MANAGEMENT AND MARKETING

INNOVATIONS ACTIVENESS IN THE SMES SECTOR IN BULGARIA AND SPAIN: EMPIRICAL STUDY

[1]***Lina Anastassova,*** *professor*
[2]***Atanas Luizov,*** *associate professor*
[3]***Esther Subira,*** *professor*
[4]***Carlos Grau,*** *professor*

[1]*Bulgaria, Burgas, Burgas Free University, Head of Marketing Department,*
[2]*Bulgaria, Burgas, Burgas Free University,*
[3]*Spain, Barcelona, University of Barcelona,*
[4]*Spain, Barcelona, University of Barcelona*

DOI: https://doi.org/ 10.31435/rsglobal_ws/30122018/6272

ARTICLE INFO

Received: 28 September 2018
Accepted: 24 December 2018
Published: 30 December 2018

KEYWORDS

Marketing innovations,
SMEs sector,
innovations' type,
empirical study.

ABSTRACT

Innovations are one of the most influential factors on the economic growth and this is the reason why governments nowadays have significant concern about it. Researchers and academics from many countries study the innovations activeness and the type of innovations in various industry sectors but comparing the big scope of academic research on international level, there is insufficient research on the topic of innovativeness in Bulgaria. And as SMEs present a significant part of the regional and national economies including in Bulgaria, this empirical survey in Bulgaria and Spain is based on samples of SMEs from different sectors in both countries. In order to guarantee comparativeness the same questioning instrument was employed and the analysis revealed many similarities in the attitude to innovations and the type of innovations in small and medium sized companies in both countries. According to the survey results, the SMEs in Bulgaria focus more on innovations in the promotional policy egg. the marketing communications in contrast with the small and medium-sized companies in Spain where the stress in innovations is more on changes in distribution channels and in the pricing strategies. The comparative analysis with the Spanish companies points out that concerning the innovations in "design and packaging of goods" and "usage of new methods for goods and services promotion" the behaviour of the Bulgarian and Spanish companies is similar. At the end of the paper are drawn some conclusions about the innovations activeness of the SMEs in both countries and the similar problems.

Citation: Lina Anastassova, Atanas Luizov, Esther Subira, Carlos Grau. (2018) Innovations Activeness in the Smes Sector in Bulgaria and Spain: Empirical Study. *World Science.* 12(40), Vol.2. doi: 10.31435/rsglobal_ws/30122018/6272

Introduction. Innovations are definitely one of the crucial concerns of the business organizations as they are the most important factor for the success and growth of companies. According to the World bank data, Bulgaria has one of the lowest levels of productivity in the European Union (large expenditure of resources, low cost efficiency etc.) and one of the reasons for this state is the weak innovation activity of

the Bulgarian companies. In addition, recent research reveals that marketing innovations have insignificant intensity in the Bulgarian companies and especially in the SME. Another negative factor related to the innovations profile of Bulgaria is that according to the National Statistical Institute of Bulgaria the research and development (R&D) expenditure from the national budget have been cut for 2015 by 3.3% to 188.6 million leva [32]. In 2016, the highest R&D intensities were recorded in Sweden (3.25%) and Austria (3.09%), both with R&D expenditure above 3% of GDP [10]. At the opposite end of the scale, ten Member States recorded R&D intensity below 1%: Latvia (0.44%), Romania (0.48%), Cyprus (0.50%), Malta (0.61%), Lithuania (0.74%), Bulgaria (0.78%), Slovakia (0.79%), Croatia (0.84%) [10].

According to economists' reports and statistical data SMEs play a major role in the Bulgarian economy by serving as a link between big and small businesses as they represent nearly 98% of the economy. They are considered as a major player in providing linkages between various subsectors and also as a source of dynamism and agility. SMEs are also said to be an engine for economic growth by creating job opportunities for the regions and for the country as a whole. They contribute to reducing unemployment, thereby swallowing up a significant number of employed people which has a beneficial effect not only on the social development of society, but also on the pace of economic growth. Other than that, SMEs help to form the middle class in developing economies which consolidates the stability of social system, based on market-economy principles. In Spain there are currently over 3.114 million companies, of which 99.88% are SMEs. Micro companies, with up to 9 employees, make up 95.8% of the total, which is 3.4 percentage points higher than the estimate for the whole of the European Union (92.4%) [14]. Overall, in 2016 SMEs in the EU-28 non-financial business sector account for 99.8% and two thirds of the total EU-28 employment is provided by these kind of companies [26]. The SMEs sector provides slightly less than three fifths (56.8%) of the value added generated by the non-financial business sector - in Bulgaria 64.0% and in Spain 61.8%. Even in the EU-28 manufacturing sector in which large enterprises are generally dominant, SMEs still account for 58% of total employment and 42% of total value added in 2016. According to Eurostat the R&D expenditures in Spain for 2016 are by 0.4 of the GDP higher that in Bulgaria (see Table 1).

The data from the CIS research of EU state that more than the half of the enterprises in Europe are defined as innovative [11]. In Bulgaria the innovative companies are under one third (31%). In fact in Bulgaria the most innovative sector is the IT industry [31]. The leaders in innovations are Germany (80%), Luxemburg (65%), Portugal, Belgium (58%) and Ireland (57%). After Bulgaria in this ranking are Lithuania (30%), Hungary (29%), Poland (28%) and Latvia (24%). It is known that one of the three priorities of Europe 2020 Strategy is Sustainable growth – promoting a more resource efficient, greener and more competitive economy [9], so the main agenda of the government and the country for the next period is to have as many as possible innovative and successful SMEs due to their important role in the economic development and its consequent toward social benefits. All this shows that the research topic about innovations, decision making for investments in innovations including marketing innovations are very important issues for Bulgaria.

The topic is from great importance for Spain as well as there are similar problems in the country like in Bulgaria. The main innovation challenge faced at present by the Spanish Innovation System is the low level of resources for R&D and the lack of critical mass of the science and technology system. Spain lags considerably behind the EU in terms of GERD relative to GDP (1.07% of GDP as compared with the EU-25 average of 1.90% of GDP [27].

The role of innovations as a significant factor in economic growth continues to be underestimated and this is valid for Bulgaria as well despite the fact that their importance has become at least equal to the overall effect of all traditional factors of production. There is a deficit of research on the innovation activities of the SMEs in Bulgaria although exactly the lack of innovations as well as lack of technological capability is the biggest problem of the Bulgarian economy and namely the low labor productivity which is on the bottom of the European Union.

Thus, according to the assessments of Western experts, global economic growth is already based, more than 75 per cent, on the achievements of scientific and technical progress [29].

According to the data, the top five R&D performers in relative terms (R&D expenditure as a proportion of GDP) are: Israel (4.3%) and the Republic of Korea (4.2%) being the world leaders, followed by Switzerland (3.4%), Sweden (3.3%) and Japan (3.1%) [26]. The best-known is the European Union (EU) target to raise overall R&D investment to 3% of GDP by 2020, but only two EU countries have reached this target (Sweden with 3.3% and Austria with 3.1%). From the European countries Bulgaria, Slovakia and Romania are on the lowest level of such investments: Bulgaria - 0.78%, Slovakia - 0.79% and Romania - 0.48%. At the same time some of the countries in the region have much higher level of investments like Slovenia - 2.0. Spain is in the middle of the ranking with 1.19% but countries like Germany, France are approaching the goal of 3%.

Table 1. Research and developmental (R&D) expenditure as a proportion of GDP, 2016*

EU countries with lower level of R&D expenditure	**% of R&D expenditure from the national GDP**
Bulgaria	0.78
Romania	0.48
Slovakia	0.79
Spain	1.19
Greece	1.01
Chroatia	0.86
Czech Rep.	1.68
Poland	0.97
Hungary	1.21
Slovenia	2.0

** http://uis.unesco.org/en/news/rd-data-release*

As seen from the table the issue about the innovative activities which are closely related to R&D and especially the innovations activeness of the SMEs in Bulgaria is an actual problem and especially the problems and barriers for higher level of activeness is an extremely important research problem which can serve as a bridge between the business and the higher education institutions.

The main goal of the research paper is to compare the innovations' activeness of the SMEs in Bulgaria and Catalunia and the attitude to innovations in the SMEs in both countries.

The research objectives are:

– To investigate what is the part of the SMEs in Bulgaria and Spain (Catalunia) which have made some kind of innovations in their product policy - new or improved products or services and what part of their sales are due to these products and services.

– What kind of innovations related to marketing are conducted - in product design, packaging and marketing communications for the products.

– What kind of approach to the innovations is implemented by the Bulgarian and Catalan companies

– What part of the company's turnover are the investments for R&D and what part of the sales revenue is provided by the launched new products-goods and services;

– What are the main problems which the companies are meeting when doing innovations: in new product and services development and in other marketing activities.

The paper contains a comparative analyses of the empirical data for the Bulgarian companies with analogical data based on the same research questions for the activeness in innovations of SMEs in Spain.

Background of the research. A plenty of economic studies have revealed the importance of academic research for innovation, technology and economic growth (Tushman, 1977; Tushman & Katz, 1980; Adams, 1990; Narin et al, 1997; Rosenberg & Nelson, 1994; Mansfield, 1995; Henderson et. al. 1l998; Branscomb et al., 1999; Griliches, 1998; Cohen et al, 2002). During the last 30-40 years, the management literature has documented the process of transfering of scientific knowledge into successful innovations and consequent economic growth mainly based on specific case studies and detailed surveys at company level (Tushman, 1977; Tushman & Katz, 1980; Bud, 1994; Hills, 1997).

On international scale, there is a plenty of research about various issues closely related to innovations, innovation activities, impact of different factors on the innovations' success etc. Researchers from different countries put the focus on innovations and SMEs as small companies present a significant part of the regional and national economies of many countries. Hoffman (1998) conducts a literature survey of UK work over the past decade and tries to characterize the state of knowledge about SMEs and innovation. It concludes with a discussion of gaps and weaknesses in the literature and some requirements for future research in this field. Massa and Testa (2008) investigate the innovativeness of a sample of Italian Small and Medium Enterprises (SMEs) based on self-reported data by entrepreneurs or managers and show that the considered SMEs were important developers of radical innovations in contrast with data published by local institutions. The results show the existence of deeply different perspectives concerning innovation, starting from its definition to the effective policies for its promotions and the role of intermediary institutions.

Considering that innovation is a complex phenomenon, other studies examine how innovations are linked with organisations' performance and try to understand and explain the conditions that make innovation profitable (Otero-Neira, C. Martti Tapio Lindman, M.T. and M.J. Fernández, 2009). The methodology used in the analysis is a multi-case comparative research of low-tech, small and medium-sized furniture firms from Italy, Spain and Finland. De Massis, Frattini & Lichtenthaler (2012) review and

systematize prior work on technological innovation in family firms and the study shows that family involvement has direct effects on innovation inputs (e.g., R&D expenditures), activities (e.g., leadership in new product development projects), and outputs (e.g., number of new products), as well as moderating effects on the relationships between these steps of technological innovation. Some researchers explore empirically the relationships between different cooperation networks and innovation performance of SME using the technique of structural equation modeling (SEM). Based on a survey to 137 Chinese manufacturing SMEs, the study finds that there are significant positive relationships between inter-firm cooperation (Zenga, S.X, Xieb, X.M. & C.M. Tamc, 2010), cooperation with intermediary institutions, cooperation with research organizations and innovation performance of SMEs, of which inter-firm cooperation has the most significant positive impact on the innovation performance of SMEs. Surprisingly, the result reveals that the linkage and cooperation with government agencies do not demonstrate any significant impact on the innovation performance of SMEs (opp. cit., 2010).

In the last decade various research papers are dedicated to studying the possible barriers to innovations in the small and medium-sized companies in different countries (Pachouri, A. and Sharma, S., 2016; Sharma, N. 2017) and to investigating the innovative behavior of small companies through variables like size, age, R&D investments etc.

(Sharma, N. 2017). A variety of research deals with necessary conditions for innovations in tourism (Brandao, F. et al, 2017) and other industries and with the relationship between innovations in SMEs and their growth (Subrahmanya, B. and Hillemane, M 2010; Bozic, L. and Radas, S. 2005).

Other research issue since 2003 when this topic evolved is the open innovation. Researchers from different countries identify some trends in open innovation research by analyzing how the literature on these topics has evolved since the introduction of the concept in 2003 (Van de Vrande, V., Vanhaverbeke, W. & O. Gassmann, 2010). They identify several directions for further research: open innovation research should be linked to other management areas such as marketing, HRM, change management, etc. Iceland researchers have also a significant contribution to the research on innovations in SMEs and especially the Centre for Research on Innovation and Entrepreneurship at Reykjavik University. Their research interests focus on topics like ”innovation mix in young technology based firms”, ”service innovativeness”, ”design as an element of innovation”, ”internal and external relationships in small firms business models” etc. According to Candi (2015) for small firms in particular, R&D relationships with external innovators, large public research labs and universities, as well as industrial and other supporting partners are at the heart of how knowledge intensive innovation is organized and managed today.

Despite the various research interest, the knowledge base about how SMEs actually undertake innovative activities and what type of innovations they implement remains limited.

Comparing to the big scope of academic research on international level, there is insufficient research on the topic of innovativeness in Bulgaria. According to the research of Slavova (2009), the main barrier for the innovations in the small companies is the lack of financial resources as this activity is a risky task but at the same time 26% o. f the companies have introduced improved product and services in 2009. Analysis on the entrepreneurship and intentions for innovations prepared by Association INSITE in 2012-2013 [33] in Bulgaria the SMEs in the production sector have higher innovation activeness than the companies in the services sector. The authors conclude based on the research data, that 1/3 of the companies in the processing industry have a very low innovation activeness. The importance of small and medium-sized enterprises (SMEs) in economic growth has made them a central element in much recent policymaking nowadays.

Research methodology. The data collection method is online survey in both counties and the link to the survey questionnaire in Bulgaria was sent to a list of 150 small and medium sized companies prepared by random choice from the sampling frame: the Directory of companies - members of Burgas Trade and Industrial Chamber which includes nearly 80% of the small and medium sized companies in the South-Easthern Bulgaria. The Spanish sample is based on a list of companies based in the eastern part of Spain – predominantly small and medium-sized which are collaborating in various activities with the University of Barcelona. The number of companies reacting to the survey is 32 which accounts to nearly 60% of the companies in the list.

The survey questionnaire contains a couple of sections relevant to the research objectives. The majority of the questions employ a 5- level Likert scale that is a type of rating scale used to measure attitudes or opinions. For the purposes of the survey, respondents are asked to rate items on their own level of agreement. With regard to the statistical methods, the paper employs quantitative statistical methods: frequencies, cross tabulation, means and correlation analysis.

Results and discussion. *Company profile of the respondents - industry and size.* According to the survey information the staff of 77.5% of the companies in the sample is under 9 people, 12.5% of the companies have from 10-50 employees (small companies) and only 7.5% are middle sized

companies (with up to 250 employees). The biggest part of the firms are from the processing industry - 60%, a little more than ¼ are from the services sector- professional services, hotel and restaurant enterprises and 12.5 % operate in the retailing sector.

The Spanish sample of SMEs differs in the structure from the Bulgarian one as it is seen from Table 2: the percentage of the micro SMEs (up to 10 people) is more than double smaller than the same group in the Bulgarian sample. At the same time the percentage of the small companies in the Spanish sample is 3 times bigger as well as the percentage of the middle-sized companies, which reflects the company, structure in the Bulgarian economy.

Table 2. SMEs sample by number of employees in Bulgaria and Spain

Number of employees	**Bulgaria**	**Spain**
	Percent	*Percent*
Fewer than 10	77.5	31.3
10 to 49	12.5	34.4
50 to 249	7.5	21.9
More than 250	2.5	12.4

As far as the job position concerns nearly 88.0% of the respondents from the Bulgarian sample are general managers or CEOs, per 5% are marketing managers and managers "business development" and 2.5% are managers "New product development". The comparison with the Spanish data about respondents' job position points out that half of the respondents (50.1%) are CEO or managers. Nearly ¼ of the respondents are marketing, R&D and sales managers (see Table 3) which is much bigger than the percentage in Bulgaria but this is understandable as the Spanish companies are bigger and have more department managers.

Table 3. Job positions of the Spanish respondents

Job positions	*Percent*
CEO	31.3
Manager	18.8
Marketing manager	12.5
Sales manager	9.4
R&D manager	3.1
Key account manager	6.3
Other	18.8

The comparative analysis of the research data for both samples with regard to the question "what part of the sales revenues is provided by new products (goods and services)" for 2 years revealed that: 1. Nearly 1/3 of the Spanish companies (32%) generate 1-5% of sales revenue by new products and services launched on the market in 2015 and 2016. Only 13% of the Bulgarian companies belong to this group; 2. The Spanish companies with 5-10% of sales revenue from new products are nearly ¼ of the sample and the percentage of the Bulgarian SMEs in this group is 18% (see Table 4).

Table 4. Distribution of the Bulgarian and Spanish SMEs with regard to the contribution of new products to sales revenue*

	Bulgaria	**Spain**
	Percent	*Percent*
Under 1%	3	6
1% - 5%	13	32
5% - 10%	18	23
10% - 25%	8	19
Over 25%	3	13
I don't know exactly	58	6

**the data is for years 2015 and 2016;*

There is a big difference in the percentages of the Bulgarian and Spanish SMEs with 10-25% of the sales revenue generated by innovations in products and services but it must be taken under consideration that more than the half of the Bulgarian companies do not have such kind of information (see Table 4).

Development and introduction of new products and services. One of the most important survey questions was about the kind of innovations introduced in the companies in both countries. The summarized survey data reveals that the majority of the companies in Bulgaria have introduced material product innovations - 58% and 53% of the respondents have conducted innovations in services.

According to the survey data 2/3 of the Spanish enterprises pointed out that they have conducted innovations in material goods and 63% of the companies in services (see Table 5). Generally, the percentage of the Spanish companies which have introduced product innovations (in either goods or services) is bigger by 10% compared to the Bulgarian enterprises (see Table 5).

Table 5. Distribution of companies in both countries by innovations in goods or services

	Bulgaria	**Spain**
	Percent	*Percent*
Innovations for new products	58	67
Innovations in services	53	63

The comparative data analysis of the innovation activeness in goods with regard to company size points out that the most active in innovations in Bulgaria are the small enterprises (80%) and the middle-sized companies: all of them in the sample have conducted such marketing innovations (see Table 5). As far as the Spanish companies concerns, mostly active in product innovations are the middle-sized enterprises (50-249 employees) and the companies with staff 250-499 people. According to the survey data the innovation activeness in services in Bulgaria and Spain is very similar: the lowest innovation activeness is in the group of the middle-sized companies -33% in Spain and 29% in Bulgaria (see Table 6).

Table 6. Innovation activeness with regard to the company size in both countries

Number of employees	Innovations for new products		Innovations in services	
	Bulgaria	**Spain**	**Bulgaria**	**Spain**
	Percent	*Percent*	*Percent*	*Percent*
Up to 9 employees	48	60	55	67
10-49 employees	80	45	40	73
50-249 employees	100	100	33	29
249-500 employees	-	100	-	100
Above 500 employees	100	100	100	100

As far as the innovation activity in production and services sectors in Bulgaria concerns, the survey data show that the higher activeness is equally represented in both SMEs groups: companies with service innovations and companies with product innovation.

The study explored the attitude towards innovations of the Bulgarian and Spanish SMEs by the answers of 16 statements related to different aspects of the innovative behavior of the companies (see Table 7). The study results give us the reason to make a conclusion that there are statistically significant differences for only 4 of all statements, namely:

- we offer totally new value to the customers: the Spanish companies are more inclined to provide new value to customers;
- we adapt business models which are successful in other industries: the Bulgarian SMEs are much more inclined to adapt business models which are successful in other industries;
- we develop radical improved product: the companies in Bulgaria are more inclined to this activity;
- we develop and produce totally new products: the SMEs in Bulgaria are more inclined to this activity (see Table 7).

Table 7. Attitude towards innovations of Bulgarian and Spanish companies

		Mean	*Std. Deviation*
1	2	3	4
We stimulate the creativeness	Bulgaria	4.08	0.971
	Spain	4.13	0.833
We strive to offer new/added value to the customers by breaking the current business model	Bulgaria	4.03	0.832
	Spain	4.41	0.560
We offer totally new value to the customers*	Bulgaria	3.65	0.949
	Spain	3.88	0.609
We are copying other successful business models when entering new markets	Bulgaria	3.60	0.810
	Spain	3.10	0.762
On new markets we offer products which have proved their value	Bulgaria	3.80	0.853
	Spain	3.53	0.803

Continuation of the Table 7.

1	2	3	4
We constantly improve our business model	Bulgaria	3.95	0.815
	Spain	3.84	0.767
We prefer to do improvements in the existing products than produce totally new ones	Bulgaria	3.58	0.781
	Spain	3.69	0.644
We renew the technologies for production of the existing products	Bulgaria	3.68	0.859
	Spain	3.81	0.749
We conduct improvements in the production process rather than introducing new ones	Bulgaria	3.75	0.742
	Spain	3.58	0.620
We develop new products by using the existing technologies	Bulgaria	3.80	0.853
	Spain	3.66	0.701
We are adapting busness models	Bulgaria	3.55	0.876
	Spain	3.78	0.659
We adapt business models which are successful in our industry	Bulgaria	3.28	0.640
	Spain	3.56	0.504
We adapt business models which are successful in other industries*	Bulgaria	3.80	0.723
	Spain	2.89	0.994
We adapt business models which are successful in other countries	Bulgaria	3.80	0.758
	Spain	3.00	1.017
We develop radical improved products*	Bulgaria	3.63	0.774
	Spain	3.33	1.028
We develop and produce totally new products*	Bulgaria	3.00	0.816
	Spain	2.79	1.177

*statistically significant differences with P-value<0.05

Investments in R&D activities and revenues from new products and services. One of the basic survey issues is the question about the percentage of the sales revenue invested by the SMEs in R&D activities and the positive fact is that according to the survey results 82.5% of the enterprises in Bulgaria included in the sample have invested in innovation activities, 43% of the companies have invested from 5-10% of the sales revenue while 8% have invested 10-25% from the sales revenues (see Table 8). The situation with the investments is slightly different in the Spanish sample: the biggest percentage of companies (38%) are those investing 1-5% of sales revenue and 28% from the companies are investing 5-10%. According to the data much bigger part of the Bulgarian enterprises do not store and store information about this indicator- nearly ¼ of the sample (see Table 8).

Table 8. Expenses for R&D activities from the turnover (sales revenue)

What is the % of the expenses for R&D activities from the turnover (sales revenue)?	**BG** *Percent*	**Spain** *Percent*
Under 1%	3	16
1% - 5%	25	38
5% - 10%	43	28
10% - 25%	8	3
There is no exact information	23	16

The analysis of the companies' expenditures for innovations depending on their number of employees (size) reveals that there is no relation between the company size and the percentage of sales revenue invested for innovation activeness.

Another important issue is what is the contribution of the launched new products and services to the sales revenue and due to this circumstance, there is a question about that in the survey instrument. As far as this question concerns there is relatively big difference in the situation on both

samples but it is not possible to draw correct conclusion as there is a big number of missing answers on this question from the Bulgarian SMEs (58% of the Bulgarian companies do not have such data).

Innovation in product design, promotions and distribution policy.

With regard to the type of marketing innovations, the survey data show that the companies undertake more and easier innovations in the promotion policy egg. in marketing communications: 65% of the SMEs made some innovations in their promotion policy and relatively high share of the company-respondents improved or totally changed their distribution channels and/ or the methods for sales of goods and services- 38.0%. The innovative practices in marketing communications include implementing new promotional approaches, introducing new communication channels, improving by big extent the current communication means etc. The comparative analysis with the Spanish companies points out that concerning the innovations in "design and packaging of goods" and "usage of new methods for goods and services promotion" the behavior of the Bulgarian and Spanish companies is similar (see Table 8). As far as the innovations in "the distribution channels and methods of sales" and introducing of "new pricing approaches and strategies" concerns, the Spanish companies are much more active (see Table 9).

Table 9. Type of innovations in the Bulgarian and Spanish companies*

	Bulgaria	**Spain**
	Percent	*Percent*
Significant changes in the design and packaging of goods	25	24
Usage of new media and methods for goods and	65	68
New distribution channels and /or methods for sales of goods and services	38	56
New pricing approaches and strategies	28	43

*the data is for years 2015 and 2016;

Generally, according to the survey results the SMEs in Bulgaria focus more on innovations in the promotional policy egg. the marketing communications in contrast with the small and medium-sized companies in Spain where the stress in innovations is more on changes in distribution channels and the pricing strategies and especially in the services sector where design is based on customer experience (Gemser, G.& Candi, M., 2014; Candi, M., 2014).

Main barriers to the innovation activeness in Bulgaria and Spain

Regarding the barriers and difficulties related to the innovation activeness in Bulgaria, the respondents are on the opinion that the biggest barrier for the companies is not the lack of financial resources and access to bank credits like 6-7 years ago and this information is in fact in contrast with the situation 5-6 years ago when the main barrier was the difficult access to financial resources (Slavova-Nocheva, M. 2009), but the lack of *qualified human resources* - 80% of the SMEs have chosen this answer option while at the same time 91% of the managers think that the access to bank credits is not difficult. For the Spanish companies the most important barriers to the innovations are: the lack of own financial resources - 53% and the lack of qualified human resources - 22% (see Table 9).

As far as the macro- and microenvironmental impact on the innovation activeness of SMEs in Bulgaria and Spain concerns, the recent survey highlights the fact, that in both countries according to the managers and CEOs, the environment can be characterized by the following 3 features (according more than 60% of the respondents): rapid technological changes, intensive competition, high consumer preferences which are changing very quickly.

Table 10. Main barriers related to the innovation activeness

Barriers / problems	**Bulgaria**	**Spain**
	Percent	*Percent*
Lack of new ideas, creativity	15	12
Lack of qualified human resources	80	22
Lack of own financial resources	25	53
Difficult access to credit	10	19
Decreased demand and lack of motivation	25	12
Unsufficient opportunities for serious promotion of the creative and initiative people	18	6

Conclusions. The study results and evidence give us the reason to draw the following conclusions: Generally, the innovations activeness of the SMEs in both countries is very similar.

The majority of the companies have introduced innovations in products – 58% of the respondents in Bulgaria and 67% in Spain.

The most active in innovations in Bulgaria are the small enterprises and the middle-sized companies: all of them in the sample have conducted such marketing innovations and as far as the Spanish companies concerns, mostly active in product innovations are the middle-sized enterprises.

According to the survey results, the SMEs in Bulgaria focus more on innovations in the promotional policy egg. the marketing communications in contrast with the small and medium-sized companies in Spain where the stress in innovations is more on changes in distribution channels and the pricing strategies and especially in the services sector where design is based on customer experience. The comparative analysis with the Spanish companies points out that concerning the innovations in "design and packaging of goods" and "usage of new methods for goods and services promotion" the behavior of the Bulgarian and Spanish companies is similar.

The biggest barrier for the SMEs in Bulgaria is the deficit of qualified human resources and for the Spanish companies- the lack of own financial resources.

The environment in Bulgaria and Spain can be characterized by the following 3 features: rapid technological changes, intensive competition and high consumer preferences which are changing very quickly. The pointed similarities in some macro-environmental factors and some similarities in the level of innovations activeness in both countries explain to some extent the similar economic growth rate in 2017 in Bulgaria and Spain.

The companies in both countries including the SMEs must introduce advanced policies for stimulation of innovative thinking development which will lead to better economic results of the whole industry.

REFERENCES

1. Adams, J. (1990). Fundamental stocks of knowledge and productivity growth. *Journal of Political Economy*, Vol. 98, pp. 673–702.
2. Allen, T. (1977). Managing The Flow of Technology. MIT Press.
3. Bozic, L. and Radas, S. (2005). The Effects of Innovation Activities in SMEs in the Republic of Chroatia. *SemanticScholar*.
4. Brandao, F., Costa, C. and Buhalis, D. (2017). Tourism Innovation Networks. *European Journal of Tourism Research*, Vol.18, pp. 33-45.
5. Candi, M. (2014) The innovation mix in young technology-based firms. *The Product Development and Management Association International Conference Research Forum*, Denver.
6. Candi, M. (2015) Design in technology-based service innovation. *R&D Management Conference*, Pisa. Retrieved March 16, 2017 from
7. Cohen, W., Nelson, R. & Walsh, J. (2002). Links and Impacts: The Influence of Public Research on Industrial R&D. *Management Science*, 48(1), pp.1-23.
8. De Massis, A., Frattini, F. & Lichtenthaler, U. (2012). Research on Technological Innovation in Family Firms: Present Debates and Future Directions.
9. Department of Finance. (n.d.). *European funding Europe 2020*. Retrieved July 27, 2015 from http://www.dfpni.gov.uk/index/finance/european-funding/content_-_european_funding-future-funding/content_-_european_funding-europe-2020.htm
10. Eurostat. (2017, December 1). *R&D expenditure in the EU remained stable in 2016 at just over 2% of GDP*. Retrieved April 10, 2018 from https://ec.europa.eu/eurostat/documents/2995521/8493770/9-01122017-AP-EN.pdf/94cc03d5-693b-4c1d-b5ca-8d32703591e7
11. Eurostat. (n.d.). *Science, technology and innovation – Data*. Retrieved April 10, 2014 from http://epp.eurostat.eceuropa.eu/portal/apge/portal/science _technology_innovation/data/
12. Gemser, G., Candi, M. (2014). Examining designers' ability to predict new service success. *The NordDesign2014 Conference*.
13. Griliches, Z. (1998). R&D and Productivity. Chicago University Press.
14. Guell, C. (2015, December 30). *The Size of Spain's Companies is an Unnecessary Drag on the Economy*. Retrieved June 30, 2018 from http://thecorner.eu/spain-economy/the-size-of-spains-companies-is-an-unnecessary-drag-on-the-economy/50492/
15. Hoffman, K. (1998). Small firms, R&D, technology and innovation in the UK: a literature review. *Technovation*, Volume 18, Issue 1, January, pp.39-55.
16. Mansfield, E. (1997). Links Between Academic Research and Industrial Innovations. in: David, P.& E. Steinmueller (Eds.). A Production Tension: University-Industry Collaboration - Based Economic Development (Stanford University Press, Palo Alto).
17. Massa, S., Testa, S. (2008). Innovation and SMEs: Misaligned perspectives and goals among entrepreneurs, academics, and policy makers. *Technovation*, Volume 28, Issue 7, July, pp.393–407.

18. Narin, F., Hamilton, K.S., & Olivastro, D. (1997). The increasing linkage between US technology and Science. *Research Policy*, 26, pp. 317–330.
19. Otero-Neira, C., Lindman, M.T. & Fernández, M.J. (2009). Innovation and performance in SME furniture industries: An international comparative case study. *Marketing Intelligence & Planning*, Vol. 27 Issue: 2, pp. 216-232.
20. Pachouri, A., Sharma, S. (2016). Barriers to Innovation in Indian Small-and Medium Sized Enterprises. *ADBI Institute, Working Paper Series*. Retrieved June 15, 2018 from
21. Rosenberg, N., Nelson, R. (1994). American Universities and technical advance in industry. *Research Policy*, 23, pp. 323-348.
22. Sharma, N. (2017). Innovative behavior of Indian SMEs: An Empirical Study. *IUP Journals*. Retrieved August 10, 2018 from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2872721
23. Subrahmanya, B., Hillemane, M. (2010). Importance of Technological Innovation for SME's Growth - Evidence from India. *MERIT Working papers 007*. Retrieved July 14, 2018 from https://ideas.repec.org/p/unm/unumer/2010007.html
24. Tushman, M. (1977). Special Boundary Roles in the Innovation Process. *Administrative Science Quarterly*, 22, pp. 587-605.
25. Tushman, M., Katz, R. (1980). External Communication and Project Performance: An Investigation into the Role of Gatekeepers. *Management Science*, 26, 11, pp. 1071-1085.
26. UIS. (2018, June 28). *R&D Data Release*. Retrieved May 23, 2018 from http://uis.unesco.org/en/news/rd-data-release
27. UNU Merit. (2006, October). *Monitoring and analysis of policies and public financing instruments conducive to higher levels of R&D investments, The "POLICY MIX" Project*. Retrieved March 20, 2018 from http://ec.europa.eu/invest-in-research/pdf/download_en/spain.pdf
28. Van de Vrande, V., Vanhaverbeke, W. & Gassmann, O. (2010). Broadening the scope of open innov ation: past research, current state and future directions. *International Journal of Technology Management*, Volume 52.
29. WIPO. (n.d.). *Recommendations for strengthening the role of small and medium-sized innovation enterprises in countries of the Commonwealth of independent states*. Retrieved March 20, 2018 from http://www.wipo.int/edocs/pubdocs/en/wipo_pub_transition_6.pdf
30. Zenga, S.X, Xieb, X.M. & C.M. Tamc. (2010). Relationship between cooperation networks and innovation performance of SMEs. *Technovation*, Volume 30, Issue 3, March 2010, pp. 181-194.
31. Георгиева, М. (2010, March 5). *Новост, но само за България.* Retrieved May 23, 2015 from http://www.capital.bg/biznes/predpriemach/2010/03/05/868457_novost_no_samo_za_bulgariia/
32. НСИ. (2012, June 29). *Разходи за научни изследвания намаляват с 3.3%.* Retrieved February 20, 2015 from http://fakti.bg/bulgaria/42549-nsi-razhodi-za-nauchni-izsledvania-namalavat-s-33
33. Симеонова-Ганева, Р., Ж. Владимиров, К. Ганев. (2013). *Изследване на предприемачеството и перспективите за развитие на иновациите в МСП (2012—2013)*. Retrieved June 30, 2018 from http://timberchamber.com/sites/default/files/imce/SMEs_2013-bg.pdf
34. Славова-Ночева, М. (2009). Иновации, иновационна политика и практика. *Механика, транспорт, комуникации*, бр. 2, с. 7.