross impact analysis).

The subject of the research is a sample of 1600 enterprises of the SME sector (100 enterprises from each voivodship). The stratified sample required division into 3 subgroups (micro, small and medium-sized). The population of the SME sector enterprises included 3,874,683 entities. 42% of them included industry and building engineering, 58% included commerce and services. The choice of strata was based on the structure of capital expenditure in the SME sector in 2009, which was as follows: micro – 31.57%, small – 23.14% and medium-sized enterprises – 21.40% (Report 2011). In connection to this, a sample

was chosen in which the balance for small enterprises was 0.23, micro – 0.32 and medium-sized – 0.21. The choice of the strata was based on capital expenditure in the year 2009, because it is the most current year that offers detailed information about the financial situation of small and medium enterprises.

EMPIRICAL RESULTS

I have conducted a survey on small business finance in Poland, which was released in 2010. This survey included 16 questions and the following rating scales were used to elicit responses: dichotomous and category. The coverage of the survey offers an opportunity to explore the data for the analysis of small business finance in Poland. In total 1600 businesses expressed their views on various dimensions of small business finance. The analysis of the survey responses will incorporate the usage of descriptive statistics. The first, 94.7% of the respondents, were small business owners who expressed their opinions on the current state of small business finance. The second, 82.2% of the respondents have indicated that they principally used the Big Four banks (PKO BP, PeKaO SA, CITY, Kredyt Bank) for their business banking needs. In general, 28.1% of small business owners reported that they were not satisfied with the products and services offered by their current financial institution; 17.7% reported that they are somewhat satisfied with the products and services offered by their current financial institution. Next, 66.2% confirmed that they had experienced a change in the terms or policies of their financing arrangement in the past 12 months. Further to this information, 73.1% of the small business owners surveyed explained that they had experienced an increase in fees, charges and interest rates in the past 12 months. In addition, 92.7% confirmed that they had not changed banks/financial institutions in the past 12 months.

Majority of the respondents - 73.4% - had indicated that access to affordable credit/finance was very important to operate their small business on a day to day basis. In addition, 64.4% confirmed that access to affordable credit/finance was very important to expand their business. A significant number - 42.3% - of the respondents reported that they had been unsuccessful in getting access to credit/finance in the past 12 months due to the lack of security. A dominant number - 42.4% - of the respondents would use more credit/finance to seize expansion opportunities. In fact, 37.9% would use credit/finance to fund growth and 38.7% would use credit/finance to improve cash flow.

The vast majority confirmed (94.3%) that a competitive banking and finance industry is very important for small businesses. A vast majority of the respondents - 85.3% - indicated that small businesses in Poland currently do not have access to a competitive banking and finance industry. A dominant number of small business owners - 62.4% - tended to believe that government funds to finance small businesses would help them to get access to affordable credit and finance. A dominant number of small enterprises confirmed that they had experienced an increase in fees, charges and interest rates in their financing arrangements. A significant number of respondents confirmed that it was very important to have access to affordable credit/finance to operate a small business on a day to day basis and to expand the business as well. Survey results also show that from the start of the recent global financial crisis terms and conditions have affected the way business banking is conducted. Owners of small businesses reported that lack of security was one of the major reasons for not getting access to credit/finance. This could be interpreted as an additional protection from the banks' perspective against possible business failure.

Table 2: Regression of net income companies relative to bank finance companies

The amount of bank financing In thousand PLN x_i	The amount of net income in % y_i	Theoretical size of the dependent variable y \hat{Y}_i	$y_i - \hat{Y}_i$	$(y_i - \hat{Y}_i)^2$
1200	7,80	9,45	- 1,65	2,7225
1500	12,20	10,65	1,55	2,4025
1600	14,00	11,05	2,95	8,7025
1800	9,20	11,85	-2,65	7,0225
1800	12,50	11,85	0,65	0,4225
2000	15,00	12,65	2,35	5,5225
2125	9,90	13,15	-3,25	10,5625
2350	15,20	14,05	1,15	1,3225
2500	15,00	14,65	0,35	0,1225
Σ 16875	110,80	x	x	38,8025

Source: Own elaboration based on own research of 2012

The regression model (Table 2) can be considered acceptable, since random fluctuations are only 19% (W - coefficient of variation of the residual) of average net profit margin ($W \leq 20\%$). Estimated net profit companies are seeking 14.85% of the amount of bank financing 2 750 thousand PLN, without taking into account the average estimation error. However, taking into account the error, it will oscillate in the range from 12.50% to 17.20% ($14,85 - 2,35 < \hat{Y}_i < 14,85 + 2,35$).

Therefore, demands for financing typically arise from two needs. First, operating financing is required by many enterprises to bridge the period between receipt of revenues and costs of production. Second, increased scale and scope of production entails adding to the stock of capital assets. Growth therefore acts as a key trigger for additional financing because growth generally increases the scale of the permanent component of working capital and because it demands investment in productive assets.

Additional financing can be obtained, broadly speaking, from one or both of two approaches. First, firms can seek both working capital and fixed asset financing from financial institutions in the form of bank loans, venture capital, etc. A second widely-used source of financing working capital is that obtained from suppliers: trade credit. While trade credit cannot directly finance R&D or capital investment, supplier financing can alleviate the need for incremental working capital.

CONCLUSIONS

Access to financing for SMEs has a significant importance for the creation of new businesses, and the growth and development of already existing ones, which, in their turn, foster the economic and social development of a country. Therefore, under crisis conditions, supporting access to financing for SMEs is vital because these firms can contribute to the recovery of the national economies. However, most surveys emphasize that SMEs report, consistently, that access to financing is one of the most important obstacles to their functioning and development. The main difficulties that SMEs face when they are seeking to obtain the necessary funding resources are related both to the entrepreneurs and the economic environment within each country, as well as to the existing regulatory and institutional framework. In order to mitigate these difficulties, the measures taken by public authorities should focus on increasing financial development, which would ensure greater availability of financing for businesses and thus economic growth. Given the reduced availability and even lack of statistical data regarding SME financing in various countries, including Poland, I consider that policymakers need to focus their efforts in order to shape and monitor a series of significant indicators, such as the share of loans granted to SMEs, based on their size, experience and sectors of activity, which would be useful for public authorities, creditors and investors.

This research study reiterated growing recognition of the importance of financing to the small enterprise sector. An empirical overview of the literature shows that analysis and investigation of the financial constraints among small enterprises within the Polish market appear to be limited. The literature review revealed that there are not enough empirical

studies on financial decisions of small enterprises and that information about the financial behaviour of small enterprises in Poland has been incomplete. Furthermore, the research literature appeared to have insufficient information about the determinants of financial constraints. This article attempts to fill in some of the gaps in this field.

REFERENCES

- Baldwin, J. R., Gellatly, G., Gaudreault, V. (2002). Financing Innovation in New Small Firms: New Evidence from Canada, Statistics Canada, Ottawa, p. 120-134.
- Ben-Ari, G., Venortas, N. S. (2007). Risk Financing for Knowledge-based Enterprises: Mechanisms and Policy Options. *Science and Public Policy* 34, no. 7, p. 475-88.
- Berger, A., Udell, G. (1998). The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle. *Journal of Banking & Finance*, 22(6/8), p. 613-673.
- Berggren, B. (2009). Financing SMEs in Different Stages of the Business Cycle – Analyzing the Financial Search Activity of Swedish SMEs between 1991 and 2000, Adelaide, Australia, p. 309-323.
- Brierley, P. (2001). The Financing of Technology-based Small Firms: A Review of the Literature. *Bank of England Quarterly Bulletin Spring*, p. 41-76.
- Carpenter, R., Petersen, B. (2002). Is the Growth of Small Firms Constrained by Internal Finance. *Review of Economics and Statistics*, 84(2), p. 298-309.
- Cosh, A., Hughes, A. (2000). *British Enterprise in Transition: Growth Innovation and Public Policy in the Small and Medium Sizes Enterprise Sector 1994-1999*. University of Cambridge, Cambridge, p. 22-30.
- Czemieli-Grzybowska W. (2011). *Eastern Poland – Selected Aspects of Regional Development in the Period 2007-2013*, Białystok University of Technology, Białystok, p. 45-82.
- Czemieli-Grzybowska, W. (2013). Barriers to Financing Small and Medium Businesses Enterprises in Poland, *Business and Economic Horizons*, vol. 9 nr 4 (2013), p. 1-12.
- Drever, M. F. (2006). Determinants of Liquidity for Australian Small and Medium-Sized Enterprises (SMEs). *University of New England*, Armidale, p. 56-70.
- Drever, M. F., Hutchinson, P. (2007). Industry Differences In The Determinants of The Liquidity of Australian Small And Medium Sized Enterprises. *Small Enterprise Research*, 15(1), p. 60-76.
- Grajewski, P. (2013). *Współczesne paradygmaty w naukach o zarządzaniu In Wybrane koncepcje Zarządzania w podmiotach leczniczych*, TNOiK, p. 31-38.
- Gregory, B., Rutherford, M., Oswald, S., Gardiner, L. (2005). An Empirical Investigation of the Growth Cycle Theory of Small Firm Financing. *Journal of Small Business Management*, 43(4), p. 382-392.
- Hodorogel, R. G. (2009). The Economic Crisis and its Effects on SMEs. *Theoretical & Applied Economics*, p.79-88.
- Jacobson, T., Linde, J., Roszbach, K. (2005). Credit Risk Versus Capital Requirements under Basel II: Are SME Loans and Retail Credit Really Different? *Journal of Financial Services Research*, 28(1-3), p. 43-75.
- Kon, Y., Storey D. J. (2003). A Theory of Discouraged Borrowers. *Small Business Economics* 21, p. 37-49.
- Lopez-Gracia, J., Sogorb-Mira F. (2008). Testing Trade-off and Pecking order Theories Financing SMEs. *Small Business Economics* 31, no. 2, p. 117-36.
- Macmillan, H. (1931). Committee on Finance and Industry Report. Retrieved 10 October, 2009, from www.scribd.com/doc/11269217/Committee-on-Finance-and-Industry-Report-June-1931-Addendum-Macmillan-Report.
- Miller, M. H. (1977). Debt and Taxes. *Journal of Finance* 32, no. 2, p. 261-75.
- Myers, S.C. (1984). The Capital Structure Puzzle. *Journal of Finance* 39, no. 3, p. 575-92.
- Myers, S. C., Majluf N. S. (1984). Corporate Financing and Investment Decisions when Firms Have Information that Investors do not Have. *Journal of Financial Economics* 13, no. 2, p. 187-221.
- Modigliani, F., Miller, M. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *American Economic Review* 48, p. 261-97.
- Storey, D. J. (1994). *Understanding the Small Business Sector*. Routledge, London, p. 12-30.
- Uzzi, B., Gillespie, J. J. (1999). Interfirm Relationships and the Firm's Financial Capital Structure: The Case of the Middle Market. *Research in the Sociology of Organizations* 16, p. 107-26.
- Walicka, M. (2009). *Finansowanie działalności małych i średnich przedsiębiorstw w województwie podlaskim w świetle badań In Grzywacz, J., Kowalski, S. (red.), Finanse przedsiębiorstwa w gospodarce rynkowej*, Płock: Wyd. Państwowej Wyższej Szkoły Zawodowej.
- Zachorowska, A., Wójcik-Mazur, A. (2010). *Wybrane elementy procesu zarządzania przedsiębiorstwem*. Częstochowa: Wydawnictwo Politechniki Częstochowskiej.