
The Impact of Innovation in Romanian Small and Medium-Sized Enterprises on Economic Growth Development

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Small firms are big business in the aid of economic development. When the SMEs competitive advantage is based on knowledge as is the case of the knowledge economy, innovation and creativity become a decisive factor in the economic activity because knowledge tends to be developed in the actual contexts. Technical progress leads to innovation waves and creativity stands in the doorway of these phenomena, although it is usually not explicitly associated with it. At the same time, much less is written about the majority of small and micro size firms that constitute the core of the economy. The purpose of this study is to explore the implications, positive and negative, of the changed economic environment in Romania, for the development of small medium enterprises'. Results revealed that Romanian Small medium enterprises (SMEs), as in all transition economy, play an important role in the economic growth development and are increasingly recognized as having a permanent role as a seed-bed for future growth.

Keywords: innovation; development; growth; enterprise

Introduction

Given the importance of SMEs in their world, economies everywhere are given special attention. Hence the concern for their delineation as appropriate, with the intention to create conditions for broader and more effective participation in economic activities in or involved. The substance of this upgrade though is situated in a great range of differences from country to country or integration groups, however, has some common aspects are taken into account with a different intensity depending on the circumstances of the moment.

One aspect of great importance to the existence, perpetuation and rise or fall of SMEs in the economy of any country is their contribution to creating new value, or, in other words, the value added in order to be more relevant, needs to be examined closely, along with the number of employees. SME activity is not confined to any country to production in the strict sense; they participate in both exports and imports in order to achieve the purposes of the owners. In addition, it should be noted that between them, the most important place is micro. Due to its' small size and simpler organizational structures, they can make many changes during their existence, that allow them to operate in conditions of economic efficiency. Another important advantage of small and medium size organizations refers to their innovative potential in the technical, technological and managerial view.

SMEs are a separate research field. There can be made two main arguments that justify the specific attention to this sub-population of private enterprises. The first is a quantitative argument: SMEs form a big and vital part of the modern economy. The second argument is more qualitative: in spite of the heterogeneity of the SME sector, they differ from large firms in many aspects.

A new business concept is the spark that triggers the innovation process. It on how the novel products or processes may be achieved from the platform of current op cents, that is, products and processes, combined with thoughts or estimates of the market new business

concept. The new business concept is conceived from the current state of products and processes in the enterprise, the current markets and a perception of future market opportunities.

Consistency between two major elements is decisive for a successful completion of the SMEs innovation process. The first element is the character of the innovation - what challenges does the innovation present. The second element is the capability of the SMEs to address these inherent challenges, that is, the capacity of the enterprise to muster resources and to act in a sufficiently dynamic way.

All countries statistics result that SMEs dominate in economy, representing over 99% of the total of companies, having substantial ponders in obtaining GDP and work place distribution.

«The World Competitiveness Yearbook» the most famous Annual Report on the competitiveness of nations which examines 60 countries and competitive economic regions based on four competitive factors: economic performance, government efficiency, business efficiency and infrastructure. An important objective of governance is to support SMEs to become competitive, according to the single internal market rules.

In 2009 "The World Competitiveness Yearbook" - the most famous annual report on the competitiveness of nations - developed by the World Economic Forum ranked Romania rank 68 of 131 countries (Bulgaria reached the place 76), this being a climbing 6 places rankings from last year when it was ranked 74, came close to the place in 2005 when it was ranked 67.

Innovation in small businesses is a different way. Young people are often trapped in their attempts to innovate in very different reasons. Therefore, in order to achieve its innovation often go to another company or they do their business.

When you innovate, large companies are considering the propensity to improve their products offer. Small businesses especially are moving toward "breaking innovations" that generate new products in business because they provide an opportunity to succeed relatively much

higher. Therefore, when engaging in research, small enterprises have share research costs much higher turnover than in large enterprises. Moreover, large enterprises in research - development focuses on another very important indicator for them: the share of production of new products in turnover.

Lately, attention is given, absolutely natural, SME branches of the peak of "high-tech." Thus, in a recently completed study, conducted with funding from the European Union Directorate General XXIII, divide, SMEs in the leading technology in three categories.

First of all SMEs in the sectors of "high-tech" and the media, characterized by a high affinity for the activities via the Internet, taking into account the latest developments in the field.

Second SME start-ups of "cyber-entrepreneurs", is focuses on the exploitation of opportunities offered by electronic commerce and service sectors.

And last but not least SMEs integrated supply chains of large firms that generate innovations and markets products under pressure from major customers.

The innovation infrastructure includes: incubators (infrastructure for start-ups), technological parks (experimental facilities), technical transfer centers and the system of intellectual property.

In a Romanian economy located yet in a consolidation process and of getting stronger of SMEs sector, environment factors (generally powerfully unstable) they act through numerous and diverse compromises. Maybe the most important are the ones who have a legislative order, which are based on taxes (fiscal, firstly) dissipated, changing and sometimes contradicted.

Against this background I searched for reasonable answers to the following questions: Is innovation a crucial concept for Romanian SMEs involving creativity, organization and profitability? Is it possible to use operational concepts that allow measurement? Is it possible to measure

the innovation in a transition economy, as Romanian is? What are the factors that influence in the low level of innovation of Romanian SMEs?

The methodology of research was focused on two directions: first, we tried to identify actual concerns regarding the development of capacity of innovation of the SMEs point of view; second we analyzed the elements that constitute to investigate the current state of innovation from the Romanian SMEs, as well as conducting a diagnosis analysis of the 730 Romanian companies regarding the capacity of innovation between January 2013 and June 2013.

The conclusion emphasizes that being with that decision an innovation entity can be called innovation infrastructure unit, practical a new concept was introduced refers to technological transfer centers which are financed through a governmental program. That initiative is very important for creating the visibility of the entity which wants to invest in innovation. The current situation of Romania is highly dependent upon the visibility level and the research system that includes the research institutes, the research departments of universities, and research departments of the companies.

Literature review and theoretical background

Despite the abundance of literature on the company, the interest of scientists and practitioners increased since everyone agrees that these organizations constitute the engine of progress in the contemporary society. On the other hand, various theoretical approaches are found less often in the empirical predictive value confrontations.

Business issues is circumscribed, mainly within the confines of questions put by Coase on the nature, existence, effectiveness and coordination mechanisms of the firm to these in addition to concerns arising from the changes occurring in companies on human resources, innovation, globalization , governance and borders. In the study mentioned, Coase has set itself the goal of developing a new theory of the firm, theory that wanted a realistic and viable, with which to explain the

reasons of the emergence of companies in specialized exchange economy and where are the resources directed to the price mechanism.

Although Coase developed a new theory of the firm in 1937, she had success in the second half of the twentieth century. Authors such as E. O. Williamson, S.G. Winter, S. Rosen, H. Demsetz, etc. developed the approach initiated by Coase to choose the transaction as the unit of analysis, or have found new areas of its application.

Unlike Coase, Williamson, who refers more specifically to vertical integration of certain types of firm, modern Capitalist Corporation has a structure of hierarchical organization, whose evolution is the result of transactional cost savings. In conditions in which the progressive increase of the division labor has produced a huge increase of transactional cost, there are efficiency differences between different forms of organization.

In terms of product innovation, it would appear that, historically, smaller firms may have contributed greatly to the improvement of existing products and even to the creation of new ones. Nevertheless, the amounts of money dedicated to research and development are not large, and the existence of a laboratory or a research team is exceptional in the SME environment (Santarelli and Sterlacchini, 1990; Kao, 1983).

For smaller firms, technology adoption is indeed a crucial decision. In the Schumpeterian sense, innovation can be viewed as a heart of entrepreneurship (Schumpeter 1934). There are empirical researches presenting evidences about the importance of small entrepreneurial businesses in innovation. Since Birch (1987) seminal study, the examination there has been several studies focusing on a the small number of high growth, young firms, the so-called gazelles that believed to be responsible for the bulk of new job creation, technology progress, and economic growth. At the same time, most small businesses that constitute the core of the economy do not innovate. Most SME innovations are marginal improvements of already existing products, and instead of new technology creation, they rely on the adoption of the available technologies (Brown 2002, Damanpour and Wischnevsky 2006,

Lankhuizen and Woolthuis 2003, Rothwell 1986, 1994). The investigation of small business innovation is a popular topic in the literature; our knowledge is still limited about the nature, the types, the factors, and aims of innovation in the smallest sized firms.

Romania, like other former communist countries, is in the situation of reinforcing the SME sector. Today, the view which is taken as a current guideline is that the most important way of supporting Romanian small and medium enterprises is to encourage the business environment and the general development of the economy. Long term economic difficulties are focused attention on the importance of innovation and technological progress for business competitiveness, sustainable growth and job creation.

On the other hand, in Romania there was created a vicious circle where the state is ensuring the minimum financial resources for stimulation of knowledge-based economy and only a few companies proved able to compete through innovation. Very often knowledge is strongly connected with people and all or part of it can do a major challenge. Innovation system is important for clarifying the area of innovation policy and also for fostering the interactions.

Methodology

The survey instrument used in this study was as a combination of a questionnaire survey and research interviews. The type of questionnaire is a self-administered postal one and it included a short glossary explaining the purpose of the survey. The questionnaire is divided into three parts and has a total of 45 questions. To collect data from interviewees a number of 730 companies were contacted by phone or email between January 2013 and June 2013.

Research interviews will then deepen and expand the results of the questionnaire topics. The development and the design of the questionnaire and the research interviews will obey and observe three

maxims of scientific method: construct validity, internal validity and external validity.

A central role in both the questionnaire and interview surveys will play the construction of scoring variables. They will be the pivotal element in developing a typology classifying an innovation of Romanian SMEs in strategies of development economic activity.

Results

This study analyses the quantitative and qualitative results of questionnaire and interview. Four hundred fifty representatives from different Romanian SMEs that approved to participate in this survey were distributed the questionnaires as sample respondents for this study. Despite the repeated reminders 680 filled - up questionnaires were received back in total. After elimination of received filled - up questionnaires in which item responses were missing, the final sample consisted of 590 responses. The usable response rate of 42, 71% based on total number of respondents received the questionnaires are within the range typically reported for research studies in social sciences. Based on the scoring results in the questionnaire and the interview cases presented in table 1, typology for the companies' innovation process was derived. The typology of Bayer and Gann (2007) is widely accepted as being useful to assess the organizational behavior Romanian SMEs. As justified by the scoring approach, this category led to merging of the two central types of Bayer and Gann into one.

Table 1: Frequencies of the Types of Innovation process

Type of innovation process	Questionnaire Results		Interview Results	
Reactor	252	42,71%	40	44,44%
Defender/Prospector	144	24,41%	20	22,22%
Analyzer	158	26,78%	1	15,56%

			4	
Pattern not evaluated	36	6,10%	1	17,78%
			6	
Total	590	100%	9	100%
			0	

To validate the scoring approaches, the multivariate methods of factor and cluster analyses was applied. The constituents of the scoring variables was undertaken a factor analysis, and the resulting factors would the input of a cluster analysis.

The present analysis also had the aim to investigate the state of planning and how innovation process of Romanian SMEs is linked with it. However, the investigation has also revealed that business planning for Romanian SMEs is developed only in a rudimentary way. The results of the questionnaire and the research views have shown that firms having a controlling unit use it to implement the innovation process of the strategy of economic development.

Conclusions

Researchers have been interested in innovation and growth for a long time. Small and medium enterprises represent an equilibrium factor at micro and macro-economic level. In permanent economic changing environment, SMEs are flexible and possess a greater adaptation capacity, favorite by reduced dimensions and rapid decision process. They adapt easily to consumer exigencies and requirements, being more appropriate to market.

Another important aspect is the fact that these generate in a big proportion technical innovations that are economy applicable. Many work places will come by innovation, and new discoveries will give birth to some new entrepreneurial adventures.

In the context of the current crisis, rapid development of the Romanian SME sector represents a priority, not only for the general reasons which sustain this sector in the developed countries.

Thus, despite the economic reform, small and medium enterprises in Romania are still confronted with a series of obstacles which, in the view of the economic and political instability, lead to uncertainty and to inhibition of the entrepreneurial spirit.

To become or to remain competitive, Romanian companies must continually develop ways of operating through more sophisticated strategies aimed at increasing research and innovation capacity and functioning in a business environment to the highest level. The competitive advantage of Romanian SMEs will depend on the state to create attractive conditions for such local or foreign companies to find ways most effective way to mobilize them. Creating a stimulating business environment for SME growth and their competitiveness is based on the national strategy and government policies to facilitate an incentive framework for foreign investment and development of commercial partnerships with small and medium firms in other countries. This should stimulate the concentration of domestic private capital to help boost the sector's role the Romanian economy.

This innovation process is based on defining groups of companies having similar sets of scoring values and for validation are applied there types of innovation (reactor, defender/prospector, analyzer) in contrast to the original four types of Bayer and Gann (2007). As justified by the scoring approach, this category led to merging of the two central types of Bayer and Gann into one.

Empirical SMEs research in Romanian faces several problems. Regarding size classes, the research object of Romanian SMEs has a very homogeneous structure. This study aims at covering the total range of SMEs including also the class of micro firms. So, for future studies it would be interesting to focus exclusively on the class of micro firms. Such a research project would require investing considerable time in collecting data.

We certainly have many casualties among SMEs due to the incorrect application of innovation process, as we will have winners of

the crisis, and the winners will be those who will be able to make accurate forecasts on medium and long term and manage the risks.

The results of the questionnaire and interview deliver that the company size is an essential factor to distinguish the sophistication of Romania innovation systems. Another factor for judging the innovation of SMEs is the personality of the owner or the Romanian managing director. Here the educational background and the interest business management topics play an important role, with owner-management showing more deficits than other managers. The interviews have revealed that some Romanian owner-managers have quite a fatalistic attitude toward innovation process. With increasing company size the problem becomes dramatic, but regulations for replacement and succession are generally established badly.

The results also suggest that for Romania the small and medium businesses represent the engine of the economic growth and a vector for disseminating the research and development results. The increase of the small and medium businesses sector had a positive influence upon the businesses environment reducing the unemployment rate and increasing the productivity. It is necessary for the Romanian state to rethink the fiscal system in order to better sustain the growth of the small and medium businesses sector taking into consideration that even though its major role in the development of the country is known and admitted, the support is not likewise.

In conclusion, the influence of innovation in the strategy of Romanian SMEs development economic is mixed, both negative, by the superior concurrence, the increase of the turbulence of the businesses environment, and positive, facilitating the access at new markets of provision and sale, the acceleration of the know-how transfer, the access at new technologies, partnerships and strategic alliances at international level, etc.

So, innovation will not only support the development of new products or increase the productivity of labor and capital, but also bring

more economic growth, employment, a better balance of payments, improve the labor conditions.

References

- [1] Biatour, Bernadette and Kegels, Chantal and Vandecandelaere, Siska, *Le financement public de l'innovation: Etude comparative Finlande, Suède, Belgique*, Bureau fédéral du Plan (Belgian Federal Planning Bureau), Working Paper 9-06, 2006.
- [2] Biatour, Bernadette and Kegels, Chantal (2008). *Les déterminants de l'innovation dans une petite économie ouverte: le cas de la Belgique*, Bureau federal du Plan (Belgian Federal Planning Bureau), Working Paper 11-08, 2008.
- [3] Birch, D., *Job Generation in America*, the Free press, New York, 1987.
- [4] Criscuolo, C., Haskel, J. E., & Slaughter, M. J., *Global engagement and the innovation activities of firms*. International Journal of Industrial Organization, 28: 191–202, 2010.
- [5] Golodner, A.M., *Antitrust, Innovation, Entrepreneurship and Small Business*, *Small Business Economics* Vol.16 No.1 (February), pp.31-35, 2001.
- [6] Iacob Kerlek și colectiv, *Economia întreprinderii*, Editura Forumconsulting partners, pp 9, 1999.
- [7] H. Frank, M. Luejer, *Reconstructing Development Processes*, in International Studies of Management, vol.27, nr. 3, 1997.
- [8] Lankhuizen, M - R. K. Woolthuis, *The National Systems of Innovation Approach and Innovation by SMEs*, EIM Research Report, Zoetermeer, November 2003;
- [9] Mark Blaug, *Teoria economică în retrospectivă*, Editura didactică și pedagogică, București, 1992, pag. 736;
- [10] Ronald Coase, *The Nature of the Firm*, <http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0335.1937.tb00002.;>

- [11] Soete, Luc a.o., *Eindrapport van de Expertgroep voor de Doorlichting van het Vlaams Innovati instrumentarium*, 2007.
- [12] Storey D.J., *Understanding the Small Business Sector*, Thomson Learning, pp 70-74, 1994.
- [13] Tõnis Mets., *Creative Business Model Innovation for Globalizing SMEs, Entrepreneurship - Creativity and Innovative Business Models*, Thierry Burger-Helmchen (Ed.), ISBN: 978-953-51-0069-0, InTech, Available from:
- [14] <http://www.intechopen.com/books/entrepreneurship-creativity-and-innovative-business-models/creative-business-model-innovation-for-globalizing-smes>, 2012;
- [15] Torben Juul Andersen and Peter Winther Schroder, *Strategic Risk Management Practice*, Cambridge University Press, 2010.
- [16] Vlerick Leuven Gent Management School, Global Entrepreneurship Monitor, Rapport voor Bel en Vlaanderen, 2006.
- [17] Wickham, Philip A., *Strategic Entrepreneurship*, Pearson, Fourth Edition, 2006.
- [18] Williamson, O.E., *The Institutions of Governance*, The American Economic Review, Volume 88, Issue 2, 1998;
- [19] Zimmerer, Thomas W. and Scarborough, Norman M., *Essentials of Entrepreneurship and S Business management*. Pearson, Fifth Edition, 2008;
- [20] Business Models for Small and Medium-Sized Enterprises, in Constructing the European Information SocietyFAIR, 1998, pp. 18-19.
- [21] http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database (referred on 27.07.2013);
- [22] <http://www.mimmc.ro>;
- [23] OECD, Small and Medium-sized Enterprises: Local Strength, Global Reach, OECD Observer, iunie 2011;
- [24] www.alliedacademies.org/entrepreneurship/index.html;
- [25] www.animmc.ro;

[26] www.cnipmmr.ro;

[27] www.europa.eu.int.