PhD THESIS SUMMARY

ROMANIAN SMEs FINANCING WITHIN THE EUROPEAN CONTEXT

Scientific Coordinator:
Prof. Univ.Dr. Ioan Nistor

PhD student:
Daniela-Rodica Silivestru (cas. Popescu)

Cluj-Napoca
2013
INTRODUCTION
CHAPTER 1: THE ECONOMIC IMPORTANCE OF SMES, THEORETICAL AND EMPIRICAL APPROACH

1.1. SMES DEFINITION – THEORETICAL APPROACH
1.2. THE PROS AND CONS OF SMEs ROLE IN ENSURING ECONOMIC GROWTH
1.3. THE FINANCIAL SYSTEM’S CONTRIBUTION TO SMES GROWTH AND ECONOMIC DEVELOPMENT
1.4. SMEs CONTRIBUTION TO THE ECONOMIC GROWTH OF THE EUROPEAN UNION MEMBER STATES DURING 2005-2011 – EMPIRICAL STUDY

1.4.1 DATA USED AND METHODOLOGY
1.4.2 EMPIRICAL ANALYSIS OF VARIABLES AND MAIN RESULTS OBTAINED
1.5. EUROPEAN UNION’S FINANCIAL SECTOR DEVELOPMENT AND ITS IMPACT ON SMES DOMINATED INDUSTRIES IN THE 2005-2011 PERIOD

1.5.1. METHODOLOGY AND DATA USED
1.5.2. MAIN RESULTS

CHAPTER 2: THE STATE OF SME SECTOR DEVELOPMENT IN THE EUROPEAN UNION AND ITS IMPACT IN ROMANIA

2.1. SMEs SUPPORT ACTIONS TAKEN AT EU LEVEL
2.2. SMEs DEVELOPMENT IN EUROPE DURING 2005-2011
2.3. SMEs POSITION IN THE ROMANIAN ECONOMY DURING 2005-2011 PERIOD

2.3.1. SMES EVOLUTION BY SIZE AND SECTOR OF ACTIVITY
2.3.2. ROMANIAN GOVERNMENT’S STRATEGY REGARDING THE SMES SECTOR DEVELOPMENT DURING 2012-2013

CHAPTER 3: SMES FINANCING IN ROMANIA

3.1. ACCESS TO FINANCE – A BARRIER IN SMES DEVELOPMENT
3.2. EQUITY GROWTH
3.2.1. SELF-FINANCING
3.2.2. VENTURE CAPITAL FUNDS
3.2.3. BUSINESS ANGELS
3.3. SMES FINANCING THROUGH DEBT
3.3.1. BANK LOANS
3.3.2. SUPPLIER'S CREDIT
3.3.3. LEASING
3.3.4. FACTORING
3.3.5. MICRO CREDIT
3.3.6. GUARANTEE MECHANISM
3.4. EUROPEAN AND GOVERNMENT FUNDS

3.4.1. SECTORAL OPERATIONAL PROGRAMME INCREASE OF ECONOMIC COMPETITIVENESS
3.4.2. REGIONAL OPERATIONAL PROGRAMME
3.4.3. SECTORAL OPERATIONAL PROGRAMME HUMAN RESOURCES DEVELOPMENT
3.4.4. NATIONAL RURAL DEVELOPMENT PROGRAMME
3.4.5. FISHERIES OPERATIONAL PROGRAMME
3.4.6. GOVERNMENT PROGRAMS TO STIMULATE SMES DEVELOPMENT IN ROMANIA

CHAPTER IV: AN EMPIRICAL STUDY OF ROMANIAN SMES FINANCING OPTIONS

4.1. PREMISE RESEARCH
4.2. VARIABLES DESCRIPTION AND BASIC EQUATION SELECTION
CHAPTER 5: EMPirical RESEARCH ON THE DETERMINANTS OF ROMANIAN SMES CAPITAL STRUCTURE

5.1. THEORIES AND MODELS REGARDING FIRMS CAPITAL STRUCTURE VALIDATED EMPIRICALLY

5.1.1. CAPITAL STRUCTURE THEORIES

5.1.2. EXISTING EMPIRICAL RESEARCH REGARDING SMES CAPITAL STRUCTURE

5.2. CASE STUDY OF ROMANIAN SMES CAPITAL STRUCTURE DETERMINANTS

5.2.1. RESEARCH HYPOTHESES

5.2.2. SAMPLE DATA AND ITS CHARACTERIZATION

5.2.3. METHODOLOGY OF RESEARCH

5.2.4. VARIABLE DESCRIPTION

5.2.5. MAIN RESULTS OBTAINED WITH AN ENPHASE ON THE PARTIAL EFFECTS OF THE EXPLANATORY VARIABLES ON THE DEPENDENT VARIABLE

CONCLUSIONS AND PERSPECTIVES

REFERENCES

Keywords: micro, small, medium sized enterprises, SMEs sources of financing, European funds, government programs supporting SMEs development, loans, leasing, factoring, microcredit, business angels, venture capital funds, firms capital structure.
INTRODUCTION

In the last 50 years, micro, small and medium-sized enterprises ("SMEs") have became valuable actors in the economies of the world, in terms of created jobs and their direct contribution to raising the living standards of the communities in which they operate. Due to their small size, SMEs enhance the market’s atomicity, diminishing the power of big business to influence it. In addition, their large numbers fosters competition by limiting the monopoly position of big firms and thus reducing their ability to raise prices. Moreover their capability to respond quickly to local needs because of their production flexibility makes them more efficient in local markets than their larger counterparts.

The importance of the present research draws from the position occupied by the SMEs in the private sector of the developed and developing countries. Statistically speaking at the end of 2011 in the European Union ("EU") there were recorded over 20.8 million such entities providing approximately 87.5 million jobs (Ecorys, Cambridge Econometrics, 2011). Improving SMEs access to finance plays a crucial role in promoting entrepreneurship and increasing competition in the European Union’s Member States. Access to sufficient and adequate capital to grow and develop is one of the main obstacles that most European SMEs face nowadays. This situation is heightened by the difficulties encountered by SMEs in relation to financial intermediaries who consider their funding as a high-cost and high-risk activity. The financial intermediaries’ reluctance towards SME financing is amplified by a number of factors such as (World Bank, 2008):

- High administrative costs. Regardless of the loan amount or SMEs size class the creditors bear a series of fixed costs when lending money (e.g the applicant’s file analysis, recording, monitoring). From this perspective the high administrative costs associated with providing small loans make SME financing as a low profitable business for most creditors;
- Lack of tangible goods that could be used as collateral. SMEs are regarded by creditors and investors as high risk borrowers due to their insufficient assets, their vulnerability to market fluctuations and high mortality rates;
- The existence of information asymmetry between SMEs acting as borrowers and lenders / investors. SMEs lack of experience in providing creditors with solid financial statements or business plans hinders the evaluation of the submitted investment proposals.
Many governments and international financial institutions have attempted to address the issue regarding the barriers faced by SMEs in seeking finance by developing different kind of programs to support the small businesses sector. This is the case with the Romanian government, which, after the country’s entry into the European Union, supported the creation of financial toolkits (guarantee funds, loan products, etc.) aimed at facilitating SME access to finance, in line with the European’s best practice. Initiatives in this area, developed so far, tried to strengthen the capacity of financial intermediaries (microfinance institutions, banks, venture capital funds, etc.) to support at national and regional level the investments undertaken by the private sector. In addition the European Union membership status provides Romania with the benefit of financial transfers aimed at facilitating access to knowledge and innovation, enhancing clarity and predictability of the business environment, education and training in business. The financial support is given through structural instruments which include (UGIR, 2006:6):

a) Structural and Cohesion Funds (European Regional Development Fund (ERDF), European Social Fund (ESF), the Cohesion Fund (CF));

b) Additional Funds (European Agricultural Fund for Rural Development (EAFRD) and European Fisheries Fund (EFF)).

SMEs' access to finance is closely linked to the cost of financing arrangements and the financial structure of the applicant. Often, financial intermediaries question SMEs ability to present viable projects worth investing in. Business funding sources differ between countries due to specific factors such as: enterprises characteristics, financial system development and governing institutional environment. At country level differences in SMEs financing practices are more pronounced depending on aspects related to profitability, asset tangibility, sales, development opportunities, bankruptcy costs, etc.. Understanding SMEs financing pattern and their reaction to the institutional development has important political implications. Throughout the world, including in the European Union policymakers believe that SMEs have inadequate access to financing due to market imperfections. As a result, significant resources are channeled into programs aimed at promoting and supporting small and medium size enterprises financing.

Generally speaking, SME financing depends on the supply and demand of existing financial resources. If the offer is exogenous to enterprises the demand depends entirely on their growth objectives, level of expected return and assumed risks. In this context, analyzing the factors that influence SMEs capital structure provides clues about their funding matrix by identifying those features that ease their access to finance.
For nearly three decades, SMEs occupy a significant place on the global economic scene being one of the main topics of debate among both economists and policy makers. Neglecting these entities in the literature was somewhat ironic given the fact that in most countries they dominated the private sector providing jobs and generating added value. SMEs are important for all economies, especially for those in developing countries which face employment problems and per capita unequal income distribution.

The supporters of SME economic development model use three main arguments to sustain their ideas (Beck et.al, 2005:1):

1. SMEs capacity to stimulate competition and develop entrepreneurship. From this perspective, SMEs support oriented towards facilitating their access to finance represents the main tool in endorsing economic growth, innovation and aggregate productivity at country level.

2. SMEs productive flexibility which makes them capable of producing more sophisticated, varied and innovative goods, than their larger counterparts who bound by rigid production cycles, do not always meet customers’ needs. SMEs ability to seize market opportunities and adapt quickly to its changes has been extensively studied. In this respect there are numerous papers showing that enterprises flexibility is inversely related to the size of the enterprise (Somes C., 2010: 9).

3. SMEs significant contribution to increase employment due to reduced costs associated with job creation. Thus SME financing leads to poverty reduction fostering the necessary conditions for sustained economic growth.

Assuring a framework for SMEs growth and development has become a European Commission’s goal set out on several occasions. This has culminated, in June 2008, with the publication of the Small Business Act (SBA). The SBA recognized the central role occupied by SMEs in the EU economy emphasizing their importance in insuring the economic and social cohesion and innovation. In this context the principle promoted by the Small Business Act "Think Small" aims at encouraging Member States to define policies for promoting entrepreneurship and SMEs growth by creating the necessary tools which can help them overcome the problems that hamper their development. Out of these the most difficult relates to SMEs access to finance. EU statistics shows that every third enterprise faces problems when it comes to attracting the necessary financial resources for its investment projects.

The lack of adequate funding opportunities together with the financial institutions reluctance towards SMEs capital requirements (regardless of their stage of development) leads to a slow down their development with negative repercussions on productive sectors
remodeling, job creation and innovation. These issues are more evident in Romania’s case, where according to a recent survey conducted by the European Commission SMEs "Access to finance" has manifested a significant deterioration especially in recent years (e.g. from 2009-2011) (European Commission, 2011).

In the light of these findings, the proposed scientific approach aims at examining Romanian SMEs financing options and the main features governing their financial statements which reveal their capacity to become in debt. The research purpose is understanding the actual situation that micro, small and medium enterprises face when it comes to financing their investment projects and in base of the main findings formulating practical solutions that can help alleviate some of their main problems by following the examples of good practices in other European Union Member States.

The importance of this work lies in the way it addresses the issues related to Romania SMEs financing. Until the development of this study discussions on how SMEs funding works in Romania have not focused on a thorough examination of both SMEs financing options and the features which increase the indebtedness of small and medium-sized enterprises by size and sectors of activity. Furthermore empirical studies centered on identifying the factors that influence micro, SMEs capital structure or those that allow the ranking of funding options in terms of their contribution to firms’ created value added are completely lacking.

In this context, the novelty of the thesis lies in the conducted investigations which fills the existent Romanian literature gap and brings to the fore key issues related to SMEs financing such as:

- The gap between demand and supply of financial instruments available to SMEs in Romania between 2005-2011;
- The validation of an econometric model meant to identify and prioritize those financing options which have contributed the most to the increase of Romanian SMEs gross added value during the 2007-2011 period;
- An empirical analysis of the key factors influencing Romanian’s SMEs capital structure by size class and sectors of activity.

The thesis research objectives include:

1. A literature review of SMEs contribution to economic growth and how the financial system supports the growth of sectors dominated by SMEs. In carrying this work I have studied the works of the following authors: Lucar Acs and Audretsch the authors (1987), Little, et al., (1987), Carlsson (1989), King and Levine (1992), Glaeser et al. (1992), Jovanovic (1993),

2. An empirical analysis of SMEs contribution to the economic growth of European Union Member States during 2005-2011 by size class and an investigation of how the European Union’s financial system has supported the European Commission efforts towards SMEs promotion by facilitating their access to financial resources; 

3. A radiography of Romania SMEs financing during 2005-2011 with a focus on highlighting the gap between the demand and supply of financial instruments in view of our country's integration into the European Union; 

4: An analysis and ranking of Romanian SMEs financing sources which have contributed the most to the created value added of small and medium-sized enterprises by size class and sector of activity between 2007 and 2011; 

5: A summary of the main conclusions drawn from the literature regarding the enterprises capital structure determinants. Based on the information retained I have extracted and examined the annual financial statements for a representative sample of Romanian micro, small and medium-sized enterprises (1,139 units) between 2005 and 2010.

In achieving the research’s objectives I have used specific methods such as analysis, synthesis, deduction, historical method and the unit of logical and mathematical modeling. The whole scientific approach was based on an analysis of the Romanian SMEs financing phenomenon in the context of existing EU regulations and similar problems faced by these entities in other Member States. The information gathered was then synthesized and used as base in formulating the ideas and assumptions applied in developing the research econometric models.

All the data and information contained in this thesis come from: books written by Romanian and foreign authors, specialized articles published in internationally recognized journals, European regulations and national laws, reports and surveys carried out by different public and/or private bodies. The raw data used in validating the econometric models have been gathered from official sources such as: Eurostat database, the EU statistical committee, the Romanian National Institute of Statistics, AMADEUS database, a commercial database.
produced by Bureau van Dijk, annual surveys conducted by the National Council of Small and Medium Sized Private Enterprises in Romania (CNIPMMR), National Bank of Romania (BNR) statistics, data published by the Managing Authorities of European funds programs in Romania, etc..

The paper contains five chapters and 18 sections.

In the first chapter entitled "The Economic Importance of SMEs, Theoretical and Empirical Approach" I have focused on highlighting the SMEs role in promoting economic growth at the European Union level. Issues concerning the delimitation of enterprises by size class were brought forward in order to better understand an often used statement in documents, presentations and articles discussing the topic of private sector development: "SMEs are the backbone of the economy". Most times, this statement was made in the absence of accurate data, capable to support it or without a real effort to comprehend what exactly SMEs are. Currently, throughout the world there are very different ways of defining SMEs each state or international body sizing SMEs according to specific criteria. At EU level the problem of SMEs delineation has been addressed by the European Commission Recommendation 2003/361/EC which imposed uniform size thresholds for each enterprise class. This has facilitated the development of the SME sector and allowed for the conduction of comparative reports at country and industry level. Regardless of how SMEs are defined the enterprise finance literature abounds with topics regarding the pros and cons effects of developing this sector on the economy. Based on these aspects I have concluded that SMEs development by facilitating their access to funding creates prerequisites for sustained economic and social growth, creating jobs and ensuring a suitable development for individual and society. To test this I conducted a regression analysis, which examined the SMEs’ sector contribution to GDP growth at the EU level in the 2005-2011 period. Based on the main results I was able to support the idea of promoting differentiated financing instruments for SMEs, at EU level, based on their size class. These costumed financing instruments can lead to a strengthening of SMEs market position by facilitating their transition to higher size classes (classes that currently contribute to GDP growth).

In Chapter II, entitled "The State of SME Sector Development in the European Union and its Impact in Romania " I have reviewed the SME sector development in the European Union and Romania in order to understand the evolution of these entities and the problems they face.

The presentation of the actions taken at EU level to support small and medium size enterprises facilitated the understanding of the role played by the SMEs sector in the
economies of European Union’s Member States. From the beginning, the founders of the European Community have realized the vital role that small and medium-sized enterprises play in assuring economic competitiveness and growth in Europe. In this regard, supporting the SME sector has had its legal basis on Articles 157, Title XVI of the Treaty establishing the European Community which stated, that the Community and Member States will follow to ensure an “environment favorable to initiative and to the development of undertakings throughout the Community, particularly small and medium-sized enterprises " . Subsequently the article’s full text was taken and included in the Treaty on European Union signed in Maastricht on February 1992. A first attempt to define a common European regulatory framework regarding SMEs financing, was the Integrated Program for SMEs and the Craft Sector, accepted in 1994 by the European Commission. The program was based on the White Paper on Growth, Competitiveness and Employment launched by the European Commission in 1993 which established a close collaboration between all parties involved in SMEs financing and development. Thanks to the elements regarding the support of the SME sector included in the integrated program, the European Commission set forth the priority actions to support European business during the 1994-1999 programming period. Thus the March 2000 Lisbon European Council defined its objectives in terms of employment, economic reform and social cohesion. The main purpose of the new strategy was to transform the European Union by 2010 into "the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion " . Connected to the implementation of the Lisbon strategy at the enterprise level, in June 2000 the European Council adopted the "European Charter for Small Enterprises", which facilitated the entry into force, in December 2000, of the Multiannual Programme for Enterprise and Entrepreneurship for 2001 -2005. The program’s objective was to strengthen entrepreneurship, ease business development, provide services to improve business opportunities and prepare firms for EU accession. In late 2005, the European Commission’s objective to support entrepreneurial initiatives and increase SMEs competitiveness was made possible by a) extending the Multiannual Programme for Enterprise and Entrepreneurship to December 31, 2006, b) entering into force since 2007 of the Competitiveness and Innovation Framework Programme 2007-2013 and c) promoting initiatives to facilitate SMEs access to finance. The European Commission's efforts have led to a positive and constant evolution in the number of SMEs by size class and industry presence, especially in the 2005 and 2009 period. However the financial crisis has taken its toll on these entities leading to a decrease of 2.1% in their number in the 2008 and 2009 period and a 2.8% reduction in their employees in
the same period. The largest decreases in employment were recorded by SMEs active in manufacturing, construction and real estate. Unlike the EU average, in 2010, the Romanian SMEs increased their created value added and permanent employees, matching in this respect countries like Austria, Germany, Luxembourg, Malta, Sweden and United Kingdom (Ecorys, Cambridge Econometrics 2011: 27).

Chapter III "SMEs Financing in Romania" presents a review of the main sources of Romanian SMEs funding during 2005-2011 period based on the premise that business financing options depends on the sector in which firms operate and their lifecycle stage. Special emphasis was placed on the EU funding assistance administered by the European Commission. In this context the main programs ensuring SME sector development set out in the National Strategic Reference Framework have been presented. The investigation conducted found that, in terms of the earmarked, requested and contracted funds aimed at providing financial assistance to SMEs the situation is quite poor. Discrepancies in the structural funds absorption are due to the combined actions of inadequate management regarding Operational Programmes implementation (for example, the Structural Operational Programme Increase of Economic Competitiveness’s, launched its first call for projects only in 2008 sem. I) and the way in which the applicants have failed to provide viable investment projects.

Generally speaking on all programs related directly or indirectly to the support and development of SMEs it was noticed that the number of projects submitted is significantly higher than those contracted, indicating SMEs growing interest to benefit from structural funds financial assistance. However according to monitoring reports completed by December 31, 2011 the amount of signed contracts is well below the amount allocated to Romania in 2007-2013.

In addition to European and government SMEs financing various other ways of funding have been analyzed. These were classified in two main categories: direct sources of financing (loan banking, venture capital funds, leasing, factoring, microcredit, European funding, government assistance programs, etc..) and indirect sources of funding (guarantee schemes). For each category I exposed the main features governing their access and where possible by using the statistical data I have presented their usability.

In Chapter IV, entitled "An Empirical Study of Romanian SMEs Financing Options" I have empirically analyzed the impact of different financing sources to which Romanian SMEs have had access in the 2007-2011 period on their created value added.
The purpose of the analysis was to create an external financing arrangements ranking for Romanian SMEs during the 2007-2011 period, in terms of their contribution to the growth of created value added. To achieve this I have combined the analysis based on questionnaires with the statistical analysis of data. More specifically I have collected statistical data regarding the amounts of external financing arrangements accessed by SMEs in Romania between 2007 and 2011. Next, for the same time I have sorted and retained the answers given by Romanian SMEs to the survey conducted annually by The National Council of Small and Medium Sized Private Enterprises in Romania (and published annually in the White Paper of SMEs). Then by SMEs size categories and sectors of activity I have weighted the percentages of businesses surveyed responses (which according to the National Council of Small and Medium Sized Private Enterprises in Romania formed a representative sample in each year) with the collected statistical data. Thus for each SMEs category I have obtained a separate statistical series, series that I have then used as base to study the impact of the external funding sources to the created value added of SMEs by size classes and sector of activity.

The obtained results allowed for SMEs external financing arrangements to be ranked in accordance to their contribution to the created value added at enterprise level in the 2007-2011 period. Thus, the guarantees products, factoring and long-term bank loans contributed positively and significantly to the increase of the value added created by SMEs while leasing and European funds have adversely affected the created business value.

In Chapter V, entitled "Empirical Research on the Determinants of Romanian SMEs Capital Structure" I sought to identify, based on previous study results, the main factors that influence the capital structure of Romania SMEs by size categories and sectors of activity. To achieve this investigation I have collected and analyzed the financial statements of 1,139 SMEs in Romania between 2005 and 2010. The representativeness of the sample extracted from the Amadeus database, database commonly used in scientific research was provided by the application of objective criteria for the selection of entities considered in relation to the research purpose. Thus, geographical location, to SMEs definition, activities, financial statements and reporting structure size categories and sectors of business have allowed capturing the main features of Romanian SMEs ensuring that the undertaken analysis leads to the formulation of generally accepted opinions. Research methodology in this case was based on the two-part fractional regression model presented and validated in the literature by Ramahlo and da Silva (2009). Unlike the above-mentioned authors, whose study is based on a static model analysis, the research conducted in Chapter 5 is based on a dynamic model (it was conducted over a period of time) and includes a number of new elements: the
introduction of additional variables and combined analyzes: by sector and size categories of SMEs.

The undertaken investigation through the sample chosen, the research methodology and the variables construction, allowed the identification of the following features at Romanian SMEs level:

- The average long-term indebtedness of Romanian SMEs decreases proportionally with the increasing of the business size.
- Tangible fixed assets rate, sales volume, and growth exerts a positive influence on long-term indebtedness of SMEs regardless of their size class. Tangibility is an important factor in determining the proportion of debt in the capital structure of SMEs regardless of their size. This is in line with the economic reality of the conditions governing the SMEs long-term loan granting. Information asymmetry leads creditors to require SMEs to post collateral thus making tangibility a "ticket" for capital loan access.
- Profitability has a negative impact on leverage and Ani and LC variables effect is increasing with the passage from one size class to another.
- The sectors determinants of Romanian SMEs capital structure differ in significance and sign. Long-term indebtedness of SMEs active in industry, trade and services is positively influenced by the rate of tangible assets while profitability, the number of years on the market and the current liquidity exert an opposite impact. Thus for microenterprises in industry, trade and services increased profitability causes a decrease in long-term indebtedness while for small enterprises active in construction and medium sized enterprises in industry the impact is the opposite. The number of years on the market exerts a significant negative impact on the leverage ratio of micro and medium sized enterprises active in the service sector emphasizing that companies with a history on the market have an increased capacity compared to the newly established self-financing. Current liquidity increases long-term indebtedness of micro and small enterprises in industry indicating that for these the value of this indicator is important in obtaining long-term financing. On the opposite side there are the medium-sized enterprises in industry and services for which an increase in the current liability ratio leads to a diminish in their long-term indebtedness level.
CONCLUSIONS AND PERSPECTIVES

A common statement in works dealing with the economic importance of SMEs is that "SMEs are the main engine of economic growth". Unfortunately in support of the above mentioned statement there is little existing empirical work turning this affirmation into an unfounded automatism when considering the role that SMEs play in the economy.

Empirical studies addressing the significance of SMEs in developed and developing countries are limited by the lack of data and the difficulty of making accurate comparisons regarding SMEs role in the economy due to deficiencies in defining these entities. Most authors speak of the existence of a positive link between SME growth and economic growth, although this link is not causal. This is because most of the work deals with the role of SMEs in economic growth through the contribution of SMEs to create new jobs. Thus, Audretsch and Fritsch (2002) showed that during 1980-1990, most German regions experienced significant growth due to the increasing share of SMEs in terms of number of employees in most industries.

A reference analysis regarding the link between SMEs and economic growth is Beck et.al.’s (2003) paper which highlights the fact that SMEs prevalence is a characteristic of those economies which record significant growth and not a cause of that growth.

In this context, the analysis I made in this paper has demonstrated the existence of a positive link between the prevalence of SMEs in the EU, in terms of created value added, and GDP growth, in the period 2005-2011. Looking by size class, the situation is different. While microenterprises fail to generate increases in GDP, small and medium size enterprises contribute significantly to the economic welfare of the Member States. The main cause for this discrepancy at SMEs level is employee productivity. In small firms (with less than 50 employees) we find the largest share of employees, but the lowest labor productivity per employee. Inefficiency is caused by small firms’ limited access to finance for their investment projects. According to the literature a way the financial system contributes to economic growth is by easing private sector constrains and concentrating on increasing firms’ size. (Thorsten Beck et al., 2008: 1384).

Although in recent years the financial intermediaries have adapted their products and services in accordance with small businesses requirements, constraints on financing investment projects continue to exist. As we have seen from the analysis performed during the 2005-2011 the EU Member State financial system has favored the development of industries dominated by small and medium enterprises at the expense of microenterprises.
In this context the EU SME policy should be directed at changing the share structure of enterprises by size. If small businesses are contributing to the growth of the European Union in terms of created value added, then normally their share in total SMEs should surpass that of the microenterprises. This can be achieved by supporting the growth of microenterprises, which are the most numerous, and facilitate their transition to higher size classes. Unfortunately, an impediment in achieving this goal is the SMEs official definition itself set into force by the European Commission in the Recommendation no. 361/2003. More specifically it is the number of employees criterion which delimitates SMEs by size class. Using this classification criterion, the SME definition suggests, that to increase in size an enterprise just has to hire more staff regardless of the value added created by new employees. Independent use of this criteria leads to a false classification of businesses allowing them to "juggle" with the SME status to qualify for government facilities.

The role of SMEs in economic growth remains a highly debated topic in the literature as long as the "engine" lacks the necessary "fuel" to develop: the funding sources.

In Romania, the analysis of SMEs funding sources in the period 2005-2011, reveals the following features:
a) Start-up financing poses difficulties. This is demonstrated by the large number of applications which have been rejected by the business angels (of 100 business proposals submitted in 2007-2011 period only 3 were funded), the low interest of venture capital funds to support start-up businesses (in 2005-2010 venture capital funds have invested in Romania only 10,000 Euro to support the creation of new business) and low uptake of EU funds allocated to support the creation of new Romanian enterprises (e.g. from 2007 to 2010, the European Agricultural Fund for Rural Development rate of absorption through the National Rural Development Programme, Measure 312 "Support for the creation and development of micro-enterprises” was 3.34%). All this led to a decrease in the average ratio between the annual number of firms’ registrations and cancelations during the period 2005-2011 from 2:1 in 2005 to 0.6 to 1 in 2011)
b) Initial businesses funding raises many problems for entrepreneurs due to the absence of business angels’ networks with regional and national coverage and poor development of venture capital instruments. The only viable option for SMEs in their initial stage of activity is microfinance (in 2010 the Romanian microfinance market was dominated by 7 organizations mature (10 years old), large and medium which held an average microcredit portfolio of about 10 million Euro).
c) **SMEs business growth financing** is relatively easy. Main financing tools in this stage are bank loans, financing source accessible to more than 25% of SMEs (in particular small and medium sized enterprises), guarantee schemes, supplier’s credit, government and European funding, leasing and factoring.

d) **Financing of SMEs restructuring** through venture capital investment (formal venture capital funds) or by issuing shares or bonds on the capital market is possible, but highly selective, due to the relatively high value transactions (over 2 million euro) and rigorous selection criteria which usually include a history of profitable operation for several years, exceptional growth potential and a strong position on the market (Ministry of Economy, Trade and Business Environment, 2010:15).

To correct market failures in SME financing in recent years, national authorities have implemented a number of measures. Thus, in parallel with the development of 6 multiannual programs to support small businesses promoted by the Agency for the Implementation of Projects and Programmes for SMEs, in 2010, the Ministry of Finance established a state aid scheme exclusively for SME development. In addition, to facilitate SMEs' access to credit for supporting the investment projects which were partially financed by European funds, in 2009 the Romanian Counter-Guarantee Fund was established. The purpose of the fund which became operational in March 2010 is to counter-guarantee guarantees awarded from guarantee funds to Romanian legal persons for loans and other financial instruments extended by commercial banks and other financial sources to small and medium-sized enterprises. Moreover in 2010, the National Credit Guarantee Fund for SMEs was capitalized with an additional 105 million Lei (24 million Euros) (European Commission, 2011b).

Given this context, SME owners will have to recognize that in the future, access to external financing (venture capital or loan) will be based on a more transparent and open exchange of information regarding the situation and development prospects of their companies. To meet new needs for transparency, SMEs will have to use new information and risk management tools (e.g. business plans, financial reporting, etc.).

The analysis of the financing sources currently available to SMEs in Romania was completed with an analysis of the determinants of demand. Specifically I have examined the some of the enterprises’ financial characteristics that may impair their access to external financing sources and the contracted amounts.

In the literature, the debate over enterprises’ capital structure determinants continues for more than five decades. If initially the focus was mainly on the analysis of large enterprises, today's economic realities have forced a shift of interest towards SMEs sector
which is becoming the main support of the economies of the world. However empirical studies aimed at investigating SMEs financial structure by size class are very limited lacking completely in Romania’s. In this regard this paper represents a first step in analyzing the factors that influence the capital structure of Romanian micro, small and medium-sized enterprises. The analysis is conducted for the 2006-2010 period.

SMEs in Romania are traditionally characterized by the almost exclusive use of bank loans when it comes to financing their long term investments projects. However many of them face problems when accessing external financing sources which leads them to postponing their investment plans and focusing on finding momentary solutions to ensure their competitiveness in the market. Not having access to loan capital these companies recorded a null long-term indebtedness level. Therefore in analyzing the factors that influence firms’ capital structure a distinction between these two situations needs to be made.

Applying the methodology proposed by Ramalho, J. and Silva, J. (2009) the present study identified for a representative sample of SMEs (1139 entities) the existence of differences between the factors that influence the option to borrow capital and those that determine the proportion of debt in the capital structure of enterprises by size class. The Two part fractional regression model allowed separate determination of:

i) the effects of selected explanatory variables on the probability that firms use borrowed capital;

j) the effects of selected explanatory variables on the proportion of the borrowed capital by firms that have accessed to this capital.

The variables chosen to explain the SMEs behavior by size class include both classic variables, validated by the literature to justify the financial structure of SMEs and new ones (rate of intangible assets). Thus, changes in the level of long-term debt of companies (dependent variable) were explained through the following independent variables: the ratio of tangible assets, sales volume, the level of development (total assets growth index), growth opportunities (intangible assets rate), enterprise’s number of years on the market, overall profitability and liquidity.

The main results of the undertaken analysis suggest that, on average, in the period under review, microenterprises long-term indebtedment level is significantly lower than that of small and medium-sized enterprises. However, when comparing the average rates of indebtedness based only on firms which register long term debts, it has been noticed that microenterprises have higher debts rates than their larger counterparts. These results are in line with the relatively recent studies undertaken by Strebulaev and Kurshev (2006) and
Ramalho and da Silva (2009), which identify a negative relationship between firm size and long-term debt, when only firms with long-term debt are considered.

When comparing the variables coefficients derived from conducting the two part fractional regression model we find that the factors influencing the firms’ likelihood to resort to borrowed capital don’t have the same impact on the long-term indebtedness of SMEs using borrowed capital. For example, the sales volume does not influence the long-term indebtedness of micro and medium enterprises that use borrowed capital but instead favors the use of loan capital. This is not valid for small enterprises where the above-mentioned variable influence significant and contradictory the behavior of firms in the two situations. Thus, the sales volume influences positively the probability that small enterprises seek borrowed capital, and negatively their long-term indebtedness. Regarding the level of development is was found that in case of small businesses, this affects significantly only the option of whether or not to become indebt having no effect on their the long term indebtedness level.

Romanian SMEs capital structure determinants differ in meaning and sign by enterprises size class and sector of activity. For example the ratio of intangible assets has a distinct impact on long-term indebtedness of SME size classes and sectors. Micro and small enterprises active in the construction sector finance their intangible assets by become indebt, while the capital structure of SMEs active in the primary sector is not affected by the rate of intangible fixed assets.

The empirical analysis conducted suggests that the factors influencing Romania SMEs financing options are different by size class and sector of activity.

The study has some limitations on the choice and construction of the dependent and explanatory variables included in the research. The data used in this paper is based solely on the availability and accuracy of the reported situations within the queried databases (AMADEUS, EUROSTAT, NBR, World Bank, and so on). Despite the fact that in recent years the focus on the development and collection of information on SMEs in Europe in general and Romania in particular grew annually, financial information remains unavailable for various reasons. Therefore, this situation hinders the construction of additional explanatory variables that could be used to test the robustness of the results.

Nevertheless this study is a first step made towards understanding the financing behavior of Romanian SMEs by size and sector of activity, indicating that the treatment and analysis of SMEs as a homogenous group is not a correct approach.
REFERENCES

Books, articles


Ahn S.C; Moon, R. H.; (2001); Large-N and Large-T Properties of Panel Data Estimators and the Hausman Test, USC CLEO Research Paper No. C01-20


Anghel, I.; Vasilescu, C; Dragota M.; (2004); *Studierea modelelor de finanțare a întreprinderilor competitive din țările UE și analiza politicii de finanțare a întreprinderilor românești*, Editura ASE, București

Anghel, L.D.; (2005); *Marketingul întreprinderilor mici și mijlocii*, Editura ASE, București

Armendáriz de Aghion B.; Morduch J.; (2005); *The economics of microfinance*, The MIT Press, London


Baron, R, A.; Scott A., S; Rubber R; (2008); *Entrepreneurship: a process perspective*. Editura Nelson Education, Canada


Bădulescu, D.; (2010); Finanțarea IMM-urilor: dimensiunile nevoii și răspunsurile diferitelor structuri de creditare; *Economie teoretică și aplicată*; Volumul XVII, No. 7(548): 22-35

Bătrâncea L, (2006), Noile valențe ale analizei financiare în entitățile economice românești în contextul adoptării IFRS, *OEconomica*, nr.8


Beck, T., de la Torre, A., (2006), The basic analytics of access to financial services. World Bank Research Paper no. 4026


Berger A. N.; Udell G. F. (1998), The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle, Journal of Banking & Finance, no. 22(6-8), 613-673


Bugaian, L.; Catanoi, V., Curagau, N., Dolghi, C., Enivoc, I., Golovoco, V., et.al. (2010); Antreprenoriat: Inițierea afacerii; Editura: „Levița Angela”, Chisinău


Carboni B. J.; Calderón M. L.; Garrido S. R.; Dayson K.; Kickul J.; (2010); Handbook of microcredit in Europe, Edward Elgar Publishing, USA

Cardone, A; (2004), Business angel a caccia d’imprese, BAN, Bologna


http://people.few.eur.nl/thurik/Research/Articles/The%20impact%20of%20entrepreneurship%20on%20economic%20growth%20-%20thurik%20chapter.pdf


Corduneanu, C., Iovu, L. R., (2008); Etape în dezvoltarea sistemului financiar românesc și corelația cu nivelul de creștere economic”, *Journal of Economics*, Volumul 1, Timișoara

Cornell, B., Shapiro, A.C, (1987); Corporate stakeholders and corporate finance, *Financial Management*, 16: 5-14

Cosma, D. (2012); Guvernanța corporativă: Percepție și devenire; lucrare prezentată în cadrul congresului Guvernanța corporativă și profesia contabilă: Competență și Responsabilitate, Sinaia

Cosma D. (1996); *Sisteme contabile contemporane*, Editura Mirton, Timisoara


De Haas, R.; Peeters, M. (2004); The dynamic adjustment towards target capital structures of firms in transition economies; *EBRD Working Paper No. 87*


Dumitrescu, D., Dragotă V., Ciobanu, A.; (2002); *Evaluarea întreprinderilor*, Ed. Economică, București


Gallup Organization, (2009); Flash Eurobarometer: Access to Finance, nr. 271


Gervasoni A.; Sattin F. L.; (2004); *Private equity e venture capital. Manuale di investimento nel capitale di rischio*, Edizioni Angelo Guerini e Associati, Milano


Helfert, E.A., (2006); Tehnici de analiză financiară: ghid pentru crearea valorii; BMT Publishing House, București


Herbei, M.; Dumitru F. (2008); Fondurile structurale-instrumente ale finanțării nerambursabile, Piata de Capital, Editura Universitatii de Vest din Timisoara, Nr. 3-4: 62-75


Hoekhle, D.; (2007); Robust standard errors for panel regressions with cross-sectional dependence; Stata Journal, Volume 7 Number 3: 281-312


Ilie, V; (2006); Gestiunea financiară a întreprinderii; Editura Meteor Press, București


Jõeveer, K.; (2005); What Do We Know about the Capital Structure of Small Firms?, CERGE-EI Working paper series, no. 283


Krasauskaite E; (2011); Capital Structure of SMEs: Does Firm Size Matter? Empirical investigation of the Baltic countries, Aarhus University, BSS, Department of Economics and Business


Lee,Y. W; Stowe, JD; (1993); Product risk, asymmetric information, and trade credit. *Journal of Finance and Quantitative Analysis*, no. 28: 285–300


Modigliani, F., Miller, M. H.; (1963); Corporate income taxes and the cost of capital: a correction; *American Economic Review* No. 53: pp. 433-443


Neagu F.; Mărgărit A.; Dimitriu I.; (2005); Rolul fondurilor de garantare a creditelor în cadrul sistemului financiar din România, Studii BNR, available at http://www.bnr.ro/Studii-4010.aspx


Nicolescu, O., (2001), Managementul întreprinderilor mici şi mijlocii, Editura Economică, Bucureşti

Nicolescu, O.; Haiduc, I.C.; Nancu, D.; (2009); Carta Albă a IMM-urilor din România - 2011, Editura Sigma, Bucureşti

Nicolescu, O.; Haiduc, I.C.; Nancu, D.; (2010); Carta Albă a IMM-urilor din România - 2011, Editura Sigma, Bucureşti

Nicolescu, O.; Haiduc, I.C.; Nancu, D.; (2011); Carta Albă a IMM-urilor din România - 2011, Editura Sigma, Bucureşti

Nicolescu, O.; Haiduc, I.C.; Nancu, D.; (2012); Carta Albă a IMM-urilor din România - 2012, Editura Sigma, Bucureşti

Nistor, I.; (2004); Teorie și practică în finanțarea întreprinderilor, Ed. Casa Cărții de Știință, Cluj-Napoca


Nistor E. I., Radu I.; (2010); Private Equity - Challenge or a Chance?. Annals of the University of Oradea : Economic Science Nr. 01/2010: 629-639

Nivorozhkin, E., (2005); Financing Choices of Firms in EU Accession Countries, Emerging Market Review, no. 6: 138-169

Oprescu, Gh., Constantin, D.L; Ilie, F.; Pislaru, D.; (2010); Analiza capacitații de absorbție a fondurilor comunitare în România, Institutul European din România – Studii de impact III, București


Petrescu, S., (2005); Analiză financiară aprofundată: Concepte, metode, studii de caz, Universitatea “Al. I. Cuza” Iaşi Facultatea de Economie şi Administrarea Afacerilor

Pirtea, M. Stefea, P. (2005); SME Sector – Promoter for Sustainable Economic Development: A Case Study of Romania, Lefkada Grecia
Popa, I; (2010); Management intraprenorial, Editura ASE, București
Popa A, Giurcă V.; (2006); Investițiile și finanțarea IMM-urilor din România, Finanțe – Provocările viitorului, Anul V, nr.5: 100-107
Psillaki M., (1995); Credit rationing and small and medium sized firms: a tentative of linkage, Revue Internationale PME, vol. 8: 67-90
Rada, C.; (2011); Structurile latente ale distanţei sociale, Revista Calitatea Vietii XXII, nr. 1:60-82
Ramalho, J.; da Silva J. (2009); A two-part fractional regression model for the financial leverage decisions of micro, small, medium and large firms, Quantitative Finance, Taylor and Francis Journals, vol. 9(5): 621-636
Rioja, F. Valev, N., (2003), Does One Size Fit All? : A Reexamination of the Finance and Growth Relationship, Andrew Young School of Policy Studies, Department of Economics, Georgia State University, USA
Rogers, S.; (2009); Entrepreneurial Finance: Finance and Business Strategies for the Serious Entrepreneur, McGraw-Hill, SUA
Rosoga, A.; (2007); Ce înseamnă Business Angels pentru afacerile de la zero, Ziarul Financiar available at http://www.zf.ro/afaceri-de-la-zero/ce-inseamna-business-angels-pentru-afacerile-de-la-zero-3058926/
Sandu, P.; (1997); Management pentru întreprinzători, Editura Economică, București
Săvoiu G., Crăciuneanu V., Țaicu M.; (2010); O metodă statistică nouă de analiză a concentrării sau diversificării piețelor, Revista Română de Statistică, nr. 2

Schertler A.; (2003); *Driving forces of venture capital investments in Europe*, EIFC - Technology and Finance Working Papers, no. 27


Silivestru (Popescu) D., R, (2012); *Determinants of Capital Structure of Romanian SMEs: A Survey Data Analysis*, *Romanian Journal of Economic Forecasting*


Silivestru (Popescu) D.R., (2011); *Financial Development and Romanian SMEs*, International Conference: CKS - Challenges of the Knowledge Society, Bucureşti, pag. 1418

Silivestru (Popescu) D.R., (2010); *Analysis of Romanian SMEs start-up financing in the context of JEREMIE’s initiative*, lucrare prezentată în cadrul conferinţe *International Symposium Research and Education in Innovation Era*, Arad


Stancu, I.; (2002); *Analiza și gestiunea financiară a întreprinderii*, Editura Economică, București,

Stancu I.; (2006); *Costul capitalurilor întreprinderii și rata de actualizare a investițiilor*, *Revista ,,Economie teoretică și aplicată”*, nr. 2(497)


Stohs M.H.; Mauer D.C., (1996); *The Determinants of Corporate Debt Maturity Structure*, *Journal of Business*, vol.69: 279-312


Stulz, R., (1990); *Managerial discretion and optimal financing policies*, *Journal of Financial Economics*, vol. 26: 3-27


Tudose, B.M., (2011); Evoluția și relevanța teoriilor privind finanțarea întreprinderii, articol prezentat în cadrul conferinței Economie și Cunoaștere, organizată de Academia Română în parteneriat cu Universitatea „Alexandru Ioan Cuza” Iași

Uhrinova, L., Bussard, A., (2005), Innovative and Commercially Sustainable Approaches to Poverty Alleviation, William Davidson Institute Policy Brief #11

Vasilescu L. G.; (2009); Microcreditarea – o soluție alternativă, Tribuna Economică, nr. 38


**PhD Thesis**

Bica, I; (2009); Bonitatea clienților și implicațiile ei în procesul creditării, Teză de doctorat, UBB Cluj-Napoca, coordinator prof. univ. dr. Rosca T.

Mihalca, G; (2011); Efectele condițiilor de piață asupra structurii capitalului entităților economice, Teză de doctorat, UBB Cluj-Napoca, coord. științific: prof. univ. dr. Nistor I.

**Reports**


AMPOR; (2011); Raportul Anual de Implementare 2010, available at http://www.inforegio.ro/node/25


BNR; (2009); Raport asupra stabilității financiare

BNR; (2010); Raport asupra stabilității financiare

BNR; (2011); Raport asupra stabilității financiare


Comisia Europeană; (2007); The Regulation of Microcredit in Europe, Expert Group Report


Guvernul Romaniei, Departamentul pentru Afaceri Europene; (2009); Finantarea pentru autoritatile publice locale prin intermediul Fondurilor Structurale și de Coeziune; Consilier European, Anul IV, nr. 9, București
INSSE; (2011a); Întreprinderi noi şi profilul întreprinzătorilor din România, Publicaţie statistic anuală, Bucureşti


INSSE; (2011c); Comunicat de presă nr. 237 available at http://www.insse.ro/cms/files%5Cstatistici%5Ccomuniate%5Ccom_anuale%5CAactiverec_dezv%5CactivCd11r.pdf

KPMG; (2011); Raport Final al Raportului de Evaluare Intermediară a Programului Operaţional Sectorial Dezvoltarea Resurselor Umane, Ministerul Muncii, Familiei şi Protecţiei Sociale available at http://www.insse.ro/cms/files%5Cstatistici%5Ccomunicate%5Ccom_anuale%5CAntreprenorii.pdf


Ministerul Afacerilor Europene; (2011); Precizări privind modalitatea de calculare a ratei de absorbţie, available at http://www.dae.gov.ro/articol/2345/preciz-ri-privind-modalitatea-de-calcule-a-ratei-de-absorb-ie


PNDR; (2011); Raport Final de Evaluare Intermediară a PNDR, available at http://www.madr.ro/pages/page.php?self=03&sub=0302&tz=030211


Legislation:

*** Ordonanța Guvernului nr. 51/1997 privind operațiunile de leasing cu modificările și completările ulterioare;
*** Legea 346/2004 privind stimularea înființării și dezvoltării întreprinderilor mici și mijlocii;
***Legea 69/2010- Legea responsabilității fiscal-bugetare

Site:
***ACIS, Autoritatea pentru Coordonarea Instrumentelor Structurale, http://www.fonduri-ue.ro/-252-p0
*** Banca Mondială http://data.worldbank.org
*** Comisia Europeană, Directoratul General Întreprinderi și Industrie: http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis
*** EBRD, European Bank for Reconstruction and Development
*** EUROSTAT, European Official Statistics
*** Factors Chain Interantional
http://www.fci.nl/about-fci/statistics/
***MDRL, Ministerul Dezvoltării Regionale și Turismului
*** ONRC, Oficiul Național al Registrului Comerțului: http://www.onrc.ro/
*** Small and Medium Enterprises Development Authority: http://www.smeda.org
*** WBES, World Business Environment Survey
http://www.gcgf.org/ifcext/economics.nsf/Content/ic-wbes