

Scotland's Rural College

An analysis of external finance availability on SMEs' decision making: a case study of the emerging market of Poland

Steinerowska-Streb, I; Steiner, A

Published in:

Thunderbird International Business Review

DOI:

[10.1002/tie.21627](https://doi.org/10.1002/tie.21627)

Print publication: 01/01/2014

Document Version

Peer reviewed version

[Link to publication](#)

Citation for published version (APA):

Steinerowska-Streb, I., & Steiner, A. (2014). An analysis of external finance availability on SMEs' decision making: a case study of the emerging market of Poland. *Thunderbird International Business Review*, 56(4), 373 - 386. <https://doi.org/10.1002/tie.21627>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

TIBR-11-174.R3

**AN ANALYSIS OF EXTERNAL FINANCE AVAILABILITY ON SMEs DECISION-
MAKING - A CASE STUDY OF THE EMERGING MARKET OF POLAND**

Dr Izabella Steinerowska-Streb (corresponding author)
Department of Transformation Policy and Economics
Faculty of Management, University of Economics in Katowice
ul. 1-go Maja 50, 40-287 Katowice, Poland
Email: streb@ue.katowice.pl
Tel. +48 32 257 70 00

Biosketch: **Dr Izabella Steinerowska-Streb** is a Lecturer at University of Economics in Katowice, Poland. She is the author over 60 individually published papers, both in Polish and foreign scientific periodicals. Her research refers to the problems associated with small and medium enterprises and franchising chains.

Dr Artur Steiner
Land Economy and Environment Research Group
West Mains Rd, King's Buildings, SRUC
Edinburgh, EH9 3JG, Scotland, UK
Email: artur.steiner@sruc.ac.uk

Biosketch: **Dr Artur Steiner** is a Researcher, Rural Society Research Team at SRUC, Scotland, UK. His research interests focus on operational aspects of innovative forms of businesses/entrepreneurship that bring social outcomes and contribute to societal development. Artur has participated in a number of international projects which aimed at exploring social enterprises and their role in improving the quality of life of communities.

ABSTRACT

This paper explores an understanding of the entrepreneurial behaviour of SMEs in Poland, one of the emerging markets of the European Union, during the recent period of economic slowdown. It considers the role of accessibility to external financial resources in shaping decisions undertaken by such enterprises. The hypothesis is that, in the period of economic slowdown, SMEs that have difficulty in accessing external sources of financing adopt different strategies to those that have free access to those resources. The findings indicate that access to the external sources of financing is a statistically significant factor determining decisions of SMEs in relation to employment reduction, price reductions on goods/services, suspension of previously planned investments and an increase in the level of salaries. Consequently, the study is important as it considers factors that impact the success and survival of SMEs in the emerging market; it is also unique as it investigates these aspects in the recent period of the global economic downturn.

Keywords: SMEs, emerging market, economic slowdown, access to finance

Introduction

Since the beginning of the transformation of the Polish economy, barriers to accessing financial capital have been indicated by Polish small and medium enterprises (SMEs) as the major obstacles to their development (Gęsicka, 1997). During the first years of transformation government policies did not support SMEs and there were no institutions encouraging business development. Consequently, in this period, Polish SME access to financial capital was particularly limited. Moreover, after almost ten years of transformation, the financial barrier was still significant for Polish SMEs. In 1998 only 4% of micro-enterprises that used external sources of financial support satisfied their needs for credits or loans. Among small

enterprises this rate was 20% and in the group of medium-sized enterprises 27% (Dzierzanowski, 1999).

More recently, after 2004, when Poland joined the European Union (EU), access to external sources of finance for Polish SMEs improved in a similar way to other new EU countries. For instance, in 2005, almost one third of Polish SME entrepreneurs informed that as a result of the accession of Poland to the European Union, availability of external sources of financing for SMEs increased (Tokaj-Krzewska & Pyciński, 2006). Further improvements in SMEs' ability to access financial capital were noted in 2007 when 81.4% of Polish SMEs had a chance to gain or extend their long-term loan. The remaining 18.6% of SMEs did not have, in their view, the possibility to get long-term loans. The main difficulties in accessing long-term finance were caused by the lack of guarantees, complexities of banking procedures and the unwillingness of banks to grant loans to SMEs (Starczewska-Krzysztozek, 2007). Similar findings emerged from a survey undertaken in 2005 among the new EU member states including Poland, Estonia, Cyprus, Latvia, Lithuania, Malta, Slovenia, Slovakia, Czech Republic and Hungary. The study indicated that the majority (70%) of SMEs from these countries met their financial management needs. However, the survey also revealed large differences across the countries. For instance, the financial situation of SMEs was least favourable in Slovakia, where less than half of the managers reported that the level of finances was sufficient. SMEs in Hungary, on the other hand, were the most satisfied with their level of finances: almost nine out of ten managers in this country claimed that their financial situation was adequate (European Commission, 2006).

In Poland easier access to capital influenced ways of financing SME investments. For instance, a range of financial services offered in the Polish market expanded, new institutions facilitating access of SMEs to external financial capital were established, the government started supporting SMEs and, finally, Polish enterprises became entitled to receive aid for

SMEs from the European Union (Starczewska-Krzysztozek, 2008). As a consequence, banks changed their approach to granting loans to SMEs and, currently, banks in Poland no longer disregard this group of businesses as potential clients. Despite this, according to Polish Agency of Entrepreneurial Development, in 2007 the majority (77%) of new investments of Polish SMEs were financed from their own resources. Smaller enterprises rarely used external sources of financing (such as loans or public resources), gaining resources most frequently from friends and family. Larger enterprises more often financed their activities through loans, gaining public grants/support or using high-risk funds such as Venture Capital/Business Angels (Żoźnierski & Zadura-Lichota, 2008).

After the financial crisis that began in the United States of America in 2007, Polish SMEs access to finance got worse. In December 2008, over 70% of SMEs indicated a lack of financial aid resources or difficulties in accessing bank loans as being a barrier to developing their business activities (Favore, 2008). Access to finance became particularly problematic for female entrepreneurs and those who had previously been unemployed (Brussa & Tarnawa, 2011).

However, it should be noticed that since the beginning of financial crisis, access to finance got worst not only in Poland but also in other countries, both in emerging and developed markets. For instance, in 2009 the worldwide volume of deposits and loans shrank, with a median decrease of 12 percent in the ratio of deposit value to gross domestic product (GDP) and a median decrease of 15 percent in the ratio of value of loans to GDP (World Bank, 2010). As a consequence, SMEs from both emerging and developed markets started to perceive limited access to capital as a bigger obstacle to the development than previously. Economic downturn negatively affected businesses' competitiveness all over the world. As such, although international growth has become a matter of high importance even for SMEs (Zain & Ng, 2006; Rowden, 2001), Global Enterprise Survey Report 2010 revealed that access to finance

became a main barrier to internationalization and export for 23% Asia-Pacific SMEs, 28% Gulf SMEs, 16% UK globally engaged SMEs, 30% SMEs from other EU countries and 19% of SMEs from the US (ICAEW, 2010; Ojala & Tyrväinen, 2007).

It needs to be emphasised that although some of the financial constraints met by SMEs can be reduced by cooperation and/or being part of a business cluster (Reid, DeMartino & Zyglidopoulos, 2005), this limited access to funding opportunities represents a significant obstacle to the firm's growth (Beck & Demirgüç-Kunt, 2006; Beck, Demirgüç-Kunt, & Martinez-Peria 2008; Zain & Ng, 2006; Ojala & Tyrväinen, 2007; Howorth, 2001). Moreover, due to their higher dependence on bank financing, the latter applies especially to SMEs (European Central Bank, 2012). Consequently, in a prolonged economic crisis it is important to find out what impact on SME decisions and activities has access to finance. It is essential to better understand complexities of SMEs decision-making as it can facilitate future monetary policies that aim to address current economic challenges.

The aim of this paper is to develop our understanding of and address knowledge gaps in relation to the entrepreneurial behaviour of Polish SMEs in the period of an economic slowdown. The study compares SMEs that had no access to external sources of financing and those that did. The primary hypothesis (H0) is that in the period of economic slowdown activities undertaken by these two groups of SMEs are significantly different. To verify the hypothesis, primary data was used.

The paper begins with a description of the role of SMEs in emerging markets, followed by an explanation of the importance of accessibility to finance and its impact on decision-making of the SMEs in the emerging market of Poland. Research methods are then presented and explained with the accompanying results. Finally, verification of hypothesis and conclusions are described; these present important issues characterising entrepreneurial behaviour of

SMEs which might influence their success, and even survival. Implications for policymakers, researchers and entrepreneurs are presented.

The role of SMEs and emerging markets

The importance of SMEs in emerging economies is two-fold; an increasing number of SMEs and their positive influence on developing national economies (Dobbs & Hamilton, 2007; McIntyre, 2001; OECD, 2006; Stel, Carree & Thurik, 2005). SMEs play an important role in all contemporary market economies around the world and this is due to their contribution to national GDPs and an ability to create employment (Andersson & Tell, 2009; Audretsch, Carree, Stel & Thurik, 2002; Curran, 2000; Gebremariam, Gebremedhin & Jackson, 2004; Halabi, Barrett & Dyt, 2010; Hamilton & Dana, 2003; Jamali, Zanhour & Keshihian, 2009; Reid & Harris, 2004; Smallbone & Wyer, 2000). SMEs have a positive influence on economic growth. For instance, they identify and satisfy market niches, produce essential goods and services, allocate resources in a sensible way, implement innovation, new techniques and technologies efficiently and, as such, are important for regional development (Andersson & Tell, 2009; Berger & Udell, 1998, 2006; Eyre & Smallman, 1998; Freel, 2000; Halabi et al., 2010; Jamali et al., 2009; Rosenbusch, Brinckmann & Bausch, 2011; Todorov, 2008).

SMEs use market shortages and economic opportunities, which are often more evident in emerging markets, and their activities are firmly grounded on the principles of rational management. Due to a close relationship with their clients, non-bureaucratized structures of management, unity of given commands and simplified methods of decision-making, these enterprises know the market and customers' needs well and, therefore, are able to quickly adapt (through being reactive and sometimes even proactive) to changing market conditions (Dobbs & Hamilton, 2007; Holmes & Gibson, 2001). For instance, SMEs easily adjust their

production of goods and services in order to satisfy evolving market demands. Because of this, SMEs influence the development of competition and contribute to de-monopolisation of some sectors, whilst shaping the market and influencing occurring market processes (Steinerowska-Streb, 2011).

Activities of SMEs, similarly to other entities operating in a market, are determined by many factors both internal and external to the organisation (Pansiri & Temtime, 2010). For instance, a national policy towards SMEs, the economic situation of the state, the level of a national GDP, investments, consumption, the level of unemployment, export and import, currency and interest rates are among those factors which have an impact on SMEs (OECD, 2006). High economic growth, low interest rates and high demand create greater opportunities for survival and development of enterprises. On the other hand, economic slowdown (defined as the phase of business cycle during which there is little or no growth or even decline of output; Sloman, 2006) does not favour, in general, development of enterprises. Economic downturn/economic slowdown, however, provides development opportunities for those entrepreneurs (and SMEs) who are able to find a gap on the market that will allow them to survive and grow.

Access to financial resources and decision-making of the SMEs

Regardless of the stage of the economic cycle, all decisions made by SMEs depend on the available resources that the enterprises have. Access to external finance, in particular, constitutes a significant obstacle to SMEs growth (Beck & Demirgüç-Kunt, 2006; Beck, Demirgüç-Kunt & Martinez-Peria, 2008; World Bank, 2010). Interestingly, some 80 to 90 percent of all trade transactions are said to be financed externally; this would suggest that without 'financial freedom' and the ability to access external sources of financing, businesses would be extremely limited in the activities they would be able to undertake (Chauffour & Farole, 2009).

Financial issues determine activities of SMEs throughout the different stages of their development. As such, if at the stage of commencing a business activity an enterprise does not have sufficient financial resources, it is more difficult for the enterprise to enter a selected market. Moreover, in these circumstances, gaining a competitive position and reaching a selected group of customers may take more time than for an enterprise with available financial capital. In the post-commencement stage of a company life cycle, during its growth and expansion, having access to sufficient financial resources determines further development of the enterprise. Thus, the limited financial capital of SME founders and limited access to external sources of financing are usually a major entrepreneurial challenge influencing the future of SMEs (Beck, Demirgüç-Kunt & Martinez-Peria, 2008; Beck & Demirgüç-Kunt, 2006). Interestingly, it is more difficult for SMEs than for large enterprises to obtain external financial support. The main reason for this is that banks, as well as other financial institutions, require from newly-established entities large guarantees that SMEs often cannot give. In addition, those SMEs which do pass credibility verification/credit check face high commission charges as they are perceived by the banks as high risk (Beck, Demirgüç-Kunt & Martinez-Peria, 2008).

Access to adequate capital to grow and develop is problematic to many SMEs worldwide (European Commission, 2005, 2006; OECD, 2006). New businesses typically use founders' own resources and the additional financial support of informal investors. Based on research evidence from 29 countries, a major part of such additional resources comes from family members (40%), followed by friends and neighbours (29%), work colleagues (11%), other relatives (8%), strangers (8%) and from other informal sources (4%) (Bygrave, Hay, & Reynolds, 2003). Similar findings have also been presented in other studies (Harrison, Mason, & Girling, 2004; Maula, Autio, & Arenius, 2005; Szerb, Rappai, Makra, & Terjesen, 2007).

Although financial constraints determine activities of small and medium enterprises all over the world there are some differences in how SMEs are financed across different economies (Beck Demirgüç-Kunt & Martinez-Peria, 2008). For instance, banks in developing countries are less exposed to SMEs than banks in developed countries.

In Poland, which is a developing country, SME access to external financial resources is limited. Firstly, SMEs usually do not have sufficient knowledge regarding available financial options that could be harnessed. Secondly, complicated, formalised and bureaucratic procedures discourage entrepreneurs of newly created SMEs to make use of external sources of financing. Due to difficulties in meeting all necessary business loan requirements, the majority of SME entrepreneurs use their own financial resources to set up an enterprise. Other SME owners who do not employ highly-qualified staff that may help them to find the most advantageous sources of finance frequently use bank loans with high interest rates and try to reduce the amount they wish to borrow to a necessary minimum (Frasukiewicz, 2003).

Restricted access to external sources of financing and financial barriers that are experienced by SMEs influence not only their growth and development, but also other operational aspects of their day-to-day activities. For instance, it could be that the enterprises are forced to keep permanent and strict financial discipline, analyse expenditure and costs regularly, to manage their resources efficiently and effectively. This means that actions undertaken by SMEs that have no access to external sources of financing and activities of SMEs that have free access to financial capital are different. The differences between these two groups of enterprises can be accentuated particularly in a period of economic slowdown. This issue is investigated in this study.

Methodology

The purpose of the study reported here was to identify patterns that occur in the period of economic slowdown in activities performed by SMEs in the emerging market of Poland.

Study context

The study focused on Polish SMEs as it is the biggest emerging market and one of the biggest markets of the European Union. Poland presents an interesting environment in which free elections in 1989 and 1990 brought the Communist era to an end and a "shock therapy" program during the early 1990s. These events enabled Poland to transform its economy into one of the most robust in Central Europe (CIA, 2012). Since 2004, EU membership and access to EU structural funds have provided a major boost to the economy. With its transformation to a democratic, market-oriented country Poland has pursued a policy of economic liberalisation and today is perceived as a success story among transition economies. For instance, despite economic slowdown in 2008-2009, Poland was the only country in the EU (including its new emerging markets) that avoided recession (Reichardt, 2011; see Table 1). In 2009, the GDP of Poland grew by 1.7%; compared to its European neighbours (the EU27) whose aggregate loss of GDP fell to 4.2% (Reihardt, 2011). It is claimed, however, that Poland's economic performance could improve over the longer term if the country addresses some of the remaining deficiencies in, for example, its business environment (CIA, 2012).

Study hypotheses

This study compared two groups of Polish SMEs: those that did not have access to external sources of financing; and those that did not experience such constraints (this was determined by asking each respondent to classify themselves into one of the two groups). The primary hypothesis (**H0**) was that **in a period of decreased economic activity, actions undertaken by SMEs that have problems with accessing external sources of financing are**

significantly different from actions implemented by SMEs that have free access to external sources of financing. In order to verify/reject the hypothesis and discover association between access to external sources of financing and its impact on SMEs decision-making, five supporting hypotheses were developed. These are presented in Table 1.

Table 1. Five supporting hypothesis

Hypothesis No.	Hypothesis
H1	In a period of decreased economic activity, SMEs that do not have access to external sources of financing, dismiss more employees compared to those SMEs that do not have problems with access to external sources of financing.
H2	In a period of economic slowdown, SMEs that have free access to external sources of financing, prices of offered products are reduced less often than those of SMEs that do not have such access.
H3	In a period of decreased economic activity, planned investments are limited in more SMEs that do not have access to external sources of financing than is observed in SMEs that have free access to external sources of financing.
H4	In a period of economic slowdown, SMEs that have free access to external sources of financing increase salary levels more often than SMEs that do not have such an access.
H5	Cost analysis and cost modifications are executed more often in SMEs that do not have access to external sources of financing in a period of economic slowdown than those that do have it.

To verify these hypotheses, primary data collection was conducted.

Data collection

The data used in this paper was part of a larger study that surveyed and explored characteristics and behavior of Polish enterprises. The survey was conducted at the end of 2010; all data presented here relate to 2009 - the year of the economic slowdown and the lowest level of GDP across Europe in recent years (see Table 2 and Appendix 1).

Table 2. GDP in UE(27) and in Poland between 2005 and 2012

	2005	2006	2007	2008	2009	2010	2011	2012
UE-27	2,1	3,3	3,2	0,3	-4,3	2,1	1,6	-0,3
Poland	3,6	6,2	6,8	5,1	1,6	3,9	4,5	1,9

Source: Eurostat (2013)

This research relates only to the group of SMEs operating in the Polish market. Enterprises employing up to 50 employees were classified as small enterprises (within this group a subgroup of micro-enterprises employing up to five people was identified) and those employing between 51 and 250 people as medium-sized. This classification of SMEs is based on the employment criteria suggested by the European Commission. The study, however, did not consider other criteria such as turnover, an annual balance sheet, and/or the type of relationship between an enterprise and another firms (European Commission, 2003).

A structured questionnaire was developed to gather information from a high number of respondents (Bryman & Bell, 2007). The questionnaire consisted of dichotomous and fixed-alternative questions which ensured consistency and reliability of the selected research method (Saunders, Lewis & Thornhill, 2009). The questions identified organisational changes, management methods and other business practices relating to development obstacles, firms' investments, financing problems, cost management, aspects of firms' innovativeness, employment issues and human resource management. The questions were based on previously developed and tested surveys conducted by the authors (see Steinerowska-Streb, 2005). In order to further increase the validity of responses, a number of additional questions verifying given answers were included (Bryman & Bell, 2007). The final version of the questionnaire was pre-tested in a pilot study. For the purpose of this paper, six questions were selected; these are presented in Table 3.

Table 3. Selected questions from the research questionnaire

No	Questionnaires' questions
1	What kind of changes took place in the level of your firm's employment?
2	What kind of changes took place in the level of prices for the products offered by your firm?
3	Were there any changes in the level of planned investments made by your firm?
4	What kind of changes took place in the level of wages offered by your firm to your employees?
5	How often was the cost analysis conducted in your firm?
6	Did your firm have access to the external sources of financing?

The data was collected using an online questionnaire survey. The questionnaire was available on a web-site and access to it was granted to firms invited to the survey by e-mail. This method of conducting the study was selected for a number of reasons: (i) an online survey offered access to SMEs from all Polish regions ensuring good geographical data coverage and it enabled to obtain information from those who might not wish to be questioned face-to-face; (ii) respondents (i.e. SME entrepreneurs) could complete the questionnaire at a convenient time which was extremely useful taking into consideration the busy life and work commitments of the target group; (iii) respondents could take as much time as they needed to fully understand and complete the survey which promoted optimum quality of gathered data; (iv) an email survey often stimulates higher response levels than ordinary 'snail' mail surveys and, finally, (v) it is argued that participants of an online surveys are willing to give more honest answers than to a person or on a paper questionnaire (Seale, 2004, Bryman & Bell, 2007; Saunders, Lewis & Thornhill, 2009).

In order to identify Polish SMEs, researchers used a database of the Foreign Trade Promotion Group NETEX-STERLING - Edition 2010. The database consists of e-mail addresses of 290 000 Polish firms and it is considered to provide a representative sample of Polish enterprises (i.e. according to research evidence 96% of Polish enterprises that employ more

than 10 people have access to the Internet and 65% of them have their own website (Eurostat, 2010)). Access of microenterprises to the Internet is also considered to be high and exceeds 90% (Juchniewicz & Grzybowska, 2010).

Only commercial SMEs that produced services and/or products were included in the analysis. A total of 202 000 SMEs were identified after all large firms and primary sector industries (defined as agriculture, forestry and fishing) were removed from the database. These were excluded for the purpose of this study due to specific characteristics and a limited ability to adapt to changes in the level of national economic activity. Questionnaires were emailed to the chief executive of all identified enterprises. In total, 1238 firms responded, 987 questionnaires were completed correctly and analysed.

To identify activities undertaken by Polish SMEs in the period of economic slowdown, the respondents were asked to indicate changes introduced by them in 2009. In order to verify the hypotheses, the Chi-squared (X^2) test was adopted; this enabled identification of differences in the activities undertaken by SMEs with free access to the external sources of financing and those with no access to the external sources of financing. Differences were accepted as significant at $p < 0.05$ for all statistical analyses.

Findings

The data presented in this section comes from different types of SMEs. As such, micro-enterprises consisted of the majority of respondents (61.6%), 29.1% of respondents were small enterprises and the remaining 9.3% were medium-sized enterprises. 37.8% of respondents specialised in service activity, 22.4% in commercial activity and 23.5% in production activity. The remaining 16.3% of enterprises combined more than one activity. 66.4% of studied enterprises had access to external sources of financing and the other 33.6% did not have access to external financial resources. This characteristic corresponds with a

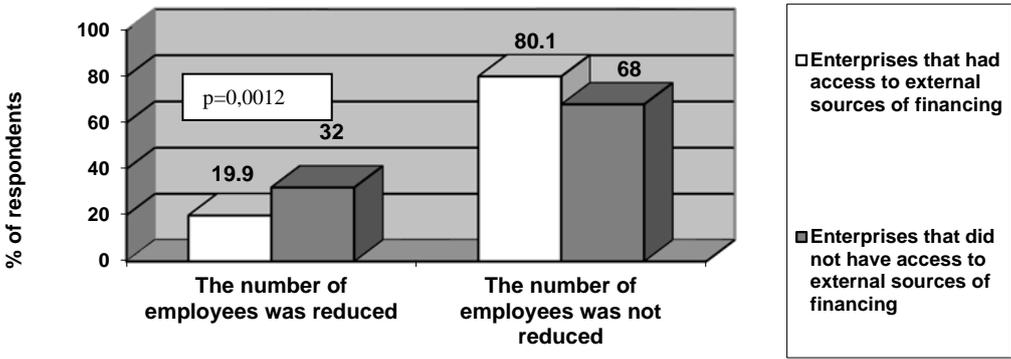
wide diversity (and it helps to explore a broad spectrum) of SMEs on the Polish market. The paper now turns to verify presented hypotheses:

Employment reduction (H1)

Respondents were asked about redundancies made in 2009. The findings show that in 80.1% enterprises that had free access to external sources of financing there was no reduction in the employment rate. However, among enterprises that did not have access to external sources of financing the employment rate was lower with only 68% dismissing employees as shown in Figure 1.

Access to external sources of financing proved to be a statistically significant factor determining entrepreneurs' decisions in the area of employment reduction in the period of economic slowdown ($X^2=10,5$; $p=0,0012$).

Figure 1. Reduction in employment in 2009 in SMEs according to their access to external sources of financing (%)



Source: Own case study

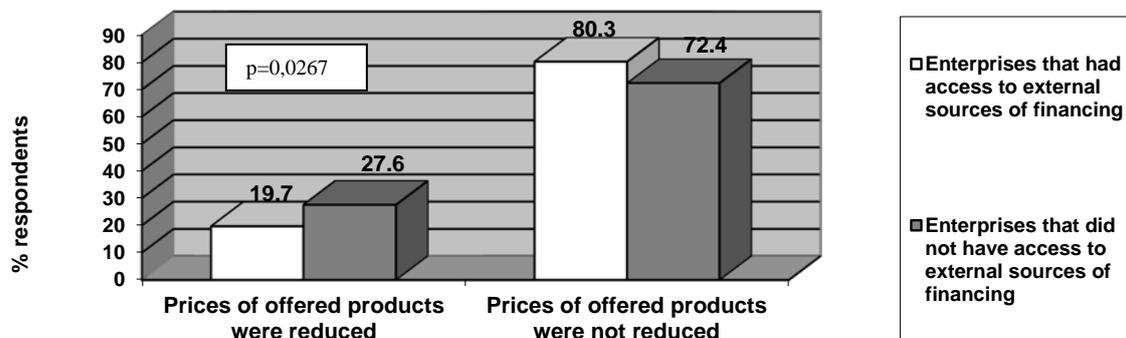
The findings suggest that SMEs that do not feel financial pressure are more likely to keep their human resources which frequently are essential to continue, maintain and/or grow business activities. On the other hand, SMEs that have problems with accessing financial

resources are forced to reduce their costs and they do that by reducing a number of their employees. The latter (although presents a short-term solution) can have negative long-term consequences especially if SMEs have to resign from experienced and skilled staff. Hence, lack of access to financial resources can reduce a level of other resources.

Price reductions on goods offered by an enterprise (H2)

Respondents were also asked about changes in the area of service/product price delivery. The study reveals that in 2009, prices were reduced in 19.7% of SMEs that had free access to external sources of financing and in 27.6% of other enterprises (Figure 2). Access to external sources of financing proved to be a statistically significant factor determining decisions relating to price reductions in the period of economic slowdown ($X^2=4,9$; $p=0,0267$).

Figure 2. Reduction of prices in 2009 in SMEs according to their access to external sources of financing (%)



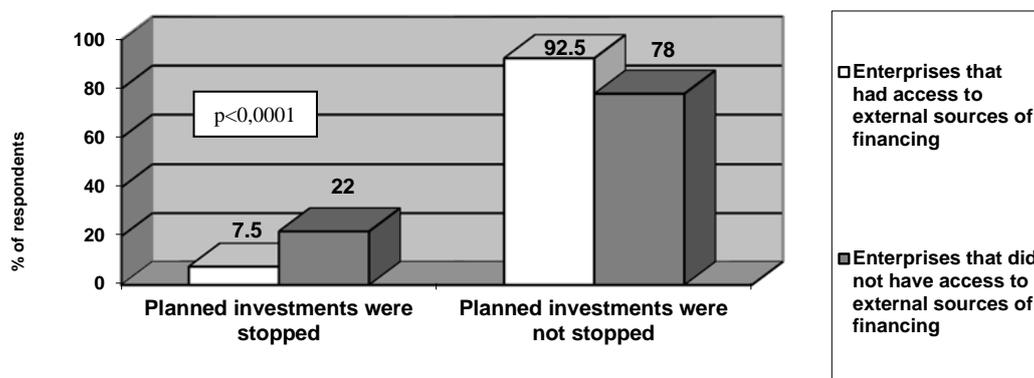
Source: Own case study

Our findings suggest that SMEs without access to external sources of financing try to attract more customers through offering cheaper products/services. If successful, this approach can lead to expanding a customer base, increasing financial turnover and, finally, bringing higher profits. Alternatively, if customers do not respond to introduced changes, reducing prices can lead to declining profits and, in extremes, to business failure.

Suspension of previously planned investments (H3)

To verify Hypothesis 3, respondents were asked if in 2009 they had suspended any previously planned investments. The findings indicate that planned investments were stopped only in 7.5% of enterprises that had access to external sources of financing and in 22% of companies that did not have access to them (Figure 3). Thus, access to external sources of financing proved to be a statistically significant factor influencing investments implemented in studied enterprises in the period of decreased business activity ($X^2=31,97$; $p<0,0001$).

Figure 3. SMEs that suspended investments in 2009, according to their access to external sources of financing (%)



Source: Own case study

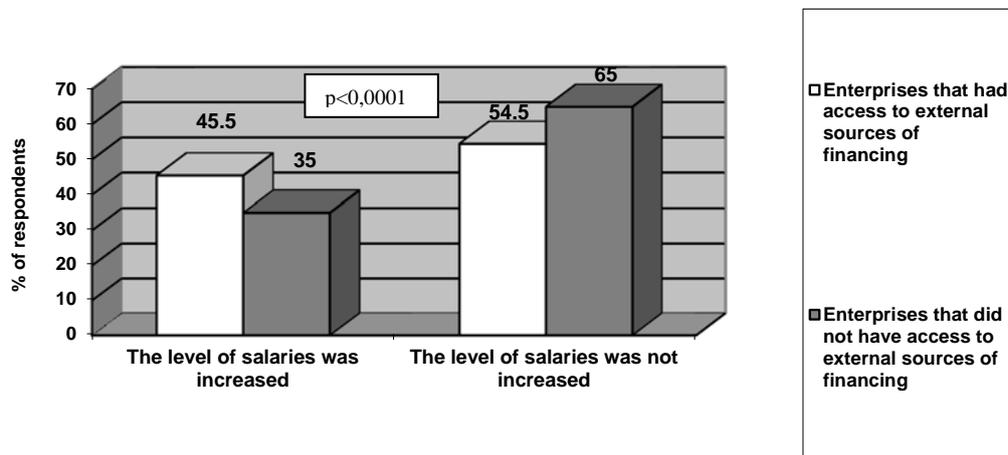
Presented data reveals that a level of investments is linked to ability to access financial resources. Lack of finance leads to potential investments being postponed or even cancelled. Although it reduces current expenditures of a business, it stops SMEs from introducing (sometimes essential) changes, innovations and improvements. These, in turn, can have an impact on their competitiveness and, in a long term, their survival.

Increase in the level of salaries (H4)

Results concerning the increase in the level of salaries showed that in 2009 45.5% of SMEs that had free access to external sources of financing increased a level of salaries. At the same time, only 35% of SMEs without external sources of financing reported the increase in salaries (Figure 4). This means that access to external sources of financing proved to be a

statistically significant factor influencing the increase in salaries in the period of decreased business activity ($X^2 = 11,9$ $p < 0,01$).

Figure 4. SMEs that increased salaries in 2009, according to their access to external sources of financing (%)



Source: Own case study

Our findings suggest that through accessing additional financial resources SMEs are more likely to financially reward to their employees. Possibly through offering pay-raise SMEs want to retain their best staff, show them appreciation and encourage to contribute to business development. SMEs that are unable to do that might lose their employees or decrease their willingness to perform well. The latter can have a negative impact on the overall performance of the business. Hence, being able to increase salary levels could be seen as important in a long-term sustainability of businesses.

Execution of cost analysis and cost modifications (H5)

To verify Hypothesis 5, respondents were asked to state if cost analysis in their SMEs was carried out frequently, rarely or not conducted at all. The findings show that in both groups of SMEs, the percentage of enterprises that carried out cost analysis regularly is similar (see

Table 4) and there was no statistically significant difference between the studied groups ($X^2=0,6$ $p=0,44$). This suggests that the cost analysis and cost modifications are equally important to SMEs with and those without access to external sources of financing. It needs to be highlighted, however, that based on their cost analysis and cost modification, the two groups of businesses take significantly different decisions; this was presented through testing H1-H4.

Now, Table 4 summarises findings of the study and presents which of the five supporting hypothesis have been accepted and which rejected.

Table 4. Management practises carried out by Polish SMEs in 2009 in relation to their access to external sources of financing

Hypothesis No.	Enterprises with access to the external sources of financing	Enterprises without access to the external sources of financing	p-level	Correctness of hypothesis
H1: Reduction in employment	19.9%	32.0%	$p=0.0012$	H1 verified
H2: Reduction of prices	19.7%	27.6%	$p=0.0267$	H2 verified
H3: Investments	7.5%	22.0%	$p<0.0001$	H3 verified
H4: Enterprises which increased the level of salaries	45.5%	35.0%	$p< 0.01$	H4 verified
H5: Cost analysis carried out frequently	28.6%	25.5%	$p=0.44$	H5 rejected

Discussion

The results show that in the period of economic slowdown, activities performed by Polish SMEs that did not have access to external financial resources and those that had free access to capital are significantly different in the areas of employment reduction (H1), price reductions

on goods offered by an enterprise (H2), suspension of previously planned investments (H3), and, finally, increase in the level of salaries (H4).

The strongest statistically significant relationship occurred between the Polish SMEs access to external sources of financing and realisation of previously planned investments. The data suggests that in the period of economic slowdown, SMEs that do not have access to external sources of financing are more likely to reduce planned investments than SMEs that have free access to external financial resources, thus verifying Hypothesis 3. Due to additional financial resources, SMEs that had free access to external sources of financing did not have to abandon planned investments as frequently as other SMEs with no access to financial capital. Interestingly, risk associated with unfavourable market situations discouraged SMEs from using their own financial resources. This left the enterprises with limited financial resources for investment and therefore had a negative impact upon potential development.

It could be argued that enterprises with access to the external financial resources, due to their assumed better financial condition, were also more likely to increase salaries of their employees than those without access to the financial resources. This was statistically proven and the study verified Hypothesis 4 indicating that in the period of economic slowdown more SMEs that had free access to external sources of financing were more likely to increase the level of salaries in comparison to SMEs that did not have such access.

The findings indicate another statistically significant relationship between the ability to access external sources of financing and a reduction of prices of products/services provided by SMEs. In the period of economic slowdown, SMEs that had free access to external sources of financing were less likely to reduce their prices than SMEs that did not have it. This relationship verifies Hypothesis 2. A possible interpretation of this is that SMEs which are economically weaker/have no access to additional financial resources are forced to maintain their liquidity. To do that, they reduce prices in order to sell/deliver more than competitors

despite surplus of supply over demand that occurs in the market characterised by the economic slowdown.

Further, access to external sources of financing proved also to be a statistically significant factor determining decisions of enterprises in the area of employment reduction in the period of economic slowdown. In SMEs that did not have access to external sources of financing, in the period of economic slowdown, more employees were likely to lose their jobs than in SMEs that did not have problems with access to external sources of financing. This relationship accepts Hypothesis 1 as true. Maybe not surprisingly, in a period of economic slowdown, when turnover of companies decreases, those who manage companies, while looking for ways to maintain profits at the highest possible level, make attempts to reduce costs. Labour costs have been considered for a long time as being the most important financial barrier to the development of SMEs in Poland and make up a large part of overall costs. Therefore, while reducing the number of employees, entrepreneurs significantly lower the overall running costs associated with their ventures. As such, enterprises that are in a more difficult economic condition dismiss employees more often than companies that are financially secured.

The study did not reveal a statistically significant difference between two analysed groups of SMEs and their attitudes towards cost analysis: SMEs that had free access to external sources of financing and those without such access, showed a similar pattern of regular cost analyses. Thus Hypothesis 5 is rejected.

Despite the fact that H5 was not accepted, the overall Null Hypothesis (H0) suggesting that in the period of economic slowdown activities undertaken by SMEs that have problems with access to external sources of financing are different from activities performed by enterprises that have free access to external financial resources is true. Therefore it can be concluded that

in emerging economies, such as Poland, access to external sources of financing can be considered as a determinant of actions undertaken by small and medium-sized enterprises in the period of decreased economic activity.

Conclusions

Due to the current economic climate, businesses (and in particular SMEs) face a number of challenges including decreases in demand, increases in late payments and reduced access to affordable finance. Currently, lack of access to finance is often the main obstacle to growth. Insufficient supply of lending remains a critical issue mainly because it limits firms' abilities to invest and grow (i.e. two essential elements influencing economic recovery). Therefore access to finance is often used as a motive and rationale for more government intervention (for example see Wymenga, Spanikova, Derbyshire, & Barker, 2012) and it is a subject of increasing research interest. Despite this, an understanding of the relationship between SMEs access to external sources of financing and activities undertaken by those SMEs in the emerging markets during the period of economic slowdown is limited. This research helps to fill this knowledge gap. Also, this study is timely in that the economic slowdown affects entrepreneurship in many countries including those with emerging and developed economies.

The study has shown that there is a clear relation between the ability to access financial resources and strategic decisions of SMEs. Consequently, this study raises interesting issues for policymakers, researchers and entrepreneurs. Firstly, in emerging markets, policymakers have to understand that their decisions relating to accessibility of SMEs to financial resources have a direct impact on activities undertaken by, and the development of, the enterprises. Those factors have to be better understood in order to further enhance and strengthen emerging economies. Moreover, and as highlighted in the introduction, access to sufficient capital is essential in fostering entrepreneurship, competition, innovation and growth – all

needed in order to address challenges of the world economic crisis. The study showed, for example, that lack of accessibility to financial resources can lead to a reduction in the employment level and decreased SME investments in innovations and business improvements; these factors can have an impact on a prolonged economic crisis.

Secondly, for SME entrepreneurs the study presents the assessment of the financing needs of SMEs in the emerging market of Poland, particularly during the time of economic slowdown. In addition, the study indicates potential consequences of accessibility (or otherwise) to financial resources on their decision-making. These practical findings can influence future policies relating to finance accessibility and, thereafter, activities of SMEs.

Finally, for researchers interested in entrepreneurship and business, this study identifies important patterns relating to activities undertaken by SMEs during the period of economic slowdown. The study showed that access to external financial resources (or lack of it) has a significant impact on decisions undertaken by SME entrepreneurs. Therefore, as an important theme, this topic should be a subject of further empirical testing. A comparative study in other - emerging and developed markets - during times of both economic slowdown and high economic growth - would help to verify and build better understanding of the results described in this study. Further exploration of trends and patterns relating to the behaviour of SMEs and their ability to access finance, would provide important information which could help in underpinning the evidence base for future policy that aims to achieve economic growth and supports innovation.

References

Andersson, S., & Tell, J. (2009). The relationship between the manager and growth in small firms. *Journal of Small Business and Enterprise Management*, 16(4), 586-598.

- Audretsch, D. B., Carree, M. A., Stel, A. J., & Thurik, A.R. (2002). Impeded industrial restructuring: the growth penalty. *International Review for Social Sciences*, 55(1), 81-97.
- Beck, T., & Demirgüç-Kunt, A. (2006). Small and Medium-Size Enterprises: Access to Finance as a Growth Constraint. *Journal of Banking and Finance*, 30, 2931-43.
- Beck, T., Demirgüç-Kunt, A. & Martinez-Peria, M.S. (2008). Bank Financing for SMEs around the World: Drivers, Obstacles, Business Models, and Lending Practices. Policy Research Working Paper 4785. World Bank, Washington, DC.
- Berger, A., & Udell, G. (1998). The Economies of Small Business Finance: The Role of Private Equity and Debt Markets in the Financial Growth Cycle. *Journal of Banking and Finance*, 22, 613-673.
- Berger, A., & Udell, G. (2006). A more complete conceptual framework for SME finance. *Journal of Banking and Finance*, 30, 2945-2966.
- Brussa A., & Tarnawa A. (2011). Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce, PARP, Warsaw.
- Bryman, A., & Bell, E. (2007). *Business Research Methods*, Oxford University Press, Oxford.
- Bygrave, W., Hay, B.M., Ng, E., & Reynolds, P. (2003). Executive forum: a study of informal investing in 29 nations composing the Global Entrepreneurship Monitor. *Venture Capital* 5(2), 101-116.
- Central Intelligence Agency (2012). The work of a nation. The world Factbook. Europe-Poland. Retrieved April 15, 2012, from <https://www.cia.gov/library/publications/the-world-factbook/geos/pl.html>
- Chauffour, J. P., & Farole, T. (2009). Trade Finance in Crisis. Market Adjustments or Market Failure? In: S. J. Bernard, M. Hoekman, and O. Cattaneo (eds.) *Effective Crisis Response and Openness: Implication for the Trading System*, The World Bank, Washington, 119-142.

Curran, J. (2000). What is small business policy in the UK for? Evaluation assessing small business policie. *International Small Business Journal*, 18(3), 36-50.

Dobbs, M., & Hamilton, R.T. (2007). Small business growth: recent evidence and new directions. *International Journal of Business Behavior & Research*, 13(5), 296 - 322.

Dzierżanowski, W. (1999). Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce w latach 1997-1998 [Report on Condition of the Sector of Small and Medium-Sized Enterprises in Poland Between the Years from 1997 to 1998]. Polska Fundacja Promocji i Rozwoju Małych i Średnich Przedsiębiorstw [Polish Foundation for Promotion and Development of Small and Medium-sized Enterprises“], Warsaw, Poland.

European Central Bank (2012). Survey on the access to finance of SMEs in the euro area (SAFE). Retrieved January 3, 2013, from <http://www.ecb.int/stats/money/surveys>

European Commission (2003). European Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises. Document number C (2003) 1422, Text with EEA relevance, 2003/361/EC, *Official Journal of the European Union* 124, 36.

European Commission (2005). SME Access to Finance. Executive Summary. *Flasheurobarometer 174 – The Gallup Organization*, 3-4.

European Commission (2006). SME Access to Finance in the New Member States Analytical Report, *Flasheurobarometer 184 – The Gallup Organization*, 4.Eyre, P., & Smallman, C. (1998). Euromanagement competences in small- and medium-sized enterprises: a development path for the new millennium? *Management Decision*, 36, 34-42.

Eurostat (2010). Dane statystyczne dotyczące społeczeństwa informacyjnego. Retrieved January 7, 2013, from <http://epp.eurostat.ec.europa.eu>

Eurostat. (2013). GDP and main components – volumes. . Retrieved May 28, 2013, from, www.appsso.eurostat.europa.eu.

Favore. (2008). Bariery rozwoju sektora MSP [Barriers for SME Sector Development].

Retrieved September 15, 2008, from

http://file.favore.pl/store/ctx/docs/reports/Bariery_rozwoju_sektora_MSP.pdf

Frasukiewicz, D. (2003). Psychologiczne uwarunkowania decyzji finansowych właścicieli małych i średnich przedsiębiorstw, a kultura wysokiej tolerancji niepewności [Psychological Conditioning of Financial Decisions of Owners of Small and Medium-Sized Enterprises and the Culture of High Tolerance of Indecision]. In: Orachwa-Maliszewska E., & Kpoczuk A. (eds) Finansowe aspekty funkcjonowania małych i średnich przedsiębiorstw [Financial Aspects of Functioning of Small and Medium-Sized Enterprises]. Publishing House of University of Finance and Management in Białystok, Białystok, Poland.

Freel, M. S. (2000). Barriers to Product Innovation in Small Manufacturing Firms. *International Small Business Journal*, January (18), 60-80.

Gebremariam G. H., Gebremedhin T. G., & Jackson R. W. (2004). The Role of Small Business in Economic Growth and Poverty Alleviation in West Virginia: An Empirical Analysis. Regional Research Institute, WVU, Working Paper No. 10.

Gęsicka, G. (1997). Stan sektora małych i średnich przedsiębiorstw w Polsce. Raport za lata 1995-1996, Polska Fundacja Promocji i Rozwoju Małych i Średnich Przedsiębiorstw USAID GEMINI PEDS PROJECT, Warszawa, Poland.

Halabi, A. K., Barrett, R., & Dyt, R. (2010). Understanding financial information used to assess small firm performance An Australian qualitative study. *Qualitative Research in Accounting & Management*, 7(2), 163-179.

Hamilton, R.T., & Dana, L.P. (2003). An increasing role for small business in New Zealand. *Journal of Small Business Management*, 41(4), 402-408.

Harrison, R. T., Mason, C.M., & Girling, P. (2004). Financial Bootstrapping and Venture Development in the Software Industry. *Entrepreneurship and Regional Development*, 16(4), 307-333.

Holmes, S., & Gibson, B. (2001). Definition of Small Business. Final Report, The University of Newcastle, Newcastle.

Howorth, C.A. (2001). Small firms' demand for finance: A research note. *International Small Business Journal*, 19(4), 78–86.

ICAEW (2010). Global enterprise survey report 2010. A unique annual insight into business competitiveness and globalisation in major economic regions. Retrieved January 1, 2012, from <http://www.insme.org/files/4346>.

Jamali, D., Zanhour, M., & Keshihian, T. (2009), Peculiar Strengthens and Relational Attributes of SMEs in the context of CRS. *Journal of business Ethics*, 87, 355-377.

Juchniewicz A., & Grzybowska B. (2010). *Innowacyjność mikroprzedsiębiorstw w Polsce*, PARP, Warszawa.

Matkowski, Z. (2010). Perspektywy wzrostu gospodarczego Polski w latach 2010-2020 i docelowy poziom PKB per capita [Prospects of Economic Growth of Poland between the Years from 2010 to 20101 and Target Level of GDP Per Capita]. Retrieved September 15, 2011, from <http://akson.sgh.waw.pl/~zme2/konw15.pdf>

Maula, M., Autio, E., & Arenius, P. (2005). What Drives Micro-Angel Investments? *Small Business Economics*, 25, 459-475.

McIntyre, R. (2001). *The Role of Small and Medium Enterprises in Transition: Growth and Entrepreneurship*, Research for Action 49. UNU World Institute for Development Economics Research (UNU/WIDER), Hakaipaino Oy, Helsinki.

OECD. (2006). *The SME Financing Gap THEORY AND EVIDENCE Volume I*. Retrieved June 3, 2011, from <http://www.ec.europa.eu/>

Ojala, A., & Tyrväinen, P. (2007). Entry barriers of small and medium-sized software firms in the Japanese market, *Thunderbird International Business Review*, 49(6), 689 – 705.

Pansiri, J., & Temtime, Z. T. (2010). Linking firm and managers' characteristics to perceived critical success factors for innovative entrepreneurial support. *Journal of Small Business and Enterprise Development*, 17(1), 45-59.

Reichardt, A. (2011). Poland and the Global Economic Crisis: Observations and Reflections in the Public Sector. *Journal of Finance and Management in Public Services*, 10 (1), 38-48.

Reid, D.M., DeMartino, R. & Zyglidopoulos, S.C. (2005). The Internationalization Journey of a High- Tech Cluster. *Thunderbird International Business Review*, 47(5), 529-554.

Reid, R., & Harris, R.I.D. (2004). *Family-Owned SME Growth in Scotland: A Comparison with the UK*. Report to Scotcon.

Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of Business Venturing* 4, 441-457.

Rowden, R. (2001). Research Note: How a Small Business Enters the International Market. *Thunderbird International Business Review*, 43(2), 257-268.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*, 3rd ed., Financial Times Prentice Hall, London.

Seale, C. (2004). *Researching Society and Culture*, London: Sage.

Sloman, J. (2006). *Economics*. Prentice Hall, Bilboa, Spain.

Smallbone, D., & Wyr, P. (2000). Growth and development in the small firm. In: Carter, S. & James-Evans, D. (eds.), *Enterprise and Small Business*, Prentice Hall, Harlow.

Starczewska-Krzyszczek, M. (2007). Raport z badań - Monitoring kondycji sektora MSP 2007 - Część 1, Konkurencyjność małych i średnich przedsiębiorstw 2007, [Report on Research: „Monitoring of SME Sector Condition 2007“ Part 1. Competitiveness of Small and Medium-Sized Enterprises 2007], PKPP Lewiatan [Polish Confederation of Private Employers Lewiatan], Warsaw, Poland.

Starczewska-Krzyszczek, M. (2008). Raport z badań „Monitoring kondycji sektora MŚP 2008”, Konkurencyjność małych i średnich przedsiębiorstw 2008, [Report on Research: „Monitoring of SME Sector Condition 2008“Competitiveness of Small and Medium-Sized Enterprises 2008]. PKPP Lewiatan [Polish Confederation of Private Employers Lewiatan], Warsaw.

Steinerowska-Streb, I. (2005). The influence of Accession to the European Union on the Investments In the Sector of Small and Medium Enterprises (SME) In Poland. The results of a study carried out among Silesian entrepreneurs, *Transformations in Business & Economics*, 4(1-7), 77-87.

Steinerowska-Streb, I. (2011). Small and Medium Enterprises as a Moderator of the Market Mechanism in Transitional Economies. In: T. Bernat (ed.), *Selected Issues of decision-making by economic entities*, University of Szczecin, Szczecin, Poland.

Stel, A., Carree, M., & Thurik R. (2005). The effect of entrepreneurial activity on national economic growth. *Small Business Economics*, 24(3), 311-321.

Szerb, L., Rappai, G., Makra, Z. & Terjesen, S. (2007). Informal Investment in Transition Economies: Individual Characteristics and Clusters. *Small Business Economics*, 28, 257- 71.

Todorov, O. (2008). The Role of Small and Medium Enterprises in World Economies – Some Aspects. *Economic Thought*, 4, 69-79.

Tokaj-Krzewska, A., & Pyciński, S. (2006). Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce w latach 2004-2005 [Report on Condition of Small and Medium-Sized Enterprises in Poland between the Years from 2004 to 2005]. PARP [Polish Agency for Enterprise Development] Warsaw.

World Bank. (2010). *Financial Access 2010 The State of Financial Inclusion Through the Crisis*, Washington, USA.

Wymenga P., Spanikova V., Derbyshire J., & Barker A. (2011). Are EU SMEs recovering from the crisis? *Annual Report on EU SMEs 2010/2011*, Rotterdam, Cambridge.

Zain, M., & Ng, S.I. (2006). The Impacts of Network Relationships on SMEs Internationalization Process. *Thunderbird International Business Review*, 48(2), 183-205.

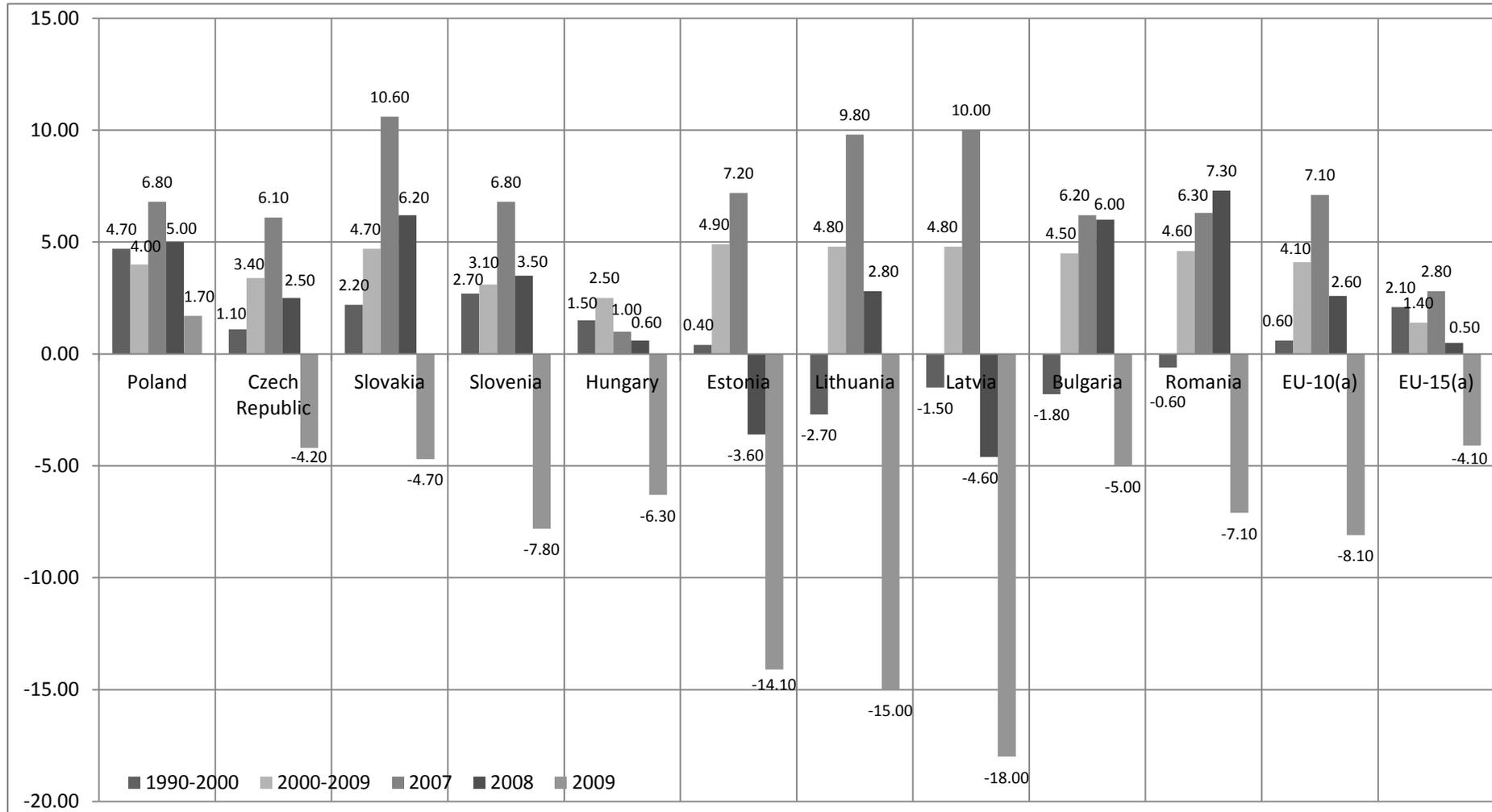
Żołnierski, A., & Zadura-Lichota, P. (2008). Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce w latach 2006–2007 [Report on Condition of Small and Medium-Sized Enterprises in Poland between the Years from 2006 to 2007]. PARP [Polish Agency for Enterprise Development], Warsaw.

Acknowledgements

The authors would like to thank all the respondents who participated in the presented study.

We would also like to thank Sian Ringrose for being an invaluable proof reader.

Appendix 1 Growth in GDP between the years from 1990 to 2009 in 10 emerging markets of the EU members



(a) - Arithmetic mean; Source: Matkowski (2010)