

SME - BASED APPROACH IN THE CONTEXT OF THE KNOWLEDGE-BASED ECONOMY

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Abstract: SMEs will continue to represent, in the following decades, the most active, dynamic and performant part of a country's economy. In this respect we have tried an approach of some aspects of extreme importance for the role of the SMEs in Romania in the present economic context of the knowledge-based economy, and we have started by presenting the main advantages and disadvantages of the SMEs in Romania as compared with large enterprises, and later we have analyzed the institutional framework which shall ensure the development and growth of the SMEs, as well as the main factors which influence competitiveness in the current economy.

JEL classification: M13, M21, G00, G18, G32

Key words: SME's, knowledge-based economy, competitiveness, institutional framework, factors of influence.

1. INTRODUCTION

The magnitude witnessed by the emergence and development of the micro-enterprises, small and medium enterprises demonstrates that small business represents, for many people, the chance of inclusion in the economic and social competition, the one which creates jobs and values exchange. The ability of small businesses to create jobs comes from the entrepreneurs' power of creation and innovation, on the basis of numerous changes caused by the discoveries in science and technology.

Small and medium enterprise is adaptable to the dynamic changes in the economy and the future is therefore represented by dynamic, adaptable and flexible enterprises. Small businesses in many countries have contributed significantly to their economic development. Peter Drucker would report that small businesses represent *the main catalyst of economic growth*. Socio-economic research in this field in the USA and Germany have pointed out that 60-70% of the jobs demand in the recent years have come from the sector of small and medium enterprises.

The small and medium-sized business within the European economy represent 99% of the whole number of enterprises and account for over 54% of jobs. Romania has a relatively small number of SMEs, about 23 per 1000 inhabitants, the European Union average being of 64, which will result in approximately 800 thousand active SMEs by the end of 2017.

Starting from the idea that our country will register an increase in the number of SMEs in the future as reported to the average met at European level, an increase in the number of jobs created by the SMEs sector with 8-10%, as well as an increase in their contribution to the gross value on average with 10-12% annually⁴⁶, we consider it necessary to conduct studies on SMEs, on policies and development strategies, and on project management as a result of the European integration.

In Romania, SMEs operate successfully in the direction of reducing the role of large monopolistic enterprises, increasing employment of active labour, emphasizing competitiveness and generating, via their profitability and dynamism, a great impact on the economy.

2. ASPECTS ON SMEs IN THE CURRENT GLOBAL ECONOMY

The organizational environment in Romania has acquired and maintained a series of unfavourable influences, being built on a precarious basis of the staff activity which was inherited from the old centralized structure. Against this background, more and more human resources management professionals face many old habits and attitudes. An efficient management is the one that creates a system of values based on communication and trust relationships, on encouraging employees, on making them responsible of the decisions to be made while assuming their consequences.

From the analysis of the literature in the field of SMEs⁴⁷, we have identified a series of advantages of the SME sector in comparison with the advantages of the large enterprises, and at the same time we have not neglected the disadvantages of the two sectors, either. Table No. 1 illustrates our view on these aspects, thus the advantages of the SME sector are related to the current trends of globalization, to the fierce competition and mobility in the economic processes, while the disadvantages or weak points of the SMEs in front of the large enterprises are because of extra-economic reasons.

⁴⁶ www.cnipmmr.ro, Strategy of the National Council of Small and Medium-Sized Enterprises in Romania for 2012-2016, accessed on February, 10th, 2014

⁴⁷ Nicolescu, O., *Management of Small and Medium-Sized Enterprises*, Economic Publishing House, Bucharest, 2008; Walters, J., *The Great Power of Small Business*, Curtea Veche Publishing House, Bucharest, 2008

Table no. 1 Advantages and disadvantages of SMEs as compared to those of large enterprises

Advantages	Disadvantages
SMEs have great flexibility and adaptability under all aspects, actually (finance, production, marketing, personnel), when economic conditions change rapidly, especially when they become adverse;	SMEs have limited access to the local and international capital market, defending a vicious circle, in the sense that small businesses are often excluded because they are small, they cannot become large and they even disappear because they cannot cover the high costs for the implementation of their own projects;
SMEs require less financial resources (largely based on equity), SMEs using the available resources more effectively;	SMEs are strongly affected by the impact of institutional and regulatory constraints, especially when they want to enter a foreign market;
SMEs are more active in the labour market, creating jobs quickly, often in new areas, the costs of creating a job are much lower than those recorded by large enterprises ;	SMEs are sensitive to any type of „barriers” (national or international, economic or non-economic), transposed into numerous and high trading costs;
SMEs influence, firstly, the efficiency of domestic markets, they create easier and faster some „niches” for specific products or services;	SMEs are characterized by low representation of their own interests, including the access to advertising or representation in various bodies, which makes them vulnerable, especially when they are in competition with large enterprises.
SMEs are perceived as an element of economic growth and stability, by asserting the trends of a healthy economic growth in the long term.	

Source: Popescu, D., *SMEs Competitiveness*, Economic Publishing House, Bucharest, 2001; Porter, M., *Competitive Strategy – Manual on the survival and growth of firms in the market economy*, Teora Publishing House, Bucharest, 2004

In Romania, financing faces a series of obstacles. The European Union is financing three priorities with regards to small and medium-sized enterprises:

- *Private sector development of the SMEs* (non-refundable loans to support the creation and development of SMEs, credit lines, training and consultancy services for SMEs);
- *Human resources development* (training-retraining measures for bringing the Romanian SME's to the European technology standards, management improvement, active measures to combat unemployment);
- *Regional infrastructure in support of economic development.*

The latest measures aimed at switching to a multi-annual programming of the financial support granted to the SMEs in Romania by the European Commission and at having a coherent strategy for the SMEs development⁴⁸. But in addition to the benefits brought by the opening of the Single Market and the free movement of goods and services for the Romanian SMEs, one must draw attention to the danger represented by the ignorance of the Community *acquis* under the free competition in this market.

³ Walters, J., *The Great Power of Small Business*, Curtea Veche Publishing House, Bucharest, 2008, p. 67

Starting from a much lower level of equipment and managerial experience, the entrepreneurs for the Romanian SMEs have to strive harder as compared to the European entrepreneurs. Competition does not spare them, and thus all those who will not cope with the standards stipulated in the single market, will be removed.

3. INSTITUTIONAL FRAMEWORK FOR PRIVATE SECTOR DEVELOPMENT OF THE SMEs IN ROMANIA

In Romania, the formulation of economic policy in the field of private sector development of S.M.E.s is generally within the public authorities, while the implementation of specific programs is accomplished primarily through agencies belonging to the NGO sector, respectively to the business community or to the banking system. This also corresponds to the general experience worldwide. An important role in the private sector development of the small and medium-sized enterprises in Romania is played by the assistance of the international community – which contributes to the improvement of the national efforts made with regards to the economic policy specification and to the implementation of the concrete programs of action.

The concerns regarding the private sector development of the small and medium-sized enterprises come from⁴⁹:

- **Central Public Administration**, through the Council of Coordination, Strategy and Economic Reform and the National Agency for SMEs, consulting the Chambers of Commerce and Industry of the SMEs employers, have significant powers to sustain the development programs of the small and medium-sized enterprises. There are also **provisions** on the local public administration regarding the private sector of the small and medium-sized enterprises.

According to the main economic and social statements, the Government is interested in the development of the SMEs private sector, the main actions of the Government in this area concern the following: specification of the Government policies regarding the development of the SMEs private sector; the improvement and completion of the legal framework relevant to SMEs; the establishment of the Agency for S.M.E.s (A.S.M.E.); the support for organizing and functioning of the development centres for small and medium-sized enterprises.

- **Business organizations** have concerns in the area of SMEs development. In this respect, one can mention the following: Associations of Small and Medium-Sized Enterprises; the Chambers of Commerce and Industry; Development Centres for Small and Medium-Sized Enterprises; Pilot-Business Incubators; Specialized consultancy firms; Financial Institutions (commercial banks, loan guarantee funds).

The services offered in general by the centres for S.M.E.s development include: consultancy on setting up companies, small and medium-sized enterprises management, financial and marketing planning, preparation of business plans or of the documentations to obtain loans, accounting system and tax regulations; programs of local development; providing legislative and economic information; identifying

⁴ Cristea, H. (coord), *Financial Management of Organizations*, Mirton Publishing House, Timișoara, 2004, pp. 312-314

business opportunities; organizing courses and seminars for private entrepreneurs; supporting international partnership in business.

▪ **The International Community** supports the creation and development of S.M.E.s private sector in Romania through the components of the following programs: Multilateral Assistance Grant (eg the PHARE Program of the European Union, the Sectoral Operational Programme for the Development of Human Resources - POSDRU, the United Nations Development Program); Bilateral Foreign Assistance; Repayable Assistance provided by the international financial institutions and organizations (eg: the European Bank for Reconstruction and Development; the European Investment Bank).

4. SMEs IN THE ENTRY TO KNOWLEDGE-BASED ECONOMY

Many concepts, especially the one from economy, have a certain history and origin because they result from a social and intellectual construction. Therefore, the concept of "new economy" could not be absolved of these findings either. Starting from Karl Marx's phrase "Give me a windmill and I'll give you the Middle Ages", we'll make the following remark on the Industrial Age: "Give me the steam car and I'll give you the Industrial Age", and if we move further on to the contemporary era, we'll add "Give me the computer and I'll give you Globalization". Although this determinism is somehow forced, it summarizes the basic idea, namely, that in all connection moments in history, there is a capital invention which overturns the normal order of things, bends the evolution of a society and puts into operation a long-lasting movement⁵⁰. At the end of the 18th century, the steam car brought about a series of significant changes: the elevation of capitalism, the emergence of the working class, the birth of socialism, the expansion of colonialism. Wishing to substitute the human brain, the computer is about to generate, before our eyes, novel and formidable mutations. Everyone of us can notice that everything changes around us: the economic context, the data on politics, the environment, the social values, the cultural criteria or the individual attitudes.

The latest communication and information technologies make us enter a new era whose main characteristic is the instant data transport, to which electronic links and networks are added. The internet represents the core of the big mutation. The communication highways are today what railways used to be for the Industrial Age: a strong factor to boost and intensify exchanges⁵¹. Since the Internet represents the latest information and communication technologies most brightly, these technologies have a great impact not only on the rhythm of economic growth, but on the content of the economic activities, be them production, consumption, financial or regulatory ones, and thus we witness the enthusiasm of a new economy.

The knowledge-based economy represents a new concept, a new approach of the economy. It is a way of access which has a "*greater chance for a democratic and*

⁵ Archibugi, D., Lundvall, B.A., *The Globalizing Learning Economy*, Ed. Oxford University Press, Oxford, 2001, p. 145

⁶ Borghoff, T., *Evolutionary Theory of the Globalisation of Firms*, Management International Review, Wiesbaden, Gabler, 2005, p. 23

⁷ Ibelings, H., *Supermodernisme : L'Architecture à l'ère de la globalisation*, Hazan Edition, Paris, 2003 pp. 18-21

sustained economic growth which will bring, in the near future, prosperity and social justice"⁵². The concept has evolved as more and more aspects of reality have been discovered, analysed and defined. Noticing the changes occurred by the Industrial revolution, by the production and management revolutions, Peter Druckner considered that what we now understand as knowledge is in fact „*information effective in action, information focused on results. These results are seen outside the person, having a role on society and economy, on promoting the knowledge itself*"⁵³. Eversince ancient times, wealth and power have been associated with physical resources, while the necessity to own knowledge has been limited, if not ignored. The wealth and power of the 19th century will not consist of physical resources ownership only, but they will result especially from intangible intellectual resources, from the knowledge capital. The transition from an economy dominated by tangible, physical resources to an economy based on knowledge is very broad and deep, generating essential changes in all components of economic activities, somehow similar to the ones produced by the Industrial Revolution. Currently, we are in the early phases of knowledge revolution. Products and services are, in terms of knowledge, more intense, and due to this fact the delimitation between products and services is becoming more and more difficult, knowledge tends to become the main feature of activities, more than the products and the services resulted. The impact of the knowledge revolution becomes visible in the volatility of the market, in the incertitudes about targeting the economic activities, in the uncertainties of careers and jobs⁵⁴.

Result of human thinking, concepts are subject to a permanent process of evolutive metamorphosis: *data* ⇔ *information* ⇔ *knowledge* ⇔ *wisdom*. The evolution of society is closely related to the evolution of these concepts, and the economy follows the model of the society where it is practised. *Data* are raw material, facts, symbols, figures, details which have no use, do not make any sense without a proper understanding. *Information* refers to the description of concepts based on understanding the relationship between data, on defining some models and links, etc (what, who, when, where?). *Knowledge* represents the awareness and understanding of a set of information and of the way this information can be used at its best, and knowledge is obtained by understanding patterns and it comprises strategies, practices, methodes or approaches (how?). *Wisdom* is based on understanding the principles governing knowledge, judgment on their utility and morality (why?).

Economy is closely related to the type of society where it takes place. Some research carried out in countries with experience on market economy have highlighted that SMEs compete successfully and more often in many fields of activity. Under these circumstances, we believe that in the future ***the role of the SMEs will be emphasized in the Romanian economy, too*** due to the following considerations:

- *There have been created bodies to represent and defend the interests of the SMEs;*

- *There is a tendency that according to the economy's development, a change should occur in the share of economic branches, namely in favour of services;*

- *Specialist publications dedicated to SMEs have appeared;*

⁸ Stiglitz, J.E., *Public Prolicy for a Knowledge Economy*, World Bank Working Paper, London, 1999

⁹ Peter Drucker, *Post-capitalist Society*, Image Publishing House, Bucharest, 1999, p. 112

¹⁰Gadrey, J., *Nouvelle économie, nouveau mythe*, Flammarion, Paris, 2000, p 213

- *Specialists in the management of SMEs are prepared according to the specific of this business through University and post graduate courses.*

The existence of legal regulations concerning the granting of some facilities to the SMEs give them the possibility to benefit from the following **facilities**:

- *Access to the available assets of the SMEs with majority capital owned by State, as well as to the autonomous public corporations which are forced to organize the first tendering procedure for SMEs only;*

- *SMEs benefit from information services, assistance, consultancy, research and technological innovation in the areas of banking and finance, management and marketing;*

- *The Government supports the activity of research and technological innovation of the SMEs, and the Government and the local public authorities ensure full or partial financing via appropriation from the budget for training schemes for managers and employees of SMEs.*

SMEs in their operation are facing a series of problems, among which⁵⁵:

- Lack of financial resources which limits the SMEs opportunities to buy new equipment, to conduct marketing studies, to employ qualified personell and to motivate them.

- Experts consider the insufficiency of financial resources as the common cause to the SMEs bankruptcy.

- The SMEs managers do not have the necessary training to deal with the multiple issues that occur during the process. Under these circumstances, the manager has to adopt a series of decisions which imply knowledge from various areas of specialty, which in fact highlights the inconsistency between the complexity of the issues and the professional training.

- Difficulties in hiring qualified personnel since the managers have solid knowledge regarding the necessary selection techniques as compared to the managers of large enterprises.

At the same time there have been researches on the possibility of predicting the failure of small and medium-sized enterprises. With that end in view, experts⁵⁶ **have built financial patterns to predict failure**, among which we could mention the following:

- **Simple and variable patterns** which try to foresee failure by studying the level and trends of a single financial indicator. The following financial indicators can be used: the ratio of cash flow to total debt, the ratio between net income and total assets, the ratio of total debts and total assets, the ratio between working capital and total assets. Error probability of these indicators decreases as the period to which the indicators apply to is further as reported to the time of bankruptcy registration.

- **Complex and variable patterns** which combine more indicators and to which more weights are applied in order to obtain a complete profile of the enterprise: the ratio between the working capital and total assets, the ratio between gross revenues and total assets, the ratio between sales and total assets, the ratio between the market value of the shares and the book value of total debt.

¹¹ Barrow, C., *Financial Management for Small Business*, Rentrop & Straton Publishing House, București, pp. 110-112

¹² Ganidis, B, “*Nouvelle initiation à la comptabilité générale*”, Publisher L'Harmattan, Paris, 2009, p. 78

4. FACTORS THAT INFLUENCE THE COMPETITIVENESS OF THE ROMANIAN SMEs IN THE CURRENT ECONOMIC CONTEXT

Many of the Romanian SMEs have crossed a heavy period which is a continuation of the two years of impact with the new realities after the accession to the European Union. In the first two years after accession, there has been a compression of the number of SMEs as these ones didn't have the resources and the necessary force to modernize and align to the demands and standards of the European Union. Reality statistics has shown that there have been a considerable number of recorded bankruptcies because of that. However, since 2010 a series of SMEs have been established, their investors coming mainly from the European Union. The survival of the SMEs lies in the both in the market evolution, more compressed for them, and in the way the financial issues get solved.

Factors that influenced the development of SMEs⁵⁷ can be found under various forms, and they are divided into:

▪ **Environment factors:**

• *Internal (endogenous)* among which: human potential, informational potential, economic status, complexity, technical equipment and technologies, territorial dispersion of subdivisions, the owner, senior management, size and organizational culture of the SMEs.

• *External*, where the organization operates.

▪ **Efficacy factors** which refer to the performance influence on the organizational structure, among which we mention the following:

• *Economic efficiency* measured by the economic and financial performance of the SMEs;

• *Social efficiency*, that is social parameters that are becoming more difficult to quantify: quality of work environment, relations between management and unions, types of motivation used.

• *Organizational efficiency*, that is the accomplishment of individual tasks, the degree of activity coverage with proper staff, when it comes to number and structure.

In the current economic situation, the main factors which affect negatively the activity of the SMEs are the evolution of the legislative framework, social climate, as well as the policies of the IMF and of the World Bank. Among the negative factors considered with a minimum impact on the activity of the SMEs, privatization (2,13%) and interethnic tensions (1,19%) have been taken into account.

When it comes to SMEs, **innovation**⁵⁸ represents the main engine for growth. Whether it relates to the development of products or new services or to the identification of some efficient ways to create the ones already existent, innovation brings value to an entity. The need for a sustained effort from the entity's management, especially for innovation, results from the obvious complexity of the innovation process. Innovation is

¹³ Grey, C., 1997, *Management as a technical practice: Professionalization or responsabilization?*, Systemic Practice and Action Research, Volume 10, Issue 6, Pag. 703 – 725

¹⁴ Bărsan, S.C., Sima, M.G., *Innovation and technological transfer-aligning tools of SMEs to the market economy demands*, Seminar "Social and economic interferences at the border of innovation" – 1st edition, Bucharest, 2008

the activity that results into a product/good/or new service or into an obviously improved one which is launched onto the market or which is related to the introduction of a new or improved process into the entity. Innovation is based on the results of new technologies, on new combinations of the existing technology or on the use of other knowledge obtained by the SMEs. The terminology of innovative entities includes all entities with completed product or process innovation, as well as with uncompleted or abandoned ones and it refers to the active entities.

5. CONCLUSIONS

SMEs represent a vital and dynamic factor of progress in contemporary society, the main generator of economic performance in all countries, major player on job offer, a major contributor to the state budget, a development engine by improving the living standard of the population. The development of small and medium-sized enterprises is a key element targeted by the Romanian economy in the context of accession to the European Union. Since the issue of SMEs development is acute because of the lack of coherent programs for their development, strategic options are therefore required for their survival. A major constraint SMEs are facing in general is that they are at a low technological level, they cope harder with difficult technical issues, they do not have the financial resources for scientific and technical information, for consultancy, for services of training qualified staff.

The key trends resulted from the analysis performed in this work underline the role of the SMEs in the context of the emergence of the knowledge-based economy and the role of assuming the principles of social responsibility for the expansion of new forms of business, organization of business incubators and the impact of competitive clusters on SMEs development. In this respect, it is necessary to take measures to finance the participation of the SMEs to the innovative process in the context of the knowledge-based economy. At the same time, the targeting of goals accomplishment is required, goals leading to: achieving a predictable and favourable business environment for SMEs; expanding middle class in Romania; promoting its role in the social and economic development of Romania; defending and promoting the SMEs interests at local, sectorial, national and international levels, especially in the EU; increasing the investment capacity of the SMEs and relauching the investment process in Romania. Since the SMEs in Romania do not have the financial strength to innovate, a set of policies is required, policies that would help small business and start-ups enter the sectors where the added value is high by continuing the process of removing entrance barriers. Such measures could involve: creating and improving techno-parks and science parks, too; implementing development programs of innovation culture and reducing the subject perception of the associated risk, the need for a permanent and active concern of the authorities to increase the competitiveness of the SMEs sector.

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