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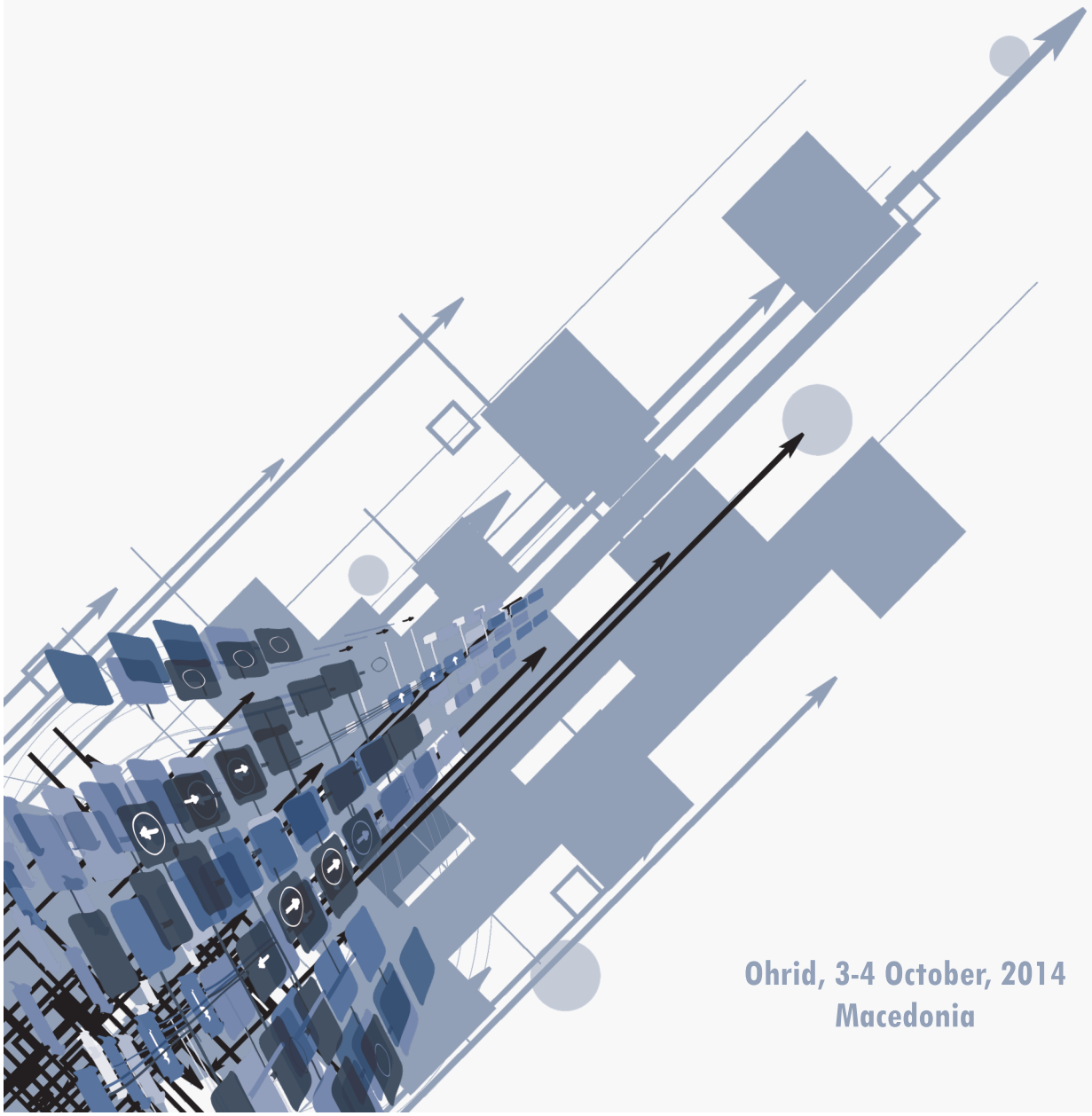
Faculty of Economics Prilep

CENTER for innovation&development

PROCEEDINGS

INTERNATIONAL CONFERENCE

SMEs DEVELOPMENT AND INNOVATION: BUILDING COMPETITIVE FUTURE OF SOUTH-EASTERN EUROPE



Ohrid, 3-4 October, 2014
Macedonia

CIP - Каталогизација во публикација
Национална и универзитетска библиотека "Св. Климент Охридски", Скопје

339.137.2:001.895(4-12)(062)

INTERNATIONAL conference (2014 ; Ohrid)
SMEs development and innovation : building competitive future of South-Eastern Europe : conference proceedings / International conference, Ohrid, 3-4 October, 2014. - Prilep : Faculty of economy, 2014. - 1025 стр. : табели, граф. прикази ; 23 см

Abstracts кон трудовите. - Библиографија кон трудовите

ISBN 978-9989-695-56-8

а) Конкурентност - Иновации - Југоисточна Европа - Собири
COBISS.MK-ID 97368586

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CONFERENCE TOPICS

SMEs Internationalization and Innovation
ICT impact on the competitiveness of SMEs
Open innovation for SMEs growth
Innovation policies in SEE
Innovation Management in knowledge-based economy
Challenges of the Social Innovation in SEE

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PREFACE

Nowadays, the South-Eastern Europe (SEE) faces a challenge to increase the innovation capacity as a basic precondition for achieving sustainable growth and competitiveness on the global market. The new strategic direction of the SEE is based upon the ambitious goal to follow the leading world economies and to attain the EU membership. This implies the necessity for SEE countries to adjust towards the main EU developments. In this context, the new EU strategic framework underlines the role of SMEs as a driving force of the European economy. The knowledge intensity and innovation capability of SMEs are becoming the basic pillars for competitiveness and prosperity of the economies. These trends are actually the rationale and idea for organizing a conference that will be focused on further clarification of the role and importance of the innovative SMEs for improving the SEE economic performance.

The main goal of the Conference is to highlight many aspects of the contemporary changes in the SEE countries aimed at increasing innovation and achieving sustainable growth. More specifically, the conference will create a platform for presenting different academic and professional approaches (conceptual, empirical, multidisciplinary, case studies, etc.) and debates about the SMEs innovation developments in the SEE countries. The Conference will provide an opportunity for researchers, practitioners, PhD students and policy makers to give their contribution in considering the issues from theoretical and empirical point of view. In addition, it will offer the possibility to exchange the ideas, build partnerships, share knowledge and experience related to perspectives for improving the SMEs innovation capabilities and enriching the scientific achievements.

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ELEMENTS NEEDED FOR ECONOMY BASED ON KNOWLEDGE CONTRIBUTING FOR GROWTH AND DEVELOPMENT OF THE SMALL AND MEDIUM COMPANIES

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Abstract

In the framework of the contemporary theory of the economic sense, within the scientific researches and debates the emphasize is more and more put on the analysis of the link between knowledge, i.e. education and the research and innovation activities (as basic institutional channels for generating and cumulating knowledge) and economic growth. Knowledge, innovations and the human capital take central position within such analyses, working as factor inputs which increase the activity of the whole economy creating the so called invisible or untouchable capital. The basic competitive advantage of a modern economy, or the so called economy based on knowledge is no longer the cheap labor or the low taxes, nor the geostrategic position. It is the knowledge of workers, their creativity and innovativeness, proactivity, the entrepreneur spirit and the expertise in defined areas. A certain economy can be highly competitive and survive on the world market only by continuous investing in the knowledge of its own citizens, in the education and the scientific and research activities. In this paper, through the methods of induction and deduction, analysis and synthesis, as well as historical and trendy comparative analysis, we have come to generalized attitudes, conclusions and recommendations about the subject of research but also about the applicability of these perceptions in the case of Republic of Macedonia. In this context, the purpose of this paper is to determine the economic justifiability of investment in human capital, to approbate the channels of influence of education and scientific and research developmental activity on the creation of human capital and together with it on the economic growth and development, to set the basic elements needed for economy based on knowledge and to determine the interaction among education, innovation, and the small and medium enterprises through the prism of thecost-benefitanalysis.

Keywords: education, scientific research activity, human capital, invisible capital.

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INTRODUCTION

Living in the new contemporary society implies to setting of new postulates for the functioning of economy. Development of new techniques and technologies and globalization led to additional needs and possibilities in which education and knowledge take a greater part. In contrast to the traditional understanding of economy as a science of prompt allocation of the rare and limited resources, the new concept of economy based on knowledge focuses on knowledge and abundance of information and ideas which are used and multiplied collectively. Here, a certain initial quantum of knowledge is needed so that they can be used selectively. The basic instigator of the growth of economy based on knowledge is knowledge which is a sublimate of all technological and scientific acquisitions.

The total amount of knowledge creates the human capital defined as a series of production abilities, skills and knowledge, and the talent of the individual, acquired through: the educational process (in the broad sense: formal and informal education), the scientific-research activities, trainings and experience.[5]Investment in the humancapital through its basic institutional channels: education and scientific research developmental activities in a certain economy implies to a more profound utilization of labour, capital and the natural resources; it is essential for efficient allocation of the economic resources (the basic paradigm of the economic science), reduction of the unemployment, increase of production, growth of the spendings and improvement of the level of the living standard and the quality of knowledge in the community. The higher level of education increases the possibilities for employment and acquiring of better earnings, and the knowledge and innovations in a certain economy bring to successful allocation and substitution of the various resources and forms of capital, with the aim of maintenance of sustainable economic growth and development. In times when knowledge and innovations are understood as an intellectual ownership of the individual with a certain price on the market of labour, the 21st century is also called a century of knowledge.

HUMAN CAPITAL IN THE MODELS FOR ECONOMIC GROWTH

The significance of human capital in the function of social and economic growth was first analyzed in 1776 by the founder of the classical doctrine for freedom on the market, Adam Smith. He defines human capital as“an amount of acquired and useful potentials of all members of the society. Acquiring and maintenance of such talents during the educational process always requires great expenses. These talents influence on creation of personal welfare and the welfare of the community to which they belong. The increased skillfulness of the worker can be viewed as a significant device in production which on its part influences the increase of the productivity of labour...,,[6]

The need to quantify the input of the individual as a worker in the production process, i.e. to define the method for measurement of its production power, in 2004 leads us to the genesis of the theory for human capital in economic sense, whose founder is said to be BeckerGary. According to the theory of human capital, the differences in the earnings of the individuals are a result of the individual productiveness which derives from the differences of education, skills, experiences and trainings of the very individual. Hence, this theory in the context of econometrical analysis can be brought to a micro level - when the measured link is between the amount of human capital and the earning; and macro econometric analysis -

[5]N. Gregory Mankiw (1995) "The Growth of Nations," Harvard Institute of Economic Research Working Papers 1732, Harvard - Institute of Economic Research, 1995

[6] Smith Adam (1776) An Inquiry into the Nature And Causes of the Wealth of Nations Book 2 – Of the Nature, Accumulation, and Employment of Stock. USA: Editor's Introduction by Edwin Cannan

which focuses on the aggregate human capital as a factor of economic growth and development.

The link between the human capital and the economic growth and development is a subject of research of many scientific researches, starting from the pure theoretical analysis to the empirical panel studies for a group of studies. There are two types of models which investigate the channels of influence of the human capital and the level of its development on the economic growth.

The first modelsin the framework of the classical and later the neoclassical economy put the accent on the accumulation of capital through alternation of the saving rate and / or by reallocation of the savings towards different innovations and capital-production technologies (Solow 1956[7], 1957[8]), which especially emphasizes the interaction: savings and innovation, creativity, knowledge i.e. of the human capital in the function of technological growth and development. This kind of analyses are often based on the production function of CobbandDaglas, on a level of an individual case or Y = KαxX,whereYis GDP per capita, K is physical capital per capita, X is a determinant of the growth per capita andαis a parameter of the production function. Many neoclassicists (KingandLevine, 1993)9consider that the growth of X comes from innovation and technological development i.e. from the cumulated knowledge, skills, innovativeness, and creativity as a basic precondition for technologicalgrowth and development.Schumpeterin his capital work emphasizes that a well developed banking system influences stimulating on the technological innovations, finding the entrepreneurs with the best chances for innovative products and production processes.[10]

The second modelsdefine that the functions performed by the financial system increase the rate of technological innovations. In these modelsLucas andRomerinclude technological development as an endogen variable of the growth (on which the human capital has the greatest impact) and the assumption for perfect competition is replaced by imperfect competition and growing profit.Lucas[11]sets a model of growth through the function:Y = AKa (uhL) 1-a, whereYstands for the overall income in the economy, Afor the physical resources,Kis the capital, L-the manpower, uis defined as proportion of the overall working hours dedicated to the working process, and the variable hstands for the supplies of human capital. Romer[12]suggests a model the economic growth, above all, requires accumulation of knowledge on all levels and claims that the economic growth derives from inside the system, regardless of whether we speak about a country or an enterprise. As segments of his model of endogen growth he takes capital, labour, human capital and the index of the level of technology.

COST-BENEFITANALYSIS FOR INVESTMENT IN HUMAN CAPITAL

The aggregation of knowledge is capital or welfare which has its value and can re-create i.e. produce additional, new welfare, which is on the other part related to the justifiability of the expenses, i.e. to the investment in the human capital, education, scientific research activity, trainings and experience as the main pillars in the creation of this kind of

[7] Solow Robert (1956),,A Contribution to the Theory of Economic Growth,, Quartely journal of economics,1956
[8] Solow Robert(1957) ,,Technical Change and the Aggregate Production Function,, Review of economics and statistic,1957
[9] KingRobert and Levine Ross (1993)-,,Financial and Growth: Shumpeter Might be Right,, Quartely Journal of economics,1993
[10]Schumpeter Joseph (1911)Theorie der wirtschaftlichen Entwicklung (transl. 1934, The Theory of Economic Development: An inquiry into profits, capital, credit, interest and the business cycle), Vienna: Kyklos,1911
[11] Lucas, Robert (1988),,On the Machanics of Economic Development,,Journal of monetary economics, 1988
[12]Paul M. Romer (1990),,Endogenous Technological ChangeThe Journal of Political Economy, Vol. 98, No. 5, Part 2, 1990

capital. For this reason are the big number of studies andcost-benefitanalyses whose main purpose is to measure the aggregate expenses (as a price of investment in the human capital) and the social benefits as a result of these investments.

Determination of the price of human capital is done in an indirect manner: taking its market value as an equivalent of the debating of the supply and demand for the human capital. Hence, until the current value (and/ or productivity) of the human capital exceeds the expenses for its creation, investment in human capital is economically worthy. Valorization and estimation of knowledge and human capital to a great extent depends on the given context, because in different institutional surrounding and different levels of development, they carry bring different profit. Unlike the expenses which are spent on investment in human capital, benefits from these investments come with delay; they influence indirectly on the productivity and are difficult to measure.

The econometrical and comparative analyses show that, observed through the prism of participation in the growth of GDP, accumulation of human capital is three to four times more significant than the accumulation of unqualified labour, while the growth of the entire factor productivity (labour, capital and natural resources) is meaningfully defined by the initial level of the human capital. Here, the results show that the workers with high educational qualifications almost three times contribute to the growth of the productivity in contrast to the workers without qualifications.[13]In a group of researches in the field of the American economy the conclusion was that if the productivity of the labour stays unchanged, then only 31% from the changes of the total output have an explanation: 15% of them are assigned of increase of the quality and the quantity of the country and the physical capital, and 16% to the increase of the quantity of labour, whereas to the increase of the quality of labour (human capital), are assigned significant38%[14].

The scientific-research developmental activity and education are the basic institutional social channels through which human capital is generated as a pillar of the economy based on knowledge. These are activities through knowledge and innovations of the individual and the society in general are acquired and they are proportionally related to the growth of the economy through:

- generation of human capital and a more quality manpower for development of the small and medium businesses, entrepreneurship, the service sector (as the most productive), and the propulsive, fast-growing industries; and
- generation of scientists and researchers as instruments for innovations, new technical and technological discoveries.

THE INTERACTION LINK BETWEEN THE INVISIBLE CAPITAL AND THE SMALL AND MEDIUM ENTERPRISES

The political and economic changes in the socialistic countries of the 80s of the previous century caused big failures in these economies, especially within the large enterprises because of their complexity of management and the slower adaptability to the changes. Together with the deepening of the problems within the large enterprises in the world at the end of the 80s of the last century, the economic policies of the most developed countries started to deal seriously with the question of development of the small and medium enterprises, innovativeness, the technical and technological blooming, competitiveness, re-structuring and privatization and the question of sustainable growth and development in the

[13]Vrateovska N. Dance, Nikolovska Dj. Vanja and Tikvesanska N. Violeta (2014)- "Micro and macroeconomic aspects of the influence of education on the human capital, the market of labour and economic growth and development" International Scientific - expert conference: *Modern upbringing and education, states, challenges and perspectives,* 2014

[14]Gocevski Trajan (2012)The paradigm of the human capital in thecountries of transition and the role of the university in its creation. *Annual compilation, University "Ss. Cyril and Methodius" - Skopje, 2012*

framework of the concept of economy based on knowledge. As a result of these trends, today 99% of the enterprises in the highly developed countries are small and medium and they employ about 70% of the totally engaged manpower. Beside the large number of thinkers who represent the thesis that forcing of the sector of small and medium enterprises is actually going back to the phase of the classical capitalism which is old-fashioned and long left over as well as that in conditions of globalization of the world markets, the only generators of economic and technological growth and development can be the large companies[15].Yet, in the contemporary context, the focus of attention is not directed to the extent of the enterprise but to the role and the meaning of the large and small enterprises in the framework of the same sector and the thesis that none of the enterprises is big enough to satisfy the aggregate demand for the given product and / or service on the market. In conditions of reorganization of the economy in the context of changes derived from economy based on knowledge, when it is no longer primarily important the extent and accumulation of physical and fluent capital but the generation of knowledge, ideas and innovations, the role of the small and medium enterprises as main carriers of the competition in these socially-economic flow is especially strengthened.

The contemporary world phenomena, processes and changes in the framework of globalization, technical and technological bloom, the appearance of the internet and the social networks produce informed consumers, a new business logic based on a business model based on knowledge, possibilities and creating of new economic goods, services and values (for whose creation it is necessary to possess adequate initial quantum of knowledge and ideas, than physical resources), management with the non-material goods and innovations, management with the changes, new indicators of the business success, creation of multi-functional teams, etc. Human capital, i.e. knowledge, innovations, information, dissemination of ideas, creation of new values, the bases of data, the software solutions, branding, talented individuals, implementation of new projects etc. define the so-called invisible capital. The invisible or the untouchable capital is a significant resource in the nowadays economy and unlike the physical and the material resources (which are amortized with time and have a decreasing value) has an increasing value. This is because of the fact that knowledge (even though becomes obsolete), is not expendable, i.e. certain knowledge, findings or ideas can be reused, updated, and even to become public goods. In relation to the expenses for creation of the non-material capital, its benefits are more difficult to measure because of its indirect way of participation in the profitability of the companies. Thus, one of the challenges of the scientific branch for finding out methods for management with non-material capital and measuring of its value as part of the total assets of the enterprise. Here, the most frequently used method for estimation of the value of the disposable non-material capital in an enterprise is the correlation between the market and the accounting value of the enterprise. The newest researches show that in the successful companies the participation of the non-material and the invisible capital is in the average of about 80% in their total assets. Welfare is now more in the non-material value, i.e. knowledge and innovativeness, which canalized through the rights of intellectual ownership confirm their value, and hence they easily move where the demand for them is at the highest level and the laws and the tax barriers are at the lowest level, they become social and international. In such conditions, in the framework of the competitiveness of the economies based on knowledge, the comparative value of each economy will be the accumulated human capital, innovations and knowledge. For this, it is needed a multi sectorial and integrated long-term activity with the aim of supplying of legal infrastructure which will provide an environment for better conditions for business, induce competitiveness, entrepreneurship and innovations and a solid struggle of the countries in the support and

[15]Jovanovski Tihomir (2003) "LargeVS small and medium enterprises" at the round table: Large enterprises in the economy of the Republic of Macedonia, ZOR, 2003

development of education, science and researches. In his researches Romer[16]comes to the conclusionaccording to which, if the states aim to induce economic growth, it is necessary that their economic polices:

- encourage investment and development of new ideas, and not investment and accumulation of physical capital, and
- subsidize accumulation of the total human capital at the level of the state.

A special input of the researches of Romerare the sublimations that the motion factor of the economic growth are not for example the government measures but the competition of the enterprises which compete through their innovations,and that innovations initially come from the inside of the system whether it is at the level of an enterprise or the level of the state, because if they come from outside, they will not provide competitive advance of a certain entity.

FOCUS OF THE REPUBLIC OF MACEDONIA

Macedonian economy as a small and opened economy, for the last recent years has been facing huge challenges starting from the consequences from the long-lasting inside privatization, lost markets, low rate of utilization of the capacities, the low productivity, insufficient economic growth, high level of unemployment, continuous deficit in the commercial and payment balance, insufficient financial intermediation and conservative banking system, by attracting foreign direct investments for transfer of new technologies and fluid capital, by maintaining of the external stability and arbitration of the collision of the global economic crisis. At the same time, economy faces the need of its overall restructuring, where the essential factors are the development of human resources, inventiveness and knowledge, as significant resources which will determinate the growth of Macedonian economy. In our country micro enterprises with less than ten employed persons are dominant - 91,2%in the total number of active legal entities.In them 33,7% from the total number of employed are engaged, and 25,1% from the total value-added tax.In 2012, in the framework of the structural business statistics 54 392 business subjectswith 335771 employed persons were analyzed, and in them a total profit of 947410 millions of denars was achieved as well as a value-added tax of 197989 millions of denars. In the big enterprises[17] (0,2%) 23,3% from the total number of employed persons were engaged, with 34,4% from the total added value within the business sector.The biggest number of enterprises belong to the sector of Wholesale and retail (44,6%), with 28,1% of the total number of employed and 41,6% from the total profit were realized. As second by its significance, the sector of Manufacturing industry participates by 13,3% of the enterprises, 30,2% of the employed persons, 26.6% from the total profit.[18]In the below-given charts it is evident that small and medium businesses are dominant in the overall business structure with total participation of 99,8%, and the percentage participation of the total number of employed in this sector in relation to the total number of employed persons in the country, is high 77%.This two indicators speak about the significance of the small and medium business and in contribution to the need of proactive and multi-department support of this structural part, especially starting from the itching problem of Macedonian economy: the continuously high unemployment which in the

[16] Romer M. Paul (1986)"Increasing Returns and Long Run Growth," *Journal of Political Economy* 94, October 1986

[17]According to the Law of trade companies (Official Gazette of the Republic of Macedonia No. 28/2004...48/2010),according to the criterion of the number of employees, small and medium enterprises are considered those of 1 to 250 employees; microenterprises are considered those with up to 10 employees, and large enterprises are the entities of more than 250 persons employed.

[18]http://www.stat.gov.mk/OblastOpsto.aspx?id=39, accessed on 28/05/2014

first quarter of 2014 was reduced to the lowest level from the independence of the country till today, of 28,6%.

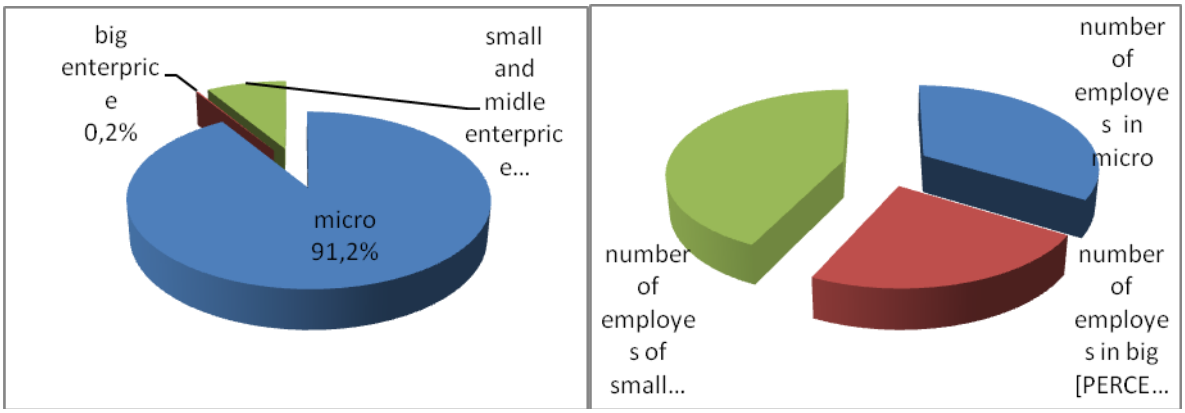


Figure 1: Representation of the enterprises according to the number of employed persons
Figure2: Total number of employed persons in the enterprises according to their extent
Source: State statistical office, structural statistics for 2012, elaboration of the author

In the framework of the analysis of the influence of education on the better utilization of the resources, employment, i.e. the labour market, numerous studies have proved that there is a narrow correlation link between the levels of education and the possibilities for employment on the labour market. Another proof is the analysis of the data of unemployed persons in the Republic of Macedonia according to the education structure. Namely, the total participation of unemployed persons who have acquired university degree, Master degree or PhD degree is 17,9% of the total number of unemployed persons in January 2014, whereas the rest of 82,1% are the workers without education or primary, secondary or college education. Furthermore, several researches show that the statistical correlation between the rates of growth of the BDP and the level of development of the human capital is proportional function with the growth of the part of the GDP which is aimed for the department of education. In this sense, we present the below given diagram which deals with the last thirty years in the Republic of Macedonia and shows the growing trend of the aggregate budget expenses (as a percentage of the GDP) aimed for the department of education. Even though it is still modest in relation to the needs, it is a positive indicator for the country as a society which deepened investments in the development of education.[19]

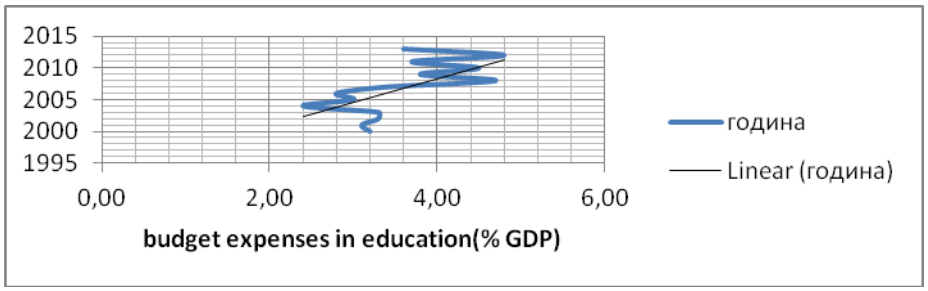


Figure 3: Budget expenses in education as % of GDP in Macedonia from 2000 to 2013

[19]Vrateovska N. Dance, Nikolovska Dj. Vanja and Tikvesanska N. Violeta (2014)- "Micro and macroeconomic aspects of the influence of education on the human capital, the market of labour and economic growth and development" International Scientific - expert conference: Modern upbringing and education, states, challenges and perspectives, 2014

Source: Vrateovska N. Dance, Nikolovska Dj. Vanja and Tikvesanska N. Violeta (2014)- "Micro and macroeconomic aspects of the influence of education on the human capital, the market of labour and economic growth and development" International Scientific - expert conference: Modern upbringing and education, states, challenges and perspectives, 2014

Besides education we have underlined that scientific research activity is also one of the basic institutional channels for creation and accumulation of human capital and in direction of creating of business ambience in the economy based on knowledge. Hence the interest for analyzing the overall expenses over the sectors in this activity in an interval of six years as a proportion with the GDP.

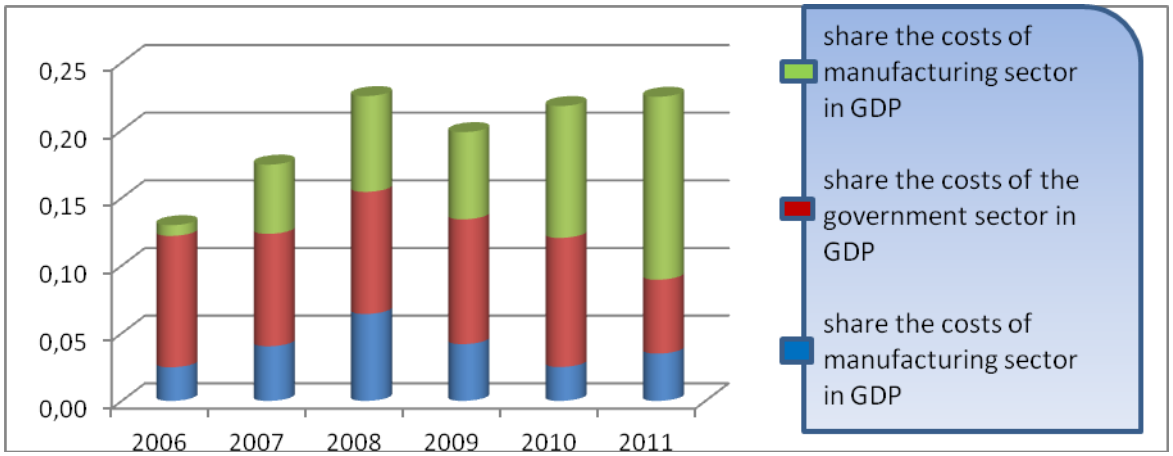


Figure 4: Sectorial participance of the expenses for scientific and research development activity in the total expenses of the activityas % of GDP from 2000 to 2013
Source: Science research development activity 2007, 2008, 2009, 2010 and 2011, State statistical office, elaboration of the author

In the shown graficon it is evident that in the average, from 2006 to 2011 participation of the total expenses for science research development activities is between 0,24% in 2005 to 0,22% in 2011,or an average participation in the analysed time interval of 0,21%. Here, in the framework of the sectorial participation in the total expenses in this activity, with growing trend are the expenses in the sector of university education, which is from 0,01% of GDP in 2006 to 0,14% in 2011, and in the average of the observed interval this participation on a year level is 0,07%. Participation of the expenses of the governmental sector is variable, from 0,1% of GDP in 2006 to 0,05% in 2011,and in the average of the analysed period it is 0,09% of GDP yearly. Participation of the manufacturing sector in the research activities as a percentage of GDP is highest in 2008 with 0,06%,and in the average of the interval it is 0,04% of GDPat a year level.The data that besides the relatively growing trend of expenses, i.e. investing in the activity, in relation to 2006 we have a decreasing trend of the number of completed scientific research development projects is indicative. This number in the mentioned year is 254, and in 2011it is 169. The biggest part in the total decrease take the completed projects of the governmenatl sector, where the number of 100projects completed in 2006 decreased to 38 completed projects in 2011.

Table 1: Sectorial participation of completed projects in the total number of completed projects for science research development activities from2006 to 2011

yaer	Number of completed projects	Complete d projects in manufact orin sector	Complete d projects in governme nt sector	Complete d projects in higer education sector
2006	254	56	100	98
2007	185	45	59	81
2008	182	50	57	75
2009	200	49	60	91
2010	183	44	51	88
2011	169	66	38	65

Source**:** Science research development activity 2007, 2008, 2009, 2010 and 2011, State statistical office, elaboration of the author

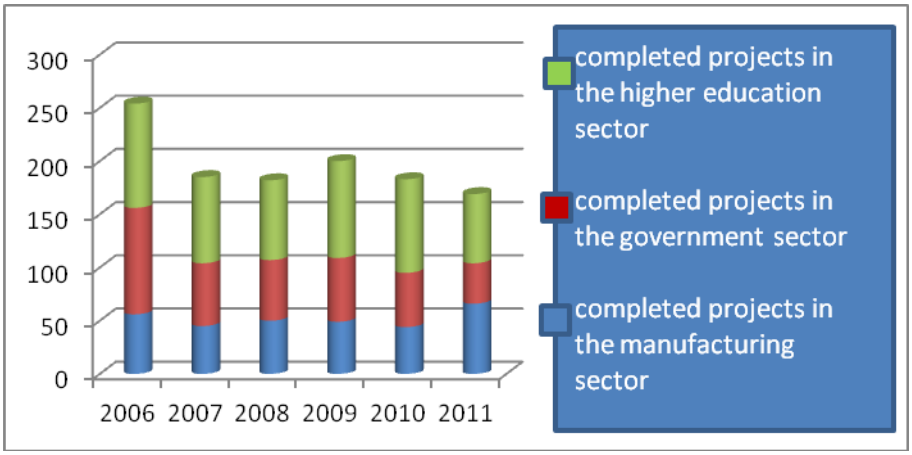


Figure5: Sectorial participation of completed projects in the total number of completed projects for science research development activities from2006 to 2011
Source: Science research development activity 2007, 2008, 2009, 2010 and 2011, State statistical office, elaboration of the author

Table 2: Number of employed within the sectors of science research development activitiesfrom 2007 to 2011

year	Total emplyes in the sector	Total number employed in the producing sector	Total number of employed in goverment	Total employed in education sector
2007	6245	1865	710	3670
2009	5085	1465	647	2973
2011	10072	5834	453	3781

Source**:** Science research development activity 2007, 2008, 2009, 2010 and 2011, State statistical office, elaboration of the author

It is interesting that a big increase of 39%of the number of employed in research projects was registered in the interval from 2007 to 2011. Here, the employees engaged in the manufacturial sector are dominant and with a growing trend, where the growth of the expenses for researches is cummulative 9% in the analysed interval and the number of employed persons in the same period increased for more than three times.In relation of this correlation we have an increase of the expenses for researches in the sector of university education for more than three times in the analysed interval and the number of employeed stays relatively stable, with a mild growing trend and in the governmental sector a decrease of the number of employed of 42% in relation to 2007 as well as reduction of the expenses 21% was registered.

In the last perion many institutions, bodies, measures and instruments were established in the Republic of Macedonia with the main purpose to enable organised appearance of the small and medium enterprises at the global market, and with the aim of outgrowing of the existing barriers as well as improvement of the competitiveness of the economy through increase of the level of innovations and the level of education and knowledge. In the framework of these mechanisms are the Agency of enterprenourship with the regional centres for support of entrepreneurship, the chambers of commerce and the clusters at the level of branches, training centers and business incubators, the European informative innovative centre in Macedonia, the Fund of development of human resources, membership of the country in the European network of mentors for development of female entrepreneurship, the Foundation of entrepreneur service of youth, the Fund of innovations, the Institute of industrial ownership, the National Center for development of entrepreneurial learning, the Programme for development of entrepreneurship, competitiveness and innovativeness of small and medium enterprises (in its framework €29600 were approved and 27100 were paid off in 2012; 21600 were separated and 20800 were granted in 2013; and in 2014 the budget was extended to €39000), the Programme for supply of the needed occupations at the labour market, the Programme for granting and subvention loans for self-employment and employment of other unemployed persons, the measures of the Ministry of Education and Science for financing of published works with impact factor and scholarship of the talented students within the country or abroad, financing of student program trips at some renown universities abroad, the concept of compulsory secondary education, the project of computer for every child, free schoolbooks and transport to the schools, dispersed studies at the state universities, accessibility to the international funds of programmes for innovativeness, education and entrepreneurship: for example, the European programme Erasmus, etc. As a sublimate of the so far functioning and implementation of the above-mentioned mechanisms and instruments we can emphasize that a more efficient coordination between policy and the carriers of the measures and services is needed within the measures which are implemented at the level of pilot-projects and are with a high degree of successfulness - finding out system solutions which will be accessible to larger target groups and concerned parts, as well as finding out domestic solutions for sustainability within the donator projects after their termination.

CONCLUSION

In direction of creating of an ambience of economy based of knowledge and in function of development of the small and medium enterprises, we suggest directions which are further to be set on the level of operating: transformation of the educational system from repetitive to creative, cognitive and sufficiently flexible for a prompt response to the rapid technical-technological changes and the individual educational / developmental needs of the participants, implementation of the concept of lifetime learning, conduction of the principles

of entrepreneurial learning on all levels of education (starting from the basic one) and through adoption of the principle of economy based on knowledge, infiltration of programmes for development of entrepreneurship and the innovational management in the framework of the programmes of the secondary schools and universities, stimulations for multiplication of the research projects, continuous development of public policy for promotion of entrepreneurship and innovations within small and medium enterprises, strengthening of the capacities of the national providers of services, promotion of the existing instruments for support of the small and medium businesses and providing of their coordinated and continuous appearance, formation of purpose-built funds for financing of the innovative ideas and business plans within the existing small and medium enterprises and the new start-upbusinesses,strengthening of the fund for scientific and research development activities, conduction of macroeconomic measures for improvement of the regional competitiveness of the enterprises and promotion of the brands, affirmation of the possibilities for patenting and the industrial ownership, creation of regional innovative clusters and marketing chains, implementation of joined projects in direction of commercialization of technology, sharing of the best practices for financing of innovative ideas within the small and medium enterprises, development of an economic platform for support and networking of the business innovators, creation of institutional support for shortening of the time gap for placement of a new product at the market, creation and implementation of border systems for innovation, strengthening of the legal framework and the infrastructure for support of entrepreneurship and the small and medium enterprises; stimulation and promotion of the female entrepreneurship (as insufficiently represented), distribution of information in the domain of the EU policies, incentives and courses relevant for small and medium enterprises, creation, keeping and updating of bases of companies of the country for international support, support in the finding out of international partners for business collaboration, technological exchange and joined participation in development projects, organization of international events such as forums, fairs, company missions, stock-exchange eventsand other types of bilateral and multilateral collaboration, etc.

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