

## DEMAND FOR NEW KNOWLEDGE – A CURRENT CHALLENGE TO SOCIAL SCIENCES

The ambition for continuous innovation – of production, technologies, corporate management, society and culture is becoming a characteristic feature of the current globalizing national economies. Innovation is an impetus for their competitiveness and for their sustainable development. However it might become an initiative without economic justification, an end in itself, if it is not motivated by conscious *quest for new knowledge* and its adequate application in practice in order to meet the pre-set socio-economic objectives. Considering the high degree of the economic risk and hence the high cost of developing new knowledge, the *demand for knowledge* needs well designed and adjusted encouragement including financial incentives, and why not “inducing” by means of the matching rational *supply of new knowledge*.

Due to the state-of-the-art nature of the socio-economic problems, ensuing from the knowledge based economy, their profound and analytical investigation and evaluation, the scientific papers and works of researchers, specialists in different sciences, but with joint interest in this sphere have been collected in the last few years in a very valuable and worth-reading book “*Demand for knowledge in the process of European economic integration*”.

The collected monographic study, compiled and edited by the Editor-in-Chief Rossitsa Chobanova, Senior Research Fellow, Dr. Ec. Scs. consists of 28 studies and reports, presenting the results of the investigations of 37 authors from academic entities in Austria, England, Bulgaria, Romania, Turkey, Hungary and Finland. The main topics, discussed by the authors and setting up the sections of the issue are: the demand for knowledge in modern development, sector and regional aspects of innovations, institutional dynamics in the demand for new knowledge, legal framework for the demand for new knowledge, the demand for new knowledge in the sphere of humanities and social sciences, human factor in knowledge society.

The main target of the collected works is to provide a clear view on the *demand for knowledge* in the process of European economic integration as a driving force for the innovative development in the globalizing world. The proper comprehension of the *demand for knowledge* as an objective process, contributing for the dynamic development of Europe, shall help the national and European initiatives to be more efficient and full of arguments.

Therefore the conclusions and the proposals made in this book aim at defining new problems and possible solutions, to be incorporated in the basic policy of various institutions: government, business, educational, academic, non-commercial and international.

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\* R. Chobanova (ed.). Demand for knowledge in the process of European economic integration. Sofia: Bulgarian Academy of Sciences – Institute of Economics, 2008, 358 p.

1. *The First Part* of the publication, entitled “*Demand for knowledge in modern development*”, deals with current aspects of the knowledge-based economy. The published reports are dedicated to the dynamic development of the knowledge-based economy in our country, of the potential of the newly acceded EU member states, incl. Bulgaria, to stimulate the demand and the application of new knowledge, of the international economic cooperation.

Studying the “*Demand for knowledge in a national economy*” *Rossitsa Chobanova*, Senior Research Fellow, Dr. Ec. Sc. from the Economic Institute of the Bulgarian Academy of Science advocated the thesis, that the economic growth after 1997 is not due to the increasing creation and application of new knowledge in the national economy, but the demand for new knowledge is less than the supply of knowledge, and therefore the national potential for economic growth, based on the knowledge, is stepping down. This negative trend could be resolved by adjusting the national innovative policy and launching a “National Lisbon Program” on innovative economic development, based on the creation and use of new knowledge. The presentation outlines in details the objectives, tasks, specific tools and measures to implement such a program.

*Senior Research Fellow, Dr. Ec. Sc. Andrea Szalavec* of the Institute of World Economics of the Hungarian Academy of Sciences presents the paper “*The Role of Innovations in Peripheral Countries’ Catching-up*”, revealing the ways to catch up in the global economy, based on knowledge, and giving an experimental reply to the question how the revolution of innovations and communication technologies affects the catching-up countries from the periphery. The author shows, that the innovations and the transition to the knowledge-based economy do not play the same role as in the advanced countries, and the driving forces of the economic growth and the technological progress are different. The conclusions of this study focus on the role and the potential of the innovative policy.

In her study “*New Trends in International Technological Cooperation, Prospects for Knowledge Creation and Economic Development*” *Dr. Liliana Mateeva* from the Austrian Institute for Modern Studies, Vienna highlights the role of the transnational companies for the globalization and internationalization of the business activities, as well as for the latest trends in the international technological cooperation – the development of innovation systems on international level and the evolution from technology transfer to innovation development.

*Senior Research Fellow Nikolina Sretenova, PhD* from the Institute of Philosophical Studies, BAS derives the significance of the European research environment for strengthening the European research capacity in the context of the Lisbon Strategy. In the studies on “*Social Sciences and Humanities in the Reality of Transformation*” the author investigates some challenges, facing the social sciences and humanities in the post-communist countries, and focuses on the advantages of the researchers from the new EU Member States, incl. Bulgaria, in this sphere. The advantages are due to the wide experience,

acquired in the course of transformation of the socio-economic systems in the former socialist countries from Central and Eastern Europe.

The publication of Associate Professor *Nako Stefanov PhD* from the Sofia University "St. Kliment Ohridsky" "*Developing a Project for a Bulgarian Model of Knowledge Based Economy and a Knowledge Based Society*" focuses on the concepts of the new models for social and economic development in the information era, with the so-called knowledge based society and knowledge based economy, being of paramount importance not only from theoretical, but also from practical point of view. The necessary prerequisites are discussed for development and implementation in practice of the "knowledge economy and society in the broad sense": the role of the state, the new organizational paradigm, the revolution in education and the creation of Homo Creativus (the creative human) being the most important result and a driving force of the knowledge society and of the knowledge economy.

2. *The second part* of the collective monographic study is dedicated to the topic "Sectoral and regional aspects of innovations".

*Anja Bauer, Dr. Ewald Rametsteiner, Dr. Gerhard Weiss* from the University of Natural Resources and Applied Life Sciences (Vienna, Austria) highlight the significance of innovations in low-technological sectors of economy. In the paper "*Innovations in the traditional sectors: Forestry in Central Europe*" the authors define the innovations as an adequate reaction to the changing technologies and the changed consumer markets, resulting in lower timber prices and in changed status-quo of forest industry – from a supplier of raw materials to a service provider industry. Having analyzed the fragmented ownership of the forest holdings and the low income from timber-processing they point out the necessity of fostering innovations in this sector, requiring an urgent development of a systematic innovative policy, supported by the institutions, and policy-makers in forestry throughout the European countries are interested therein.

In her study "*Capability Base, Innovation Activities and Public Policies in the Software Industry in Bulgaria*", *Rossitza Rousseva PhD* from the Sussex University, UK has come to interesting conclusions. They are based on data obtained from studying the potential accumulation in Bulgarian software companies and a further analysis of external factors, affecting the development of the domestic software industry. The author identifies positive changes and challenges in the development of the Bulgarian software industry and points out the key priorities for political decision making.

*Prof. Michael Andy MacAdams PhD* from USA, representing the Fatih University, Istanbul, highlights the regional aspects of innovation. In his paper "*Examining Urbanization and its Impacts in the Balkans using Geographic Information System (GIS) and Remote Sensing*" he has come to the conclusion, that the common priorities for the Balkan countries should be realized in order to look for innovative decisions. The author points out the rapid urbanization of the Balkan countries and the resulting difficulties in implementing national policies in

this region, as well as the importance of state-of-the-art technologies in solving urbanization-based-problems. The special focus is on the development and application of an integrated approach in solving such significant problems of the regional development.

Dragomir Gospodinov PhD presents an interesting and valuable investigation on the topic “*European Economic Integration and Development of Science, Technology and Innovation in the Russian Federation –current trends in their development as a response to the EU integration processes*”. Based on the specific experience and the strategic models, adopted in the Russian Federation, and in the context of the Lisbon Strategy the author formulates practical conclusions, that could be applied in Bulgaria to elaborate policies, in order to implement the European directives on economic growth and employment.

3. *The third part* of the collected works highlights the institutional aspects of the demand for new knowledge.

In her study “*Transfer of Knowledge in the Innovation System and the role of the Intermediaries*” Senior Research Fellow *Liliana Pavlova PhD* from the Centre for Science Studies and History of Science, BAS points out the importance of the intermediaries as independent liaisons among the constituents of the innovative system. The key idea is deriving the role of the policies, required to improve this system, focusing on the missing or underdeveloped components in the transfer of knowledge, such as intermediary institutions, hi-tech parks, technology transfer centers, etc.

Senior Research Fellow *Carmen Nastase, PhD* and Senior Research Fellow *Laura Bouriaud, PhD*, from the Suceava University, Romania and *Miika Kajanus, PhD* from Savonia University of Applied Sciences, Finland have drawn up the joint paper “*What Role Does University Play in a Regional Innovation System – a comparative A’WOT Analysis*”, deriving the significant role of the universities in the Regional Innovation Systems (RIS) comparing and assessing two such systems – one in Northern Romania, and the other – in Central Finland. The authors focus on the contribution of the university to increasing the competences of RIS. They make use of A’WOT analysis, a hybrid method, linking the multi-choice method with the SWOT analysis method. The factors, contained in the SWOT analysis, are treated with analytical priority making them comparable. The study is based on interviews with experts and with participants in RIS, in conformity with and within the A’WOT analysis.

*Assoc. Prof. Plamen Pachev, PhD* from South West University “Neofit Rilsky”, Blagoevgrad highlights the importance of the know-how transfer from developed EC countries to the SME sector in Bulgaria. In his study “*Challenges and Problems of the Policies for Support to Bulgarian SMEs in the Eve of EU Accession*” the author discusses the socio-economic role of the small and medium enterprises in the contemporary market economy, considering the specific nature of the European region and the targets, formulated when setting out policies in support of this vital sector.

In his report *“European Initiatives Influencing the Innovation Networks Development”* Radoslav Stanolov, Chief Expert, Ministry of Economy and Energy reveals and evaluates the measures undertaken in Bulgaria to stimulate the applied scientific research and projects through the National Innovation Fund (NIF). He sums up, that the project proposals, approved for NIF financing in the hi-tech sectors, along with the expected increase in the budget fund, are a necessary step forward, but insufficient in terms of volume, undertaken by the government to foster the development and application of new knowledge.

Assos. Prof. Vasil Sivov, PhD from South West University “Neofit Rilsky”, Blagoevgrad in his paper *“European Innovation Initiatives and the Bulgarian Approach”* analyses the latest trends of the European Innovative Strategy and its role in increasing competitiveness and generating economic growth. The author’s idea is concentrated on the use of the EU Structural Funds not only for infrastructure, but also to strengthen the stimulation of research and technological innovations as a supplement to the existing Framework Programs and national R&D funds. They could be incentives for laying down the foundations of the innovative environment in the long run, accelerating the dynamic proliferation of innovations among the companies and creating opportunities for real innovations instead of passive technological utilization of the innovations.

In her paper *“Organization Culture and Mobilization of Knowledge”* Research Fellow First Degree, Adelina Milanova, PhD from the Institute of Economics, BAS shares her concept on the challenges of the modern world, imposing heterodoxy in the economic analysis and the necessity for multidisciplinary approach to determine the dominant problems in the knowledge-based-economy. The author presents the liaison between organizational culture and the complex knowledge mobilization process in Bulgaria, and on the grounds of proven interrelations on the micro level she derives the dominant role of the cultural context in order to organize and mobilize knowledge as a key input in economy.

4. The *Fourth Part* of the collected works is concentrated on the Legal Framework for Developing the Demand for New Knowledge.

In his report *“Constitutional and Legal Protection of the Novelty of Business Methods – State, Problems, Possible Solutions”*. Assos. Prof. Vasil Tzankov from the Shoumen University provides arguments for the required legal protection of the applied new business methods under the conditions of globalization and rapidly changing technologies and economic policies. He is of the opinion that the constitutional and legal framework in force in Bulgaria concerning innovations and especially the new business methods is not developed enough, unlike USA and Germany, where such issues have been discussed since 1980. The idea hinted by the author is, that a text could be included in the Constitution on promotion of innovations and protection of the intellectual property subjects. From legal point of view, the principles and criteria for issuing a patent for a business method could be considered on the analogy of the intellectual property

right. The indirect idea is, that such a constitutional and legal approach enables a larger economic liberty, respectively a more rapid economic growth.

*In her study “Enforcing the Industrial Property Rights in Bulgaria in Accordance with the TRIPs Agreement” - Research Associate Vesselina Maneva, PhD from the Institute of legal studies, BAS analyses the legal framework of the Bulgarian legislation in view of Bulgaria’s commitments under the Agreement on Trade-Related Aspects of Intellectual Property Rights, known as TRIPs Agreement, and the Directive for enforcement of intellectual property rights. Her conclusion, based on the analysis of the current practice shows a considerable alignment of the Bulgarian legislation in the field of intellectual property with the EU legislation. The presentation of the author points out the latest changes – in the Law on trade marks and geographical indications, the Law on industrial design, the Patent Law, finalizing the harmonization process of the Bulgarian regulations. She stated, that the problem of efficient protection of the intellectual property rights is related mainly with the speed of enforcement of the regulations and with the control of their compliance.*

*Prof. Stefka Naumova from the Institute of Legal Studies, BAS in her article “Ecological legislation and the Right to Environment-related Information” discusses the interrelation among the pursuit of knowledge in the course of European economic integration, the right to information and the scope of legal knowledge, based on the environment protection laws. The ecological legislation, being an integral part of the legislation system in force has some specific features, compared to the other legal spheres, namely the legislative decisions in this field have a long-term effect on large groups of people. Therefore the correlation between the ecological legislation and the right to information on the environment is the focus of the EC ecology policy. The right to information is considered by EC as one of the basic tools, guaranteeing the sustainable development, reducing the risk for human health and conserving the key components of the ecosystem.*

*5. The fifth part of the publication discusses the problems, related to the contemporary aspects of demand for new knowledge in social sciences and humanities.*

*The Corresponding Member Vassil Prodanov, Director of the Institute of Philosophical Studies, BAS, outlined the latest trend in the development of social sciences – the increasing demand for philosophical knowledge to identify and explain the knowledge based society. In the “Demand for Philosophical Knowledge in Knowledge Based Societies” the author shows how the role of philosophy changes in the innovative societies, highlighting its paramount importance for Bulgaria due to the radical change of the ideological framework of our socio-economic development and the perception of the world. Another aspect outlined in this paper is the relation between philosophy and market as a consequence of the increasing applied philosophical research worldwide. Having become a key social factor the human capital is arranged and supported by the philosophy.*

In the context of dynamics of the social integration processes new challenges have emerged in the focus of social psychology. The study of *Senior Research Fellow Yolanda Zografova, PhD* from the Institute of Psychology, BAS, "*Socio-Psychological Knowledge and Development of New Concepts and Behavior Models*", highlights the importance of a major problem – the necessity to develop new concepts on the up-to-date requirements for the self-made personality and its role in the formal and informal structures and interrelations. The socio-psychological knowledge and investigations have a vital function – to analyze and provoke new behavior models, related to the modern demand of the social environment. One of the priorities of the modern social psychology is the knowledge of deep psychological instruments, regulating the daily human activity and behavior, under the influence of the information processes, socio-economic and cultural modifications in the modern society.

The study "*Contemporary Information Sphere in the Light of the Knowledge-based Economy*" by *Prof. Nadezhda Nikolova* from the South West University "Neofit Rilsky", Blagoevgrad discusses the problems of computer training, information culture and the information on new knowledge, drawing the attention to the role of aligning the economic, management and statistical thinking, in view of taking decisions related to a better adaptation to the economic environment.

*The Research Team - Senior Research Fellow Marta Sugareva S.Sc.D, the PhD Students Vassil Kovachev and Kamelia Lilova* from the Centre for Population Studies, BAS and *Research Fellow Ivan Garnizov* of the Laboratory of Telematics, BAS present the paper "*Problems of Generating and Diffusing Knowledge in Demography in the Educational System in Bulgaria Today*". This is a critical review of the current status of this aspect in the education system, outlining the problems, which arise when creating and proliferating scientific knowledge in Demography, especially in higher and secondary education. Based on the experience of other European countries (such as the Czech Republic, France, Holland) various opportunities have been studied, resulting in the proposal one or more university centers to be established with academic courses in Demography. All such efforts are in response of the demand and the requirements of the international organizations, and of the needs of the society in Bulgaria – the government, the media, the decision-makers, NGOs, municipalities and villages, etc.

6. *Part Six* is entitled "Human Factor in Knowledge Society".

In their paper "*Innovation and the Paradigm of Work and Personal Life*" *Prof. Dr. Dragos Vasile* and *Prof. Dr. Radu Emilian* from the Faculty of Commerce, Academy of Economic Studies, Bucharest, Romania demonstrate how companies in the knowledge based economy could reach a higher level of competitiveness, if they manage to work not only under the pressure of prices and quality, but with more flexibility and more innovations. The innovation and creativity of the companies depend on the skills of the employees to activate

their energy, both on personal level, and on company level from the point of view of work. A factor, favorable for creativity and innovations and worth to be considered by the management, is the link between the work and the individual life of each employee.

*Prof. Katya Vladimirova* from the University of National and World Economy in her paper *“Quality of the Human Factor and Challenges of the New Economy and European integration. Necessary changes for Bulgaria”* supports the idea, that the quality and the productivity of the human factor are crucial for the success of each country, organization and individual. The human factor determines the development potential, the choice of favorable opportunities, and its productivity is a criterion for the efficient use of this potential. The specific nature of the “human resource” factor, as well as the long-term aspect of the implementation process suggest the use of strategies, plans, standards, taking into consideration all the partners in this process. The policy requires a cohesion of the interests of the three main stakeholders: the state, the businesses and the individuals, or their families. This article studies the meaning of the EU social model and the employment strategy, the quality and qualifications of the staff, the labor quality assessment and the criteria required in the context of the international comparisons, the quality characteristics for employment and the human resources development process under the conditions of the new economy and the rapid internationalization and globalization process.

The study *“Knowledgeable Workers – Source for Competitive Advantage”* made by *Claudia Elena Tuclea, PhD* and *Gabriela Tigu, PhD* from the Romanian Academy of Economic Studies points out the important role of the qualified and talented staff in the modern organizations. The conclusions are based on the results from investigating the most effective HR strategies and practices of the Romanian managers for attracting, motivating and retaining the qualified staff. The analysis of the responses demonstrates the difference between the most effective strategies in theoretical and in practical aspect. In conclusion the authors determine the importance of the human resources as a valuable source for competitive advantage.

In her presentation for one of the regular meetings of the Ministers in charge of higher education in the counties, signatory of the Bolognese Declaration *“The Bologna Process for the Establishment of the European Higher Education Area”*, *Svetla Boneva PhD* from the University of National and World Economy analyses the nature and targets of this process with a brief presentation of the achievements.

In his paper *“Studying the Quality of Social Capital as a Prerequisite for the Successful Accession to the EU (Case Study of Bulgaria).”* *Prof. Alexi Danchev PhD* from the Fatih University in Istanbul, member of the Union of Scientists in Bulgaria, analyses empirical material from Bulgaria, verifying the increasing role of social capital for maintaining sustainable development. The key measurement units introduced by him are the level of trust among the members of society and

the level of integration (consensus) for arranging social preferences. Prof. Danchev sums up, that at this stage both levels are relatively well on micro level, but on the macro level the integration level is not quite well, causing problems to reach a consensus for the key social preferences.

The scientific discussion and the exchange of scientific views is the best way for the scientists to follow and consolidate the academic traditions in order to contribute to the socio-economic development. Due to their cognitive potential, social sciences could play a significant role to accelerate the innovation processes. Two important questions have emerged as a result of the study of the reports and presentations in this book: whether the scientific thought is able to fulfill its commitments and assignments in the modern development and whether the social sciences in Bulgaria are able to suggest a model of knowledge-based-society. The abundant collection of presentations, analyses and practical conclusions shows, that Bulgarian Academy of Sciences disposes of a research capacity, capable to give a positive answer to the above two questions.

Pavlinka Naydenova, Research Fellow, Ph. D.