AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Barriers to financing small and medium business enterprises in Poland

Wioletta Czemieli-Grzybowska

Białystok University of Technology, Poland

e-mail: w.grzybowska@pb.edu.pl

address: (BUT), ul. Wiejska 45A, 15-351 Białystok, Poland

The access to finance is indispensable for the efficient allocation of capital and the enterprise development. However, when compared with large enterprises, small and medium enterprises face many difficulties when pursuing to procure financial resources, which are due to several causes, including: the unstable and inadequate juridical and legislative framework, which does not support the relationship between capital providers and the enterprises that require financing, incomplete information and even lack of information from the part of both capital providers and enterprises, which prevents the development of normal and efficient relations between them; lack of a credit history and insufficient guarantees for creditors, especially in the case of the small and young firms; limited and, sometimes, inadequate range of financing products.

JEL Classifications: G18, L50, O16

Keywords: Barriers, small and medium business enterprises, finance

Introduction

The small business enterprises are significant contributor to GDP and important source of employment in every economy including the developed countries. The financing pattern of small firms is therefore an important issue for its serious policy and resource implications. It is widely believed that small firms have inadequate access to formal finance in developing countries as a result of market imperfections. It is therefore often recommended that there should be subsidized institutional finance for small-scale enterprises. World Bank also approves of SME (small manufacturing enterprises) support programs.

The assessment of decisions as to the timing and volume of funding of a project is extremely important and relevant for any organization. Access to financing plays an eminent role for a small enterprise sector in any economy. Based on previous empirical studies 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, as the data within the Polish context appears to be limited.

Given their economic relevance, the role of small and medium-sized firms and their ability to grow and be successful are essential for economic development. 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, but not only, small enterprise sector. Analysis of the data will present an insight into the actual reasons for small enterprises constraints associated with debt financing arrangements. As a result, it will make a contribution to the disputes on the effectiveness of small enterprise-bank lending arrangements in the research literature.

As such, the justification for analysing small enterprises financing arises due to the high vulnerability of these businesses.

Specifications and methods

The study is based on a survey that included 1600 firms from 16 polish regions concerning the fundamental factors on which depends the enterprises' access to finance. Thus, the study highlights the relationship between the access to finance for enterprises and their characteristics, such as age, size and propriety structure. From this perspective, it is found that young firms of small size as well as national ones face greater obstacles when they seek to obtain financial resources. The study also highlights the relationship between the degree of economic and financial development of a country (expressed through the degree of financial intermediation, the level of capital market development, the efficiency of the legal framework, the GDP per capita) and the access to finance for enterprises.

The subject of the research is a sample of 1600 enterprises of the SME sector (100 enterprises from each voivodeship) that have received public support. 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% (PARP, 2011). In connection to this, the 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 loss was based on capital expenditure of the year 2009, because it is the most current year that offers detailed information about financial situation of small and medium enterprises.

Measureable aspects (quantitative) of functioning of small and medium enterprises include:

- owner characteristics
- period of functioning of enterprises and ways of their establishing
- markets
- economic situation of enterprises before obtaining public support and after receiving it.

Data of this scope, based on own investigation's results in the year 2012, was related separately to micro, small and medium enterprises in the area of industry.

The choice of the sample of 1600 enterprises from 16 individual voivodeships proceeded according to the contribution of each public support form, i.e. 80% of public support came from the group A (subsidies and tax allowances) and 20% from other forms (e.g. deferment or arranging installments of interests, subsidies for bank loans interest).

To analyze small and medium enterprises *Qualitative Comparative Analysis* - QCA was chosen. It was invented by C. Ragin and is widely used to examine causal connections in the analysis of a sample, especially of a low number (Ragin, 2000). It was implemented, for example, in research concerning comparison of causes and outcomes of social revolution (Skocpol, 1979); it was also used to follow effects (Wickham-Crowley, 1991) which were caused by human capital and state intervention on the health care system (Hollingsworth, 1996), to examine the influence of social networks on religious changes (Smilde, 2005), to explain the differences in managing workforce in production enterprises as well as effectiveness of enterprise financing (Coverdill and Finlay, 1995), and finally to examine technological innovations (Rizova, 2007). Consequently, QCA was used here to investigate causal connections in the SME sector enterprises before and after obtaining public support.

Benefits resulting from the use of the QCA method are connected with the possibility of testing complex problems in research, especially those, in which one or more factors independently lead to the proper answer on the bothering question. Furthermore, a significant scope of occurring conditions may cause different possible combinations of them. These combinations may even lead to the same outcome with equally justified explanation.

The QCA approach is “especially well-suited for addressing questions about outcomes resulting from multiple and conjectural causes - where different conditions combine in different and sometimes contradictory ways to produce the same or similar results” (Ragin, 2000).

Methodologically, QCA constitutes a bridge between quantitative and qualitative research through an integration of features of “*case-oriented and variable-oriented approaches*” (Ragin, 1987). Configurative comparative methods stem from formal methods of qualitative analysis (Griffin and Ragin, 1994), which examine similarities and differences between cases in a systematized way (Wagemann, 2009).

Qualitative comparative analysis was developed by sociologist Charles Ragin in 1987 and elaborated in his book *The Comparative Method. Moving Beyond Qualitative and Quantitative Strategies. Qualitative comparative analysis may be understood in a narrower depiction as an analytical technique, in a broader depiction as a research approach.*

QCA is significantly developing in areas such as organizational sociology and management science, especially on the level of social networks as well as on the level of micro and small enterprises. Hence, using QCA methodological instruments on the sample of 1600 SME sector enterprises (100 enterprises from each voivodeship) allows conceptualizing conditions of functioning and estimating conclusions concerning purposefulness of obtained public support.

Empirical results

In general, the access to financial products/financial services or the financial inclusion assumes the absence of barriers in the way of using financial products/services, regardless of whether these obstacles are or are not related with pricing (Demirguc-Kunt, Beck, and Honohan, 2008). Thus, improving this access means increasing the degree in which the financial products/financial services are available for everyone and at a fair price.

FIGURE 1. THE DIFFERENCE BETWEEN THE ACCESS TO FINANCE AND THE USE OF FINANCIAL PRODUCTS/SERVICES

Source: Based on Demirguc-Kunt, Beck, and Honohan, 2008, p.29.

Within the firms that do not use financial products/services it can be distinguished several categories, whose identification is essential for the authorities in order to adopt the necessary measures to improve their access to finance (Figure 2). Thus, on the one hand, there are *the firms that have access to finance*, generally to financial products and services, but do not use them because they do not have viable investment projects.

It can be distinguished *the involuntarily excluded firms*, those firms that do not have access to finance or financial services, although they demand them. The involuntary exclusion of firms from finance/financial services appears in the situation in which some companies do not earn enough income or do not have the guarantees requested by the suppliers of capital and therefore have a high credit risk.

Thus, the access to this type of loans is vital for the development of these enterprises. However, surveys show that small firms when compared with large firms are using in a much smaller degree bank financing for new investments (Figure 2).

FIGURE 2. THE PERCENTAGE OF FIRMS THAT USE BANK FINANCING FOR NEW INVESTMENTS

Source: Own simulation based on the data provided by International Finance Corporation, 2010, p.15.

It is important to identify why small size firms use in a lesser extend bank financing. In this regard, some studies (Banerjee and Duflo, 2004) have demonstrated that the main reason would be related to the supply, because every time when the SMEs had access to subsidized credit, they used it to increase the production. Such a conduct of firms strengthens the assertion that the lack of access to finance is a major obstacle to their growth. Furthermore, in the context of the current global economic crisis, the limited access of SMEs to financing has been increased as a result of reduced availability of bank loans. Thus, this type of enterprises faces major difficulties.

In the research pertaining to the period of 2001-2005 and 2005-2009 the following matters were included to the group of demand barriers: insufficient funds at the clients' disposal, too high competition on the market, lowering prices by rival companies, insufficient recognition of a company on the market and other reasons.

Both among enterprises of the SME sector that were established in the period of 2001-2005 and still functioning in 2006, and enterprises established in the period of 2005-2009

and still functioning in 2010, the most noticeable demand barrier was too high competition on the market. However, this barrier was more noticeable for enterprises created in the period of 2005-2009 (from 82.00% to 86.90% of the examined newly established enterprises indicated it as a barrier), than in the period of 2001-2005 (from 44.00% to 79.40%).

TABLE 1. DEMAND BARRIERS OF THE SME SECTOR ENTERPRISES ESTABLISHED IN POLAND IN THE PERIOD OF 2001- 2009

Demand barriers of the SME sector enterprises established in Poland in the period of 2001- 2005 and still active in 2006					
Specification	2001	2002	2003	2004	2005
in % of the examined enterprises					
Clients' insufficient funds	32.60	55.5	76.80	54.90	47.50
Too high competition on the market	44.00	82.40	76.80	79.40	77.10
Lowering prices by rival enterprises	35.20	63.40	61.30	58.40	60.00
Insufficient recognition of an enterprise on the market	12.80	30.50	30.70	37.10	37.30
Other reasons	2.30	6.20	3.30	5.10	9.30
Demand barriers of the SME sector enterprises established in Poland in the period of 2005- 2009 and still active in 2010					
Specification	2005	2006	2007	2008	2009
in % of the examined enterprises					
Clients' insufficient funds	53.90	55.80	51.10	51.20	43.90
Too high competition on the market	86.90	83.70	82.00	86.20	77.40
Lowering prices by rival enterprises	69.40	65.60	63.90	65.60	57.60
Insufficient recognition of an enterprise on the market	24.70	29.30	21.80	30.20	45.50
Other reasons	11.00	7.80	12.50	9.80	12.10

Source: Own elaboration on the basis of: *Warunki powstania i działania oraz perspektywy rozwojowe polskich przedsiębiorstw powstałych w latach 2001- 2005*, GUS, Warszawa 2007, table 13, 8(22), 9(31), 9(41), 9(51), *Warunki powstania i działania oraz perspektywy rozwojowe polskich przedsiębiorstw powstałych w latach 2005- 2010*, GUS, Warszawa 2011, table 13, 8(22), 9(31), 9(41), 9(51).

The growth of reasons that were not differentiated in the criterion is worth noticing (in the period of 2001-2005 their contribution fluctuated between 2.30% and 9.30%, whereas in the period of 2005-2009 it varied between 7.80% and 12.50%). The difference between the analyzed periods is the difference pointed as the least noticeable. In the period of 2001-2005, it was pointed out that it is noticeable if an enterprise is insufficiently recognized on the market (from 12.80% to 37.30%), and in the period of 2005-2009 the barrier connected with clients' insufficient funds was pointed as the least noticeable (from 43.90% to 55.80%).

As it results from the data presented in Table 1, the most frequent demand barriers that were mentioned by enterprises established in the period of 2001-2005 and active in 2006, and established in the period of 2005-2009 and active in 2010 include:

- too high competition on the market (on average in 2001-2005 it is 72.28% in trade and 65.54% in industry, whereas in 2005-2009 it is 86.18% in trade and 76.80% in industry),
- lowering prices by rival enterprises (on average in 2001-2005 it is 60.70% in trade and 59.36% in industry, whereas in 2005-2009 it is 67.56% in trade and 59.70% in industry),
- clients' insufficient funds (on average in 2001-2005 it is 55.08% in trade and 38.88% in industry, whereas in 2005-2009 it is 55.50% in trade and 46.36% in industry),
- insufficient recognition of an enterprise on the market (on average in 2001-2005 it is 24.08% in trade and 40.22% in industry, whereas in 2005-2009 it is 26.28% in trade and 38.56% in industry),

- other reasons (on average in 2001-2005 it is 3.60% in trade and 3.50% in industry, whereas in 2005-2009 it is 12.18% in trade and 10.46% in industry).

It shall be noticed that in particular years there are some significant fluctuations in frequency of occurring of particular demand barriers in examined areas of activity. Nevertheless, average values constitute a benchmark in the matter of their importance to entrepreneurs.

In the research concerning the periods of 2001-2005 and 2005-2009 supply barriers include: insufficient technology, insufficient funds of an enterprise, difficulties in execution of debts, limited access to bank loans, lack of resources, lack of qualified workforce and other reasons. Table 2 presents research results in the scope of occurring demand barriers according to the chosen criteria in the periods of 2001-2005 and 2005-2009.

TABLE 2. SUPPLY BARRIERS OF THE SME SECTOR ENTERPRISES ESTABLISHED IN POLAND IN THE PERIOD OF 2001-2005 AND STILL ACTIVE IN 2006 ACCORDING TO THE KIND OF ENCOUNTERED DIFFICULTIES (IN % OF THE EXAMINED ENTERPRISES)

Supply barriers of the SME sector enterprises established in Poland in the period of 2001-2005 and still active in 2006 according to the kind of encountered difficulties (in % of the examined enterprises)						
Specification	2001	2002	2003	2004	2005	Average:
Insufficient technology	20.70	16.30	16.40	15.30	12.00	16.14
Insufficient funds	71.80	67.90	78.00	81.50	72.70	74.38
Difficulties in execution of debts	46.90	29.30	29.00	29.20	19.00	30.68
Limited access to bank loans	20.60	77.60	27.70	27.90	34.20	37.60
Lack of resources	9.50	4.60	5.60	3.40	4.10	5.44
Lack of qualified workforce	30.20	26.40	28.90	29.70	20.30	27.10
Other reasons	2.70	5.30	2.30	2.70	10.50	4.70
Supply barriers of the SME sector enterprises established in Poland in the period of 2005-2009 and still active in 2010 according to the kind of encountered difficulties (in % of the examined enterprises)						
Specification	2005	2006	2007	2008	2009	Average:
Insufficient technology	17.60	16.20	18.30	15.20	13.20	16.10
Insufficient funds	79.20	79.10	80.60	84.90	73.20	79.40
Difficulties in execution of debts	37.20	39.70	29.90	30.90	25.60	32.66
Limited access to bank loans	27.10	33.30	29.80	28.10	29.00	29.46
Lack of resources	7.50	5.30	5.00	3.30	7.10	5.64
Lack of qualified workforce	21.00	24.40	27.20	20.80	20.90	22.86
Other reasons	10.70	13.20	13.20	8.70	10.20	11.20

Source: Own elaboration on the basis of: Warunki powstania i działania oraz perspektywy rozwoju polskich przedsiębiorstw powstałych w latach 2001- 2005, GUS, Warszawa 2007, tablica 14, 9(23), 9(32), 10(42), 10(52), Warunki powstania i działania oraz perspektywy rozwoju polskich przedsiębiorstw powstałych w latach 2005- 2010, GUS, Warszawa 2011, tablica 14, 9(23), 9(32), 10(42), 10(52).

Referring to average values concerning chosen supply barriers occurring in the period of 2001-2005 and 2005-2009, it is noticeable that the most significant barriers (table 6.6.) result from:

- insufficient funds (on average in the period of 2001-2005 it is 74.38%, in the period of 2005-2009 it is 79.40%)
- limited access to bank loans (on average in the period 2001-2005 it is 37.60%, in the period of 2005-2009 it is 29.46%)
- difficulty in execution of debts (on average in the period 2001-2005 it is 30.38%, in the period of 2005-2009 it is 32.66%)

- lack of qualified workforce (on average in the period 2001-2005 it is 27.10%, in the period of 2005-2009 it is 22.86%)
- insufficient technology (on average in the period 2001-2005 it is 16.14%, in the period of 2005-2009 it is 16.10%),
- lack of resources (on average in the period 2001-2005 it is 5.44%, in the period of 2005-2009 it is 5.64%)
- other reasons (on average in the period 2001-2005 it is 4.70%, in the period of 2005-2009 it is 11.20%).

The most frequently occurring supply barriers of examined enterprises in the period of 2001-2005 include: insufficient funds, limited access to bank loans and difficulties in execution of debts. The least frequent barriers mentioned by entrepreneurs include: lack of qualified workforce, insufficient technology and lack of resources. Other reasons were mentioned very rarely. The analyzed period of 2005-2009 included: insufficient funds, difficulties in executing debts, limited access to bank loans and lack of qualified workforce. The following issues were mentioned very rarely: insufficient technology and other reasons as well as lack of resources. It is worth noticing that in the period of recession, difficulties in executing debts have become more burdensome than access to bank loans. Moreover, other reasons have become more difficult than lack of resources.

As it results from the data presented Table 2, demand barriers that were mentioned most frequently by enterprises established in the period of 2001-2005 and active in 2006, and established in the period of 2005-2009 and active in 2010 include:

- insufficient funds (in the period of 2001-2005 in industry it is on average 74.50%, in trade 77.94%, and in the period of 2005-2009 in industry it is 79.58%, in trade 77.86%)
- lack of qualified workforce (in the period of 2001-2005 in industry it is on average 33.84%, in trade 15.52%, and in the period of 2005-2009 in industry it is 28.54%, in trade 11.58%)
- limited access to bank loans (in the period of 2001-2005 in industry it is on average 30.62%, in trade 26.90%, and in the period of 2005-2009 in industry it is 27.10%, in trade 33.02%)
- difficulties in executing debts (in the period of 2001-2005 in industry it is on average 30.16%, in trade 31.06%, and in the period of 2005-2009 in industry it is 30.28%, in trade 24.12%)
- insufficient technology (in the period of 2001-2005 in industry it is on average 29.04%, in trade 13.72%, and in the period of 2005-2009 in industry it is 29.86%, in trade 11.30%)
- other reasons (in the period of 2001-2005 in industry it is on average 4.86%, in trade 4.25%, and in the period of 2005-2009 in industry it is 10.36%, in trade 14.00%).

In the area of industry in the period of 2005-2009 in comparison to the period of 2001-2005, insufficient funds and other not categorized barriers became a more serious barrier of development. The access to bank loans and access to qualified workforce improved slightly.

In the area of trade in the period of 2005-2009 in comparison to the period of 2001-2005 significant changes were noted. Access to bank loans and other not categorized barriers became a more serious barrier of development, whereas executing debts and access to qualified workforce improved significantly.

There is a remarkable difference in creating needs of the commercial and industrial branch. Industrial activity aiming at permanent development requires funds; and this is the need that is becoming intensified with recognizing the new environment and creating an urge to be competitive on the market. With regard to the commercial area, where popularization of the company's image is essential (resulting from demand barriers), it is indispensable to obtain funds for marketing, advertisement and promotion. It is hard for

commercial enterprises to obtain funds from investment credit, because they often do not have proper surety (industrial enterprises possess machine stocks that often constitutes loan collateral).

Concluding remarks

The difficulties that SMEs face when they are seeking to obtain the necessary funding resources are related both to the entrepreneurs and the economic environment from 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.

The access to finance is indispensable for the efficient allocation of capital and the enterprise development. However, when compared with large enterprises, small and medium enterprises face many difficulties when pursuing to procure financial resources, which are due to several causes, including:

- the unstable and inadequate juridical and legislative framework, which does not support the relationship between capital providers and the enterprises that require financing;
- incomplete information and even lack of information from the part of both capital providers and enterprises, which prevents the development of normal and efficient relations between them;
- lack of a credit history and insufficient guarantees for creditors, especially in the case of the small and young firms, limited and, sometimes, inadequate range of financing products.

Given the limited availability and even lack of statistical data regarding SMEs' financing in various countries, including Poland, we consider that policy makers need to focus their efforts in order to the 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, that would be useful for public authorities, creditors and investors.

References

- Banerjee, A. and Duflo, E., 2004. Do firms want to borrow more? Testing credit constraints using a directed lending program, Department of Economics, MIT
- Coverdill J., Finlay, W., 1995. "Understanding Mills via Mill-type methods: An application of qualitative comparative analysis to a study of labor management in southern textile manufacturing," *Qualitative Sociology*, Volume 18, Issue 4, pp.457-478
- Demircuc-Kunt, A., Beck, T. and Honohan, P., 2008. "Finance for all? Policies and pitfalls in expanding access", World Bank Policy Research Report
- European Commission, 2009. "The EU's response to support the real economy during the economic crisis: an overview of Member States' recovery measures", Occasional Papers 51, Accessed March 5, 2011 http://ec.europa.eu/economy_finance/publications/publication15666_en.pdf
- Griffin, L. and Ragin C.B., 1994. "Some observation on formal methods of qualitative analysis," *Sociological Methods and Research*, Vol.23 (1), pp.4-21
- Hollingsworth, J., Hanneman, R., Hage, J. and Ragin, C., 1996. "The effect of human capital and state intervention on the performance of medical systems," *Social Forces*, 75(2), pp.459-484
- International Labour Organization, 2009. Micro, small and medium-sized enterprises, Impacts and policy responses, Report

International Finance Corporation, 2010. "The SME banking knowledge guide", The Financial Development Report 2010, Accessed March 15, 2011 http://www3.weforum.org/docs/WEF_FinancialDevelopmentReport_2010.pdf

PARP, 2011. Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce, PARP, Ragin, C., 1987. The comparative method: Moving beyond qualitative and quantitative strategies, University of California Press, Berkley, Los Angeles, London

Ragin, C., 1994. Redesigning social inquiry: Fuzzy sets and beyond qualitative and quantitative strategies, University of California Press, Berkley, Los Angeles, London

Warszawa

Rizova, P., 2007. Applying Charles Ragin's Method of Qualitative Comparative Analysis (QCA) to the Study of Technological Innovation, Available at SSRN: <http://ssrn.com/abstract=1093090> or <http://dx.doi.org/10.2139/ssrn.1093090>

Skocpol. T., 1979. States and Social Revolutions, Cambridge University Press

Smilde, D., 2005. "A Qualitative Comparative Analysis of Conversion to Venezuelan Evangelicalism: How Networks Matter," American Journal of Sociology, Vol.111(3), pp.757-796

Wagemann, C., Schneider C., 2007. "Standards of good practice in qualitative comparative and analysis (QCA) and fuzzy-sets," Comparative Sociology, Vol.9, pp.1-22

Warunki powstania i działania oraz perspektywy rozwojowe polskich przedsiębiorstw powstałych w latach 2001- 2005, GUS, Warszawa 2007

Warunki powstania i działania oraz perspektywy rozwojowe polskich przedsiębiorstw powstałych w latach 2005- 2010, GUS, Warszawa 2011

Wickham-Crowley, T., 1991. "A qualitative comparative approach to Latin American revolutions," International Journal of Comparative Sociology, Vol.32 (1-2), pp.82-109

World Bank, 2010. Doing business 2010: Reforming through difficult times, Palgrave Macmillan, IFC and World Bank