ECONOMIC RESEARCH INSTITUTE
BULGARIAN ACADEMY OF SCIENCES

ИНСТИТУТ ЗА ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ НА БЪЛГАРСКАТА АКАДЕМИЯ НА НАУКИТЕ

ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ

ECONOMIC STUDIES

Volume 30, Issue 2, 2021

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Publication of this issue 2/2021 of Economic Studies journal is supported by the Bulgarian National Science Fund at Ministry of Education and Science.

ECONOMIC RESEARCH INSTITUTE AT BAS

ECONOMIC STUDIES
Volume 30 (2), 2021

Address: Economic Research Institute at BAS, 3 "Aksakov" str., Sofia 1000, Bulgaria
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ISSN 0205-3292

ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 30 (2), 2021

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ACADEMIA-BUSINESS COOPERATION IN BULGARIA: PROBLEMS AND PROGRESS POSSIBILITIES

The study presents general results of the research project "Academic sphere and business in Bulgaria: status and possibilities for expanding cooperation" carried out at the Economic Research Institute at BAS. An assessment of the status of the cooperation between the universities, research organisations and enterprises in Bulgaria is made. Main problem areas are identified and on this basis – possibilities for its expansion are derived.
JEL: I23; I28; O3

Introduction

In the conditions of globalisation and building a knowledge economy, the academic sphere – universities and research organisations, directly related to the process of creating new knowledge and forming an innovative culture of the population, is crucial for both social and economic development and achievement of intelligent growth, as well as for increasing the competitiveness of the economy. The created new knowledge requires the active participation of the business sector for its implementation in practice and the development of the process of intelligent specialisation of the economy. The need to solve the problems arising in this area is the motive to choose the subject of the project "Academic sphere and business in Bulgaria: status and possibilities for expansion of cooperation" carried out within the framework of the scientific and research programme of the Economic Research Institute at the Bulgarian Academy of Sciences, and finalised in 2020. This publication presents systematised general results of the project.

The study is based on the thesis that the weak and inefficient interaction between academic sphere and business has a negative impact on the innovation and competitiveness of the companies and enterprises, and the entire economy, on the possibilities for knowledge and technology transfer and commercialisation of the products of higher education and research, and on the development of each of the two spheres. Improving the cooperation between

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higher education, science and business in Bulgaria is one of the possibilities for increasing the innovation potential of the country through a technological renewal of production and stimulation of research and innovation.

The purpose of the project is to assess the state of the cooperation between the academic sphere (universities and research organisations) and business (enterprises) in Bulgaria, to identify problem areas and on this basis – possibilities for its improvement.

A set of methods was used in the research process, including empirical analysis of information from official statistical databases in Bulgaria and the European Union (EU), and from reports of international institutions; comparative analysis; qualitative analysis; expert assessments. The study applies authors' own approach to determine a set of indicators characterising the cooperation between academic sphere and business in the creation and implementation of new knowledge, products and services, adopting the definitions of concepts and indicators from the used national and international sources of information.

Literature Review

In the specialised literature, there are studies on the importance of and success factors for cooperation between business, universities and research institutions. A number of publications present good practices for its implementation, as well as attempts to assess its impact on the development of the academic and business spheres, the quality of their product and on the economy as a whole (Davey, Baaken, Galán-Muros, Meerman, 2011; Galán-Muros, 2016; Lam, 2010; OECD, 2014; Wilson, 2012).

The issue of the studied interaction has its own specifics in the particular countries, which presupposes the conduct of relevant national surveys in accordance with the ongoing changes related to the construction of the knowledge economy. In this regard, the topic "academic sphere – business" is a subject of a number of studies carried out in recent years in Bulgaria, devoted to certain aspects and problems of the relationship between the two spheres, dominated by publications on the relation between universities and business, as well as financial mechanisms and development of specific forms of public-private partnerships (Chobanova, 2012, 2014; Chobanova, Tassev, Milanova, Naydenova, 2013; Bakardjieva, 2013; Todorova, Slavcheva, 2016, 2017; Anguelieva, Kabakchieva, Gourova, 2011; Kirova, 2017; Georgieva, 1999; Atanassova, 2010, 2017, 2020; and others).

The study of the literature on the topic of that research reveals the existence of a number of problems related to the joint activities of the academic sphere and business in Bulgaria:

- low innovation of enterprises and low need for research products of the academic sphere;
- limited realisation and commercialisation of the created research production;
- unsatisfactory provision of the business sector with the necessary staff, with the required professional competencies and quality of knowledge and skills;
- insufficient practical applicability of the higher education in Bulgaria.

In this context, overcoming the problems of the higher education and science sphere itself, as well as the insufficient degree of innovation of enterprises, would be greatly supported by finding solutions to expand and deepen the interaction and cooperation between the two spheres.

General Assessments

The multifaceted study of the directions, state, conditions for and types and forms of cooperation between the academic sphere and the business in Bulgaria carried out within the framework of the presented project shows low degree, low efficiency and effectiveness, existence of various problems both in terms of implementation of the relationship between the two spheres, and in each of them. The results of the study allow us to highlight some general assessments.

The construction of the infrastructure necessary for the development of cooperation between the academic sphere and the business begins after the country's accession to the EU and the implementation of the goals and objectives of the first programming period 2007-2013. The practical realisation of the set goals, however, does not lead to more active interaction between the state and the components of the knowledge triangle, with little progress in terms of deepening the dialogue between academia and business. After the change of the European priorities and the adoption of the Europe 2020 Strategy, Bulgaria moves to the second stage of building an effective institutional innovation framework, related to the next programming period 2014-2020. Despite the achieved results, the Bulgarian innovation system is still characterised by separation of the areas of "research" and "innovation", low efficiency of the transformation process of the investments in research and development (R&D) into applied results, respectively low degree of commercialisation.

The interaction between academic sphere and business continues to be limited due to:

- lack of a critical mass of companies engaged in research and development;
- weak capacity for innovation and technology absorption by the business sector;
- low level of public R&D funding;
- demand mainly for external sources of funding, which leads to a distance of research from local business and to its focus on areas of international rather than national importance.

The measures and actions in the updated national strategic and regulatory documents envisaged to promote cooperation between the research institutions, higher education institutions and enterprises are still poorly implemented in practice:

- the national innovation system, in particular, public R&D and private sector innovations, remains fragmented;
- examples of successful public-private partnerships for technology commercialisation are rare;

- the role of the higher education institutions in facilitating knowledge transfer is still insignificant;
- human capital in the R&D system is insufficient;
- the slow pace of change hinders the creation of incentives for innovation in the research system;
- the mechanisms in the strategic documents provided for the involvement of local governments, companies and academic institutions do not fulfil their functions and are rather formal, failing to influence the practical establishment and implementation of the "science-business" relationship.

In recent years, there has been an improvement in Bulgaria's position in international rankings by the degree of cooperation between academia and business. For example, according to the Global Innovation Index indicator "innovation linkages" Bulgaria has increased its rank from 97 to 37 for the period 2011-2019. An improvement is observed in terms of the indicator "university/industry research collaboration" (raise of the country's rank from 100 to 69), as well as of "state of cluster development" (from 89 to 61). A progress is also reported by the Global Competitiveness Index. According to the indicator "university – industry collaboration in R&D" Bulgaria increases its rank from 68 in 2018 to 62 in 2019. These positive changes indicate the correct orientation of the national strategic goals, recognition of the existing weaknesses and obstacles and undertaking of the appropriate measures and actions, which contribute to the gradual development of the analysed relationship. However, the process remains very slow, Bulgaria is still in the bottom half of the respective rankings, and the practical results are not yet encouraging in terms of improving the country's position.

Identified Problem Areas

The problems identified in the research process in the field of and obstacles to the establishment and development of the cooperation between academic sphere and business can be summarised to the following main areas:

Strategic and regulatory framework

The process of developing, updating and approving by the European partners of the strategic and regulatory framework for the development of research and innovation after Bulgaria's accession to the EU, as well as of the relevant action plans, is slow and too lengthy: the final version of the Innovation Strategy for Smart Specialisation of the Republic of Bulgaria 2014-2020 was adopted only in 2018; of the National strategy for development of scientific research in the Republic of Bulgaria 2017-2030 (Better science for better Bulgaria) – in 2017; of the Strategy for Development of Higher Education in the Republic of Bulgaria for the 2014-2020 – in 2015, and the amendments to the Higher Education Act creating a legal basis for the implementation of various forms of cooperation in order to commercialise the results of research and training practices are from 2016. A significant part of the planned procedures

are characterised by a postponed start after their announcement, some have been interrupted due to the epidemiological situation in early 2020.

As a result, the implementation in practice of the established regulatory and institutional framework to support research and innovation in the country, which can be assessed positively in formal (substantive) terms, is still unsatisfactory in view of the achieved results and in particular – of its real impact on the formation and strengthening of the cooperation between the academic sphere and the business sector. Among the main reasons are:

- lack of consensus in society, business and government on the crucial importance of science and research for social and economic development of the country;
- continuing low R&D funding;
- lack of coordination and interaction between the line ministries responsible for the implementation of the respective strategic documents and of the related operational programmes;
- ineffective implementation of the developed measures and mechanisms to promote targeting of the research, conducted in the public academic institutions, to the needs of the business sector;
- weak government coordination of the relationship between academia and business at a national and regional level;
- search for partners both by the academia and the business mainly outside the country;
- visible separation of public and private sector activities in the field of innovation and knowledge and technology transfer;
- lack of systematic mutual dialogue and still limited implementation of incentives for more active cooperation between academia and business;
- inefficiency of the conducted information campaigns, which leads to poor knowledge of the respective programmes and procedures by both spheres.

Public and private funding

For the period 2010-2018, an almost double increase in the total R&D expenditures in the country is registered – from BGN 421.6 mln to BGN 828.9 mln. The highest level was reached in 2015 (BGN 850.5 mln). After a significant decline in 2016 (BGN 734.3 mln), they began to increase again, but still remain below the 2015 level. In 2018, the growth rate of R&D expenditures significantly exceeded that of 2017 – 2.4 times. Despite the registered growth, they represented 0.75% of the gross domestic product in 2018, and it is not realistic to expect:

- the achievement of the set national target of 1.5% of the gross domestic product for 2020;
- the overcoming the significant lag behind the EU average – overall and by sectors;

- the components of the innovation index related to research to reach the values corresponding to a "modest innovator" – the goal set in the National Strategy for Development of Scientific Research 2017-2030 to be achieved at the end of the first stage – 2022.

It can be concluded that the problems identified in the research process related to the low funding of R&D, which do not create favourable conditions for modernisation of the material base, for providing incentives and opportunities to remove barriers to knowledge transfer and commercialisation of the products of the academic sphere, and for the innovative development of the enterprises, have not been overcome and still require practical solutions.

An important problem in the field of the state funding of R&D is the fact that the measures and activities for the development of research and innovations outlined in the strategic documents are not sufficiently provided with the necessary public funds. At the same time, government policies regarding R&D funding are characterised by instability and constantly changing targets set in the several times updated National strategy for development of scientific research.

A new point is that in recent years the increase in total R&D expenditures is mainly due to the "Business enterprises" sector, where they have the largest size, share and growth rate compared to the "Government" and "Higher Education" sectors. In the structure of the total R&D expenditures, largest is the share of the sector "Business enterprises" funds (43.1% in 2018), while those of the "Government" (23.4%) and especially of the "Higher Education" (0.1%) sectors are significantly smaller. Initially, the main source of funds for R&D was the "Government" sector (43.2% in 2010), followed by the "Abroad" source (39.6%) and in third place – the "Business enterprises" sector (16.7%) with expenditures about two and a half times lower than those of the "Government" sector. In 2018, the share of the expenditures of the "Business enterprises" sector in the total expenditures for R&D is almost twice as large as that of the "Government" sector, which in turn already ranks third.

Moreover, there is mainly intra-sector funding of R&D by the business (95.8% of the expenditures in 2018), and expenditures with source "Abroad" are also directed mostly to the "Business enterprises" sector (88.2% of the expenses). All this limits the resources for the "Government" and "Higher Education" sectors to develop R&D, as well as the interest of the "Business enterprises" sector in cooperating with them. At the same time, in terms of the share of the budget expenditures for R&D from the total state budget expenditures, Bulgaria is on the penultimate place in the EU (0.56% in Bulgaria in 2018 compared to 1.4% in the EU-28), which confronts the academic sphere with serious financial problems hindering its R&D.

Another form of funding, such as the state Fund of funds, which combines funds provided under four operational programmes for financial instruments – "Human Resources Development ", "Innovation and Competitiveness ", "Environment ", "Regions in Growth ", is aimed at supporting the growth of existing new technology companies, while the financing of startups and microcredit with shared risk is still in the final phase before starting its activity at the end of 2019.

The European Commission framework programme for research and innovation "Horizon 2020" does not sufficiently fulfil its role in Bulgaria as an important source of funding for research and innovation. Researchers and businesses still face serious difficulties thwarting their effective participation. Despite the progress observed since 2016, it is insignificant, and the country remains in 24th place in the EU-28 in terms of absorbed financial contribution under this programme. One of the main barriers to funding, even for some of the projects approved in 2018, remains the lack of a budget.

Human capital

In the period 2010-2018, there is an increase in R&D personnel, especially in the "Business enterprises" sector (from 3316 to 15949 persons), where at present it is largest in number. Its significant growth in this sector leads to sizable changes in the structure of researchers by sectors and to the limitation of the human resource of the academic sphere and its potential to perform the necessary R&D, as well as narrows the possibilities for interaction between sectors.

Moreover, it is observed a much higher total number of personnel, than that in full-time equivalent in the sectors "Higher Education" (9765 and 4404 persons respectively in 2018) and "Business enterprises" (15949 and 13110 persons respectively in 2018). That could be explained to a certain extent by an informal "borrowing" of personnel between sectors, respectively a low degree of institutional cooperation. In this regard, the rapid increase in the number of self-employed persons (enterprises with zero employees) as R&D personnel (from 88 to 354) and researchers (from 71 to 321) for the period 2010-2018 is also indicative.

Another problem is the outlined negative trends in the training of potential new R&D personnel for all sectors – decrease in the number of higher schools students (from 281170 to 220168 for the period 2010/2011 – 2019/2020) and of PhD students, especially after 2016 (from 6750 to 6440 for the period 2015/2016-2019/2020).

Business capacity

A characteristic feature of the Bulgarian economy is that the predominant share of the companies perform economic activities that do not require the use of high technology (low and medium-tech industries continue to dominate[3]), and for which the needs for R&D and

[3] In 2018 the largest number and share, although slightly declining compared to 2010, have enterprises in the field of "Wholesale and retail trade; repair of motor vehicles and motorcycles". In second place are those of "Professional, scientific and technical activities". The other areas of economic activity in which there are companies from the group of hifgh-tech industries and knowledge-intensive services are "Manufacturing", in which the number of enterprises is growing slightly, but their share is declining (from 8.5% to 7.7% for the period 2010-2018), and "Information and communication" in which the number and share of companies increase significantly (from 2.3% to 3.5% for the same period). It should be taken into account, however, that in the sector "Manufacturing" only two of the industries are from the group of high-tech, in the sector "Professional, scientific and technical activities" only

innovations are limited/minimal. Small and medium-sized enterprises, which represent a significant part of the enterprises in Bulgaria, have limited resources and possibilities for R&D, and there is a decrease in the relative share of those with their own innovation activity. Innovative among them are much less than those among the medium-sized and especially among the large enterprises (according to NSI data for 2016, the share of the innovative small enterprises amounts to 20.5%, among medium-sized enterprises this share is 44.3%, while for large companies it increases to 81.9%). The number of companies that have an R&D budget, i.e. own funding for innovation is insignificant (the results of a survey within the framework of a project "Science and Business" of the Ministry of education and science, of 2013, show that only 3.8% of the companies have a budget for R&D). Overall, the share of innovative companies is growing, but is still far below the EU average (for example, the share of SMEs with their own innovation activity, of the total number of SMEs, represents 26.9% of the EU-28 average in 2019). The capacity of a large number of enterprises is not sufficient for the implementation of innovations and for the assimilation of R&D technologies and products, as well as there is a lack of skills for production and administration of innovations. In parallel with this, the number of foreign-controlled enterprises using mainly external to the country research products and services is high in percentage terms (according to the results of the above-mentioned project, foreign-controlled companies do not have targeted fund for R&D in their annual budgets and in most cases they have short-term relationships with academia, on specific projects). All this limits the needs of the business for sustainable development of cooperation with the academic sphere in Bulgaria.

At the same time, the business sector concentrates more and more human and financial resources for R&D, but lags behind in terms of development and introduction of innovative practices. There is an increase in the number of companies in the group of high-tech industries and services, and of companies that have new or improved products, but it still remains insignificant (the share of enterprises that have new or improved products new to the market is significantly lower than that of innovative ones; NSI data show that it has risen in recent years to reach 8.3% in 2016). As a result, however, the relative shares of the employed in high-tech industries and services and of sales of new product innovations, exports of high-tech products and services and patent activity are significantly below the EU average.[4] Therefore, the business in Bulgaria is still characterised by limited, although increasing needs for research products, and by insufficient, although growing potential to innovate.

It should be concluded that with the established lagging technological development, the interest of the business in cooperation is weak, the contacts with the academic sphere, where they exist, are mostly sporadic, short-term, for solving specific problems. There are many cases of cooperation which is based on personal contacts and is not institutionalised. Firms

"Research and development" is from this group, and the shares of enterprises dealing with such activitites is small.

[4] According to the European Innovation Scoreboard, the shares of the employed in knowledge-intensive activities in Bulgaria reaches 56% of the EU-28 average in 2019, of the exports of medium and high-tech products is barely 43.2%, and of the sales of new innovations for the market/company (% of turnover) is only 30.3%.

prefer R&D partnerships mainly with other companies and to a much lesser extent with academia.

The interaction between the two spheres is hampered by differences in the goals and time horizon for the performance of a certain activity, low level of information assurance, as well as by legal difficulties and problems with intellectual property and related rights. Simultaneously, the intermediation is not well developed, including by central or local level institutions, the aim of which should be the increase of the competitiveness of the economy and not the "private" interest of a particular company or academic unit.

Capacity of the academic sphere

One of the main difficulties for the functioning of the academic sphere is the insufficiency of personnel and financial resources. The R&D personnel in "Government" sector had decreased for the period 2010-2018 both in absolute number (from 9667 to 8719 persons) and in full-time equivalent (from 9346 to 8177 persons). In the "Higher education" sector the personnel in full-time equivalent had barely changed (from 4362 to 4404 persons for the same period), although as an absolute number had increased (from 7710 to 9765 persons). As a relative share, R&D personnel had declined in both sectors, much more in the "Government" sector (from 56.4% to 31.7% in "Government "sector and from 26.3% to 17.1% in "Higher education" sector), at the expense of a significant increase in the "Business enterprises" sector (from 16.8% to 50.8%). At the end of the period, the number of R&D personnel in the both sectors ("Government" and "Higher education") together was lower than that in "Business enterprises" sector, while at the beginning of the period each individually had a higher number of personnel. Although the R&D expenditures in the "Government" sector had increased for the period 2010-2018, their relative share in total expenditures had decreased (from 37.3% to 22.1%). This sector ranked second in size of these expenditures after the "Business enterprises" sector, albeit three times smaller. The "Higher education" sector's expenditures had decreased over the period as well as their share (from 11.8% to 5.4%).

There are institutional imbalances and fragmentation of higher education and research systems. Another problem concerning the development of R&D in the country is that the share of higher education institutions engaged in research is not large (around a quarter of the total number of the universities carry out research[5]), and the research element is not yet represented as an integral part of education. As a result, the academic product lags behind the EU average in terms of patents, joint projects, scientific publications, international co-publications, cited publications and others.[6] At the same time, it does not meet the needs of the business and is largely unrecognisable to the enterprises.

In addition, it is found that the academic sphere prepares a decreasing number of personnel for the needs of the business and for its own needs. The number of students studying in

[5] National Development Programme: Bulgaria 2030. Analysis of the social and economic development of the country after its accession to the EU.

[6] For example, according to the European Innovation Scoreboard 2020 the performance of Bulgaria relative to that of the EU in 2019 is as follows: PCT patent applications – 38.5%, international scientific co-publications – 24.4%, most cited publications – 20.8%, public-private co-publications – 15.4%.

Bulgarian higher education institutions has decreased steadily over the last ten years, and the number of PhD students, especially those with Bulgarian citizenship, has started to decrease since 2016. Simultaneously, a large share of the higher education graduates do not work in their speciality (according to data of "The European Higher Education Area in 2018: Bologna Process Implementation Report", in 2016 30% of the Bulgarian population aged 25-34 with higher education works in places for which higher education is not required). The quality and the fields of education do not correspond to the necessary degree to the needs of the business, to which the low degree of interaction with this sector also contributes.

All this leads to the following conclusion: although the higher education system is being modernised, the quality, the compliance of the labour market needs with the growing shortage of staff with the necessary skills, and the degree of involvement of the population in lifelong learning remain problem areas.

Market-oriented forms of cooperation and commercialisation of technologies and innovations

It is established that the use of market-oriented forms of cooperation is very limited in the country. Among the practices for realisation of this type of activities in the academic sphere, joint public-private educational, training and scholarship programmes, and analytical, expert and research activities and R&D services, assigned by the business under contract with the academic institutions, prevail. At the same time, joint research projects are rare. The latter leads to the poor performance of Bulgaria in the field of public-private publications: despite a slight increase in their relative share over the last decade compared to the EU average, it is only 17.5% of it in 2018 (10% in 2011); as a share of the total number of scientific publications, public-private ones are almost 5 times less than their average number in the EU (EU, 2019). This indicates the limited scientific cooperation between the two spheres in joint public-private research projects.

The problems of limited internal capacity and of the low level of commercialisation of technologies and innovations are essential. The normative framework for the commercialisation of the intellectual product created in the public research and educational institutions does not offer sufficient incentives for its realisation. The Commercialisation strategies developed and adopted by the higher schools in the country treat most of the existing forms of cooperation with the business as guidelines for future development, without indicating real results. The study of good practices in Bulgaria shows that the achievements of public research organisations in the field of commercial transactions related to knowledge and technology transfer are also limited.

According to the assessments of international experts, the national regulatory framework aimed at implementing innovations (legislation in the field of intellectual property protection and patent protection and registration of utility models) is well developed and largely complies with EU directives. It does not impose any restrictions on the use of intellectual property for the purpose of securing loans by enterprises and gives the research organisations and the higher education institutions freedom to manage the rights of the intellectual property they develop. A significant problem in this area is that the system of intellectual property

rights is not sufficiently used by enterprises and academia due to a number of obstacles, including the lack of experience and skills to manage innovations – Bulgaria ranks penultimate in the EU in terms of general patent applications. Some other weaknesses should be mentioned, such as:

- the application of regulations is uneven;
- the perception by the private sector is limited mainly to patents obtained through international partnerships, which does not stimulate local innovation activity;
- the patent activity in the field of higher education is relatively low;
- the system for the protection of intellectual property rights remains unpopular and the level of awareness of its benefits among business and academics is still limited;
- practices of patent application/possession by individuals, as well as non-institutionalised (informal) contacts between the representatives of the academic sphere and the business community are widespread, which leads to problems in the management and protection of the intellectual property of the academic institutions and the research centres and complexes.

Despite the obstacle to the commercialisation of innovations was overcome through the amendments to the Higher Education Act from 2016 by creating normative opportunities for the development of academic entrepreneurship, this activity is not yet developed in the country. As the performed analysis shoes, this refers mainly to the lack of practices for establishing academic spin-off companies, i.e. the activity of creating new innovative enterprises in the academic institutions is not intensified. Among the reasons is the lack of "entrepreneurial" character and skills of most public higher education and research institutions, as well as of incentives and attitudes for research mobility in the enterprises, necessary for the development of cooperation with the business sector.

Unlike the spin-offs, the Bulgarian startup ecosystem has undergone significant development in recent years: nearly 2000 startups were created in the period 2013-2018 (predominantly in the ICT sector), with 650 active; 15% of startups are high-tech, one third of the product companies and one fifth of the service companies create global innovations.[7] However, the available information on startups operating in the country does not allow to understand and evaluate either the participation of the academics in them or the presence of academic ones.

Non-commercial forms of cooperation

The study shows that informal and non-commercial forms of cooperation prevail in the country, both at institutional level and in most cases at individual level, which do not bring economic benefits to the academic sphere. Sometimes they lead to cooperation agreements or, much less frequently, to the commercialisation of the product, which is more typical for the fields of higher education and vocational training. Another more common form of

[7] The information is based on data from: https://investsofia.com/start-up/.

cooperation is barter in formal non-commercial agreements – organised by the companies internship and scholarship programmes, workshops, master-classes and the like.

Intermediary scientific and technological infrastructure to facilitate the transfer of knowledge and technology

The construction of an intermediary scientific and technological infrastructure to facilitate the transfer of knowledge and technology in the country is one of the main ongoing activities to promote the development of the relationship "academic sphere – business". Due to the initial stage of most of the existing projects, the effectiveness of the cooperation between the academic sphere and the business cannot be assessed. What has been achieved in this field is mainly expressed in the construction of research infrastructures and the equipment of laboratories.

The information about the currently registered by the Ministry of Education and Science 4 Centers of Excellence and 9 Centers of Competence is reduced to a description of the expected effects and impacts of their activity, and there is no data on the achieved results. Several national innovation complexes (infrastructures) have been built or are under construction.

The Procedure "Establishment and development of Regional Innovation Centres (RIC) "was unsuccessful during the first programming period and is characterised by a serious delay in the current one. It was officially announced that opportunities for its implementation will be sought within the funds of the new programming period 2021-2027.

Within the scope of the functions of the technology transfer offices and centres established in the country, predominate activities related to:

- dissemination of information, including research results;
- provision of consulting services;
- training activities;
- research on the needs of companies in the relevant scientific fields or in a regional context;
- performance of scientific, technical and economic assessments and expertise of the presented developments and projects;
- organisation and participation in workshops and various events and happenings in order to establish contacts.

At the same time, activities related to the legal provision and other types of support for the protection of the intellectual property, as well as for assistance in launching and implementing innovative developments, products and solutions, do not receive the necessary attention. The study conducted on the existing websites of the technology transfer centres, especially those set up under the PHARE programme and the previous operational programme, shows that most of them indicate only the objectives, tasks and services set out at the beginning of the project and not the results of the activity, which calls into question their actual functioning.

The general conclusion is that the system of established centres for technology transfer in most academic institutions is inefficient and is characterised by inadequate knowledge of the business needs and of the commercialisation tools, mainly those for the assessment and protection of intellectual property.

Such new forms of cooperation in the field of innovations as innovative clusters are in initial phase of development in Bulgaria, but, according to a specialised study (Kirova, 2017), their performance in the field of economy, as well as in the regional context is still unsatisfactory, and a large part of the existing cluster structures are outside industries with innovative potential for development.

Sofia Tech Park is an initiative of great importance for the development of the research and innovation processes in Bulgaria and for the establishment of real interaction between the spheres of academia and business. However, in order its goals and mission to be achieved, it is necessary to overcome a number of serious shortcomings related to the limited use of its scientific infrastructure, management and long-term financial sustainability, registered by an independent panel of experts in the design and management of science parks whose secretariat has been provided by the Joint Research Centre, the European Commission's science and knowledge service.

Accelerated development is observed with regard to the intermediary network of non-profit organisations and associations to facilitate and support the transfer of knowledge and technology, including by supporting the process of building partnerships between the academia and the business. The fact is, however, that there are no examples of real commercialisation of intellectual product as a result of their activities. The undertaken initiatives lead mainly to the establishment of informal contacts between the representatives of both spheres, and not to the formation of market relations between the stakeholders.

The general conclusion about the development of the intermediary infrastructure for knowledge and technology transfer at a national and regional level is that its characteristic feature is instability over time, its separate forms are in initial stage or under construction, good practices are limited and unsystematic. It still has no significant impact on establishing fruitful cooperation between academia and business.

Opportunities to Improve and Expand "Research – Higher Education – Business" Cooperation

Based on the identified and systematised groups of problems in the development of the cooperation between academia and business, the areas that provide opportunities for its improvement and expansion are outlined.

In the field of normative and institutional regulations, where there is a lack of policy coherence, therefore education, research and technology are not considered as interconnected components of a system. With a view to comprehensive regulation and coordination of relations between stakeholders in the fields of research and innovations and increase the

innovation and competitiveness of the Bulgarian economy, it is necessary to improve the sustainability of the government policy and the coherence of its separate components, aimed at the development of research, education and innovations, as well as the coordination of the actions of the line bodies and institutions responsible for its implementation. In this regard, it is appropriate to adopt the long-delayed draft of the Innovation Act, developed in 2016, which aims are: predictability of the innovation policy; increasing public and private funding for innovations; improving the business environment by supporting the creation and growth of economic activity and reducing regional imbalances; supporting the application of innovative approaches in the enterprises and others. Such a law is necessary, but the drafted project must be revised and improved, eliminating the existing gaps identified in the process of its public discussion, and reflecting the current problems of the management of the national innovation system, which have arisen in recent years in the process of the implementation of the relevant strategic and regulatory documents and the implementation of the operational programmes.

To overcome the lack of coordination between the current state structures in the development and implementation of policies for smart growth, it would be useful to establish a single state regulatory body/agency for the promotion of innovations. Such an agency was proposed in the treated draft law, but has not yet been established. The current Council for Smart Growth at the Council of Ministers and the National Council for Science and Innovation at the Ministry of Education and Science are advisory bodies without operational powers, and at the same time, as practice shows, do not contribute to the synchronisation of policies and actions in the field of research and innovations. The establishment of such a structure would help to overcome the pointed problem and to establish a coordination link with the intermediary organisations assisting in the creation and transfer of knowledge, as well as to support the coordination of the activities of local technology transfer centres, which will facilitate the commercialisation of the research results.

In the field of funding, which is characterised by insufficient and unsustainable public funds for the development of R&D in the country and reliance mainly on external sources. The inadequate amount of government funding leads to the non-fulfillment of its main function to sustain and support the effective functioning of public academic institutions. Its increase is necessary to enhance productivity and support with financial resources, the process of commercialisation of the product of the academic sphere. In addition, the research evaluation criteria for budget allocation need to be improved. They should take into account the specifics of separate institutions and research areas, as well as the quality of research in view of their applicability in the business sector and public life.

The low level of public funding of R&D is accompanied by a rise in price and duplication of some of the measures. One of the ways to overcome them is the implementation of the new European initiative “Open Science – Open Innovation”. The first step in the process of development of the open science is the establishment by the Ministry of Education and Science in 2020 of a Bulgarian portal for open access to scientific information, which is maintained by the National Centre for information and documentation in pursuance of the Commission Recommendation (EU) 2018/790 of 25 April 2018 on access to and preservation of scientific information.

An important specific financial instrument for the development of the research-business relationship is the Technology Transfer Fund, which is intended to support projects in the thematic areas of the national Innovation Strategy for Smart Specialisation aimed at strengthening the interaction between academia and business, as well as to create a favourable environment for the development of innovations worked out in academic institutions, technology parks and laboratories. In 2020, the Fund of Funds completed the procedure for selection of a financial intermediary for the management of the Technology Transfer Fund, the call for project proposals began, but its real activity is still in its infancy, which does not allow an assessment of its contribution to the development of either operating or newly created innovative companies.

The resources of the Technology Transfer Fund are expected to trigger the financial instruments for startups. The mechanisms functioning so far under the Operational Programme "Innovation and Competitiveness" mainly benefit the already operating companies, because the financing scheme provides for the recovery of the initially spent funds. The latter makes it difficult for small startups, so the introduction of tax reliefs in the first months would allow them to overcome the problem of risk capital shortages. It should be emphasised that there are generally no tax reliefs for R&D in Bulgaria. This limits the motivation of the business to finance it and to seek cooperation with academia. Such a practice is typical for many countries, where different forms of tax preferences are applied for both enterprises and academic institutions. Given the current state of the academic and business spheres in the country and the low level of cooperation between them, it would be useful to introduce such preferences in order to create favourable tax conditions for funding research and innovations, especially for companies investing in Bulgarian research. It should be noted that the introduction of tax incentives and their possible forms in the field of R&D is a subject of ongoing discussions in Bulgaria (Damyanova, 2020).

With regard to the funding from the European funds and programmes, it should be emphasised that it is carried out on a project basis, which raises the question of the sustainability of the achieved results after the completion of the project, i.e. to what extent the effects of this form of funding will last over time. A practical example in this regard is the already established separate structural units for intermediary scientific and technological infrastructure to facilitate the transfer of knowledge and technology, many of which do not operate or do not work effectively after the suspension of funding. This depends, to a large extent, on increasing their capacity, especially in management, on their interest and on their management, which requires improving the activities of intermediary structures, including of the state, to meet the interests and time horizons of business and academic sphere.

In general, it should be underlined that it is necessary to raise the criteria for allocating funds under national and European programmes and to increase the control over their spending.

In the field of human capital, in which it is observed a shortage of personnel in public research organisations, as well as its transfer to work in the private R&D sector and in higher education or foreign academic institutions. Among the important ways to overcome these trends is the increase of the attractiveness of scientific careers and of the payment for research work, which is inadequate both to the EU average and to a number of other economic sectors

in the country. The increase in wages and the academic professional growth must be accompanied by more adequate criteria for evaluating research work, as well as by incentives for more active participation in knowledge and technology transfer activities.

Another possibility to expand and deepen the cooperation between academia and business, to learn about the mutual opportunities and needs for partnership, to acquire the necessary skills and exchange experience is the stimulation of the development of intersectoral mobility of researchers and practitioners. This requires the creation of appropriate pathways for its implementation at institutional level in both spheres (internships, business trips, etc.).

In the field of the potential for cooperation between business and academic sphere, which is still insufficient and does not lead to real partnerships, especially in the field of R&D and to a lesser extent in education and training. Its development requires better matching between demand and supply of scientific and technological products. One of the solutions to the problem with the found weak demand from the business is to provide it with accessible and up-to-date information about the achievements in the scientific field. At the same time it will help to increase its trust in the quality of the offered products, on the one hand, and on the other, to increase domestic demand at the expense of external transfers. With regard to supply, it is appropriate to constantly monitor the current needs and niches of the market by the academic sphere in order to produce the desired product. There is also a need of change in the style and way of working in this sphere in order to achieve greater flexibility and faster reactions to the emerging needs of the business. Improving mutual awareness of the needs and capabilities of both parties and the communication between them is a condition for deepening cooperation in the field of R&D.

In order to improve the cooperation between both spheres, the efficiency of the activities of the intermediary structures for transfer of knowledge and technologies related to information provision, consulting and training activities should be increased, with emphasis on the provision of legal and other services to support protection and management of intellectual property rights, for launching and implementing innovative developments and products, etc. This would also help to:

- overcome the lack of skills for creating and managing innovations in enterprises and of human potential for their implementation;
- raise the entrepreneurial culture of the academic staff;
- improve the skills of academics to assess the market orientation of their research projects and the ability to participate in research consortia;
- overcome the differences in the professional culture/the way of work of the academic institutions and the business.

In the field of R&D commercialisation, which is characterised by an adequate legal framework, but the main problems are the low level of its knowledge, the insufficient institutional culture, interest and initiative to carry out relevant activities related to

commercialisation, as well as to the exploitation and transfer of knowledge and technology. A proactive behavior in both spheres is necessary, which would be facilitated by awareness and knowledge of the benefits of commercial forms of cooperation between them. In turn, the latter can be achieved through wider involvement in the information platforms created by the intermediary organisations, in their training initiatives and those of the Bulgarian Patent Office.

The development of effective Commercialisation strategies by all structures in the academic sphere is important for overcoming these problems. Such strategies have already been adopted by some institutions, but the practice related to commercialisation shows a low degree of their effectiveness. In this regard, the academic Commercialisation strategies must set out appropriate policies and mechanisms (procedures, rules, instructions, etc.) for their implementation and financial provision, including the provision of funds for the acquisition of intellectual property rights over their respective objects and for the commercialisation of the created research products. Covering patent costs at institutional level would help to overcome the observed trend of claiming inventions mainly by individuals.

The achievement of the institutional strategic goals requires raising awareness and knowledge and skills through relevant, initiated by research organisations and universities information campaigns and training courses for the administration and academic staff on the needs, benefits and ways of implementing the commercialisation process.

Another possibility in this direction is the improvement of the personnel capacity of the technology transfer units (offices, centres) for providing qualified services for primary consultations, regulation of the intellectual property rights, assistance for preparation of documentation and for application activity for obtaining patents and licenses, preparation of market expertise/assessments of the intellectual property objects and others. More effective activity of these units can be achieved by creating their own information platforms for presentation of the produced, including patented, scientific products and through marketing research of the business needs.

Conclusions

In conclusion, we would like to emphasise that Bulgaria should faster get out of the bottom of the rankings for competitiveness and innovation. For that purpose, it is necessary to encourage, stimulate and support the development of high-tech industries and services, on the one hand. On the other hand, it is imperative that public and political consensus make research and development a real priority for the social and economic development of the country. To a large extent, it is the lack of consensus that leads to the conclusions on the state of research and innovations found in the study, and more specifically: in the presence of favorable conditions – a good strategic and regulatory framework and provided programme funding, the desired results have not been achieved and Bulgaria is still far from meeting national targets in this area. An important reason for that is the inefficient use of the allocated funds in view of the practical realisation of the envisaged goals and carrying out activities, which often do not lead to actual implementation of the set indicators.

All this implies still limited opportunities for expanding and deepening cooperation between business and academia. In turn, the weak interaction between higher education, research sphere and enterprises has a negative impact on the innovation and competitiveness of the business sector, on the opportunities for commercialisation of R&D products, as well as on the improvement of the conditions for development and increasing efficiency, quality and effectiveness of the Bulgarian higher education and research systems.

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ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 30 (2), 2021

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INFLUENCE OF TRANSNATIONAL CORPORATIONS ON THE GLOBAL ECONOMIC ORDER

The global economy has been in a state of permanent crisis for the last 10 years, the beginning of which is considered to be the financial crisis of 2007. Many studies have been devoted to identifying the reasons for deepening this crisis and gaining global scales, but there is no explicit answer to questions related to measures to overcome crisis phenomena and to create the basis for further sustainable development and its regulation.

In our opinion, one of the main reasons for the failure of national economies and the global economy as a whole to ensure a positive development trend is the significant influence of modern monopolies and monopolistic associations both on the national and international levels.

From the early 1970's to the beginning of the nineteenth century, transnational corporations have become the engine of the global economy and the driving force behind the spread of globalisation, but at the current stage, reaching a large size and with considerable financial resources, they become an obstacle to the development of a free market and support and development of competition.

Most publications in scientific sources are devoted to the analysis of tendencies of development of transnationalization of the world economy and substantiation of efficiency of activity of transnational companies as the organisation of the world economy, but insufficiently covered the shortcomings of activity of transnational corporations and revealed negative influences on the state of development of the global economy.

In a scientific article in order to find ways to overcome the stagnation of the world economy, the influence of international monopolies on economic relations has been researched both within individual states and within the global economy, trends in their development have been identified, and measures have been developed to improve the situation.

JEL: A1; C1; F01; F23; F6

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Introduction

World monopolisation began to develop quite actively after the Second World War, and globalisation of the world economy contributed to these processes. So far, the share of transnational corporations in the world trade reaches almost 70%, in industrial production – more than 60%, but the most dangerous in our view is that transnational corporations own 80% of patents, licenses and know-how. In addition, almost all of the global commodity markets are under the complete control of transnationals. The list of these markets and the share of transnationals in these markets are shown in Table 1 (Hiratsuka, 2011; Adam, 2017; Morse, 2018; Ushanov, 2017).

Table 1

The world markets with the highest concentration of transnational corporations (%)

№	Name of the product market	The share of transnational corporations in the market
1	Pharmaceutical market	95
2	Iron ore market	90
3	Wheat market	
4	Tobacco market	
5	Coffee market	
6	The corn market	
7	Timber market	
8	Foreign direct investment market	
9	Bauxite market	85
10	Copper market	
11	Tin market	80
12	Tea market	
13	Manufacturing Electronics Market	
14	Chemical products market	
15	The banana market	75
16	Oil market	
17	Rubber market	
18	Automotive market	70

Source: compiled by the authors (Hiratsuka, 2011; Adam, 2017; Morse, 2018; Ushanov, 2017)

Analysing the data in Table 1, we can say that in the world market situation is that transnational corporations control the markets for the production of goods with the highest level of value-added.

The current state of development of the global economy is characterised by the acceleration of mergers and acquisitions, which results in a decrease in the level of competition and the monopolisation of certain industries in the world market.

The Literature Review

Adam S. (2017) focuses on identifying the impact of transnational corporations on financial market development.

Bair J. (2015) paid attention in his study to the study of the impact of transnational corporations on the activities of the United Nations.

Cârlea D. (2010) paid attention to the study of the impact of Codex Alimentarius on the state of competition in global food and pharmaceutical markets.

Cobham A., Gray J., Murphy R. (2017) in their work analysed the level of taxation of transnational corporations in different countries of the world, identified the general trends and approaches of these companies to optimise tax payments.

Gostiuk M.T. (2010) conducted a research towards the monopolisation of the world food market, which revealed its trends, the impact of transnational corporations on the quality of food.

Katasonov V. (2018) explored the use of international law by transnational corporations in disputes with governments of host countries.

Morse S. (2018) outlined the Organization for Economic Co-operation and Development's approaches to regulating the activities of transnational companies and analysed the taxation methods for multinational companies.

Nellis S. (2018) analysed the state of Apple's development and provided an estimate of its future pricing policy in the global market.

Stroeva O., Ivanushkina, A. (2017) conducted research in the field of the global investment market, identified the place of transnationals corporations on it and identified the directions of internal technological development of these companies.

Ushanov S. A. (2017) identified the place and role of US transnational corporations in the global economy, provided an analysis of trends in the priorities of their activities and identified approaches to their activities in countries of location.

Ylonen M. (2017) provided a deep retrospective analysis of the unification of taxation methods for transnational corporations, which allowed them to determine the share of these companies in the budget revenues of different countries.

The above authors have provided an in-depth analysis of the activities of transnational corporations in their fields of research. However, this study distinguishes a comprehensive approach to determining the impact of transnational companies on the development of the global economy, analysing the most attractive industries of these companies and forecast the profitability of technology corporations in the world.

Aims

The purpose of the study is to comprehensively highlight the role of transnational corporations in contemporary international economic relations, identify leaders of global markets, identify trends, forecast the development of the largest companies in one of the most promising sectors of the global economy and develop proposals for regulating the legal relations of globalisation processes in order to transform transnational economy and competition protection.

Research Methodology

In accordance with the purpose of the study, the following objectives were developed: to identify the sectors of the world economy with the greatest influence of transnational corporations; to study and analyse the dynamics of the circulation of the largest transnational corporations in the world; identify the problematic aspects of transnational companies providing theoretical substantiation; to develop the forecast of development of the most promising branch of the world economy; propose remedial measures.

The recessionary state of the world economy and the recent threatening tendencies on the one hand, and the strengthening of the economic and even geopolitical power of transnational corporations, on the other hand, are forcing scientists to seek new approaches and theories of organising the world economic space in order to promote competition, stimulate competition-technical progress and development of the world economy. The above determines the relevance of the chosen research topic.

Today, the activities of multinational corporations are attracting more and more attention from politicians and scholars alike, allowing one to hope for solutions to pressing issues and contradictions. Thus, the theoretical basis of the study became the fundamental provisions of economic theory, scientific works and methodological developments of domestic and foreign scientists in the field of economics, law, statistics, modeling, as well as legal acts, methodological and statistical materials. The study was based on the application of the methodology of economic analysis, logical generalisation and comparison of results, statistical analysis and graphical presentation of results.

Research on the status and development trends of multinationals over the past five years

Before moving on to the study of the state of development of transnational corporations, it is advisable to consider the economic essence of the concept of "transnational corporation".

There are many interpretations of this definition in the modern scientific literature. In our view, the most correct in practical use should be the definition that has received international legal approval. This is the interpretation given by the United Nations Conference on Trade and Development (UNCTAD): "A transnational corporation is an enterprise that unites legal entities of any legal form and activity in two or more countries and pursues a single policy and overall strategy through one or more decision centres" (World Investment Report, 2003).

At the present stage, transnational corporations have gone beyond the concept of legal entities and inflated geopolitical colour by their level of influence. In addition, being multinationals, they still have signs of belonging to the national economy of their country of origin. It is these characteristic features against the background of the strengthening of the monopoly power of such corporations in the world markets that determine their behaviour. (Sullivan, 2002; Bair, 2015)

In our view, these features should be reflected in the definition of the concept of a transnational corporation at the level of international law and have appropriate legal regulation.

Table 2

The world's largest transnational corporations for 2018

Name	Country of Origin	Industry	Revenue, billion USD					Rank				
			2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Walmart	USA	Retail	476	485	482	485	500	1	1	1	1	1
State Grid Corporation of China	China	Fuel and energy	333	339	329	315	349	7	7	2	2	2
Sinopec	China	Fuel and energy	457	446	294	267	327	3	2	4	3	3
China National Petroleum Corporation	China	Fuel and energy	432	428	299	262	326	4	4	3	4	4
Royal Dutch Shell	Netherlands	Fuel and energy	459	431	272	240	311	2	3	5	7	5
Toyota Motor	Japan	Car manufacturing	256	247	236	254	265	9	9	8	5	6
Volkswagen	Germany	Car manufacturing	261	268	236	240	260	8	8	7	6	7
BP	United Kingdom	Fuel and energy	396	358	226	186	244	6	6	10	12	8
Exxon Mobil Corporation	USA	Fuel and energy	407	382	246	205	244	5	5	6	10	9
Berkshire Hathaway	USA	Financial	182	194	210	223	242	14	14	11	8	10
Apple	USA	Technology	171	182	233	221	229	15	15	9	9	11
Samsung	South Korea	Technology	208	195	177	174	211	13	13	13	15	12
McKesson	USA	Pharmaceutical	138	181	192	198	208	29	16	12	11	13
Glencore	Switzerland	Food	232	221	170	173	205	10	10	14	16	14
United Health Group	USA	Insurance	122	130	157	185	201	39	35	17	13	15
Daimler	Germany	Car manufacturing	156	172	165	169	185	20	17	16	17	16
CVS Health	USA	Insurance	126	139	153	177	184	35	30	18	14	17
Amazon	USA	Technology	74	89	107	136	178	112	88	44	26	18
Exor	Netherlands	Financial	151	162	152	155	161	24	19	19	20	19
AT&T	USA	Telecommunications	128	132	146	163	160	34	33	23	19	20
Phillips 66	USA	Fuel and energy	161	149	86	н/д	91	19	23	74	94	67
E.ON	Germany	Fuel and energy	162	151	129	42,8	42,8	18	22	32	254	255
Gazprom	Russian Federation	Fuel and energy	165	144	99	91	112	17	26	56	63	49
AXA	France	Insurance	165	161	129	143	149	16	20	33	25	27
Industrial and Commercial Bank of China (ICBC)	China	Financial	148	163	167	147	153	25	18	15	22	26
Total SA	France	Fuel and energy	212	212	143	128	149	11	11	24	30	28
Chevron	USA	Fuel and energy	202	203	131	107	134	12	12	31	45	33
General Motors	USA	Car manufacturing	155	156	152	166	157	21	21	20	18	21
The revenue of the top 20 companies			5493	5227	4548	4458	4987					

Source: compiled by the authors.

Based on the above, we propose our own interpretation of this definition: a transnational corporation is a legal entity that owns foreign funds, through which it operates in order to

maximise profits by optimising the organisational and production process, achieving total market control, and all strategists, directly or indirectly, are accepted for the benefit of the country of origin.

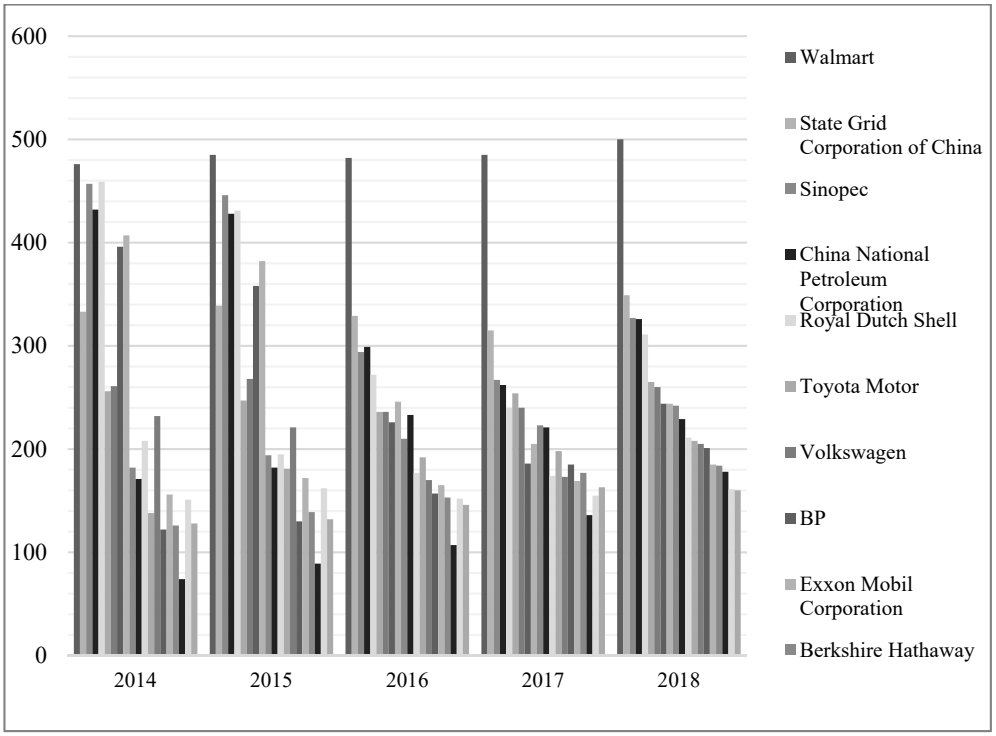
The number of transnational corporations is steadily increasing, there are currently about 85000 in the world, they control more than 850000 subsidiaries worldwide. At the same time, about 65% of parent companies are located in developed countries, and 60% of subsidiaries are located in developing countries. The United States, Western Europe, Japan, China, Hong Kong, North Korea have become world centres of concentration for multinational corporations as countries of origin (Friedman, 2002; Ylonen, 2017; Ushanov, 2017; Buckley, 2009).

The list of the most influential international corporations, according to the Fortune Global 500, is shown in Table 2. According to this rating, the influence of the corporations of the fuel and energy sector has been weakening over the last 5 years.

Figure 1 clearly illustrates the dynamics of revenue development of the largest transnational corporations over the last 5 years and the trends in their ranking.

Figure 1

Dynamics of income of the largest transnational corporations in the world for 2014-2018

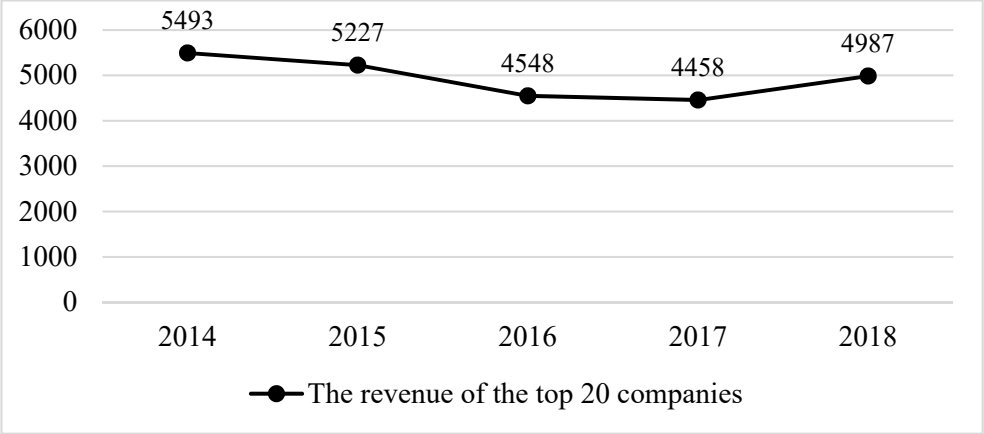


Source: compiled by the authors

Figure 2 allows us to trace the dynamics of revenues of the largest transnational corporations for 2014-2018, the composition of the list of TOP-20 of these companies differs slightly by year, but its essence is to identify the turnover of only the leaders of the rating. We see a trend towards a decrease in the aggregate revenues of the TOP 20 transnational corporations in the period from 2014 to 2017, and only in the last year there is a certain increase in this indicator. This trend is almost exactly the same as the overall change in the volume of income of the 500 most powerful companies in the world: yes, in 2015 this amount was 12.5 trillion. USD, in 2016 – 12 trillion. and in 2017 – 12.06 trillion. $. A prime example is United Health Group, which has risen from 39th place in 2014 to 15th place in 2018, and has almost doubled its revenue. But the most worrying is Amazon's growth from 112th place in 2014 to 18th place in 2018, with the company's turnover growing 2.5 times.

Figure 2

Revenue dynamics of the 20 largest transnational corporations in the world for 2014-2018, billion USD



Source: compiled by the authors.

In addition, studies show that overall revenue declined most for fuel and energy companies over the analysed period, while retailers, financiers, and high-tech corporations increased their revenues.

The TOP-5 industries that account for the highest revenue, accounting for 57% of the total turnover of the largest transnational corporations in the world, rated Fortune-500, are shown on Table 3.

As can be seen from Table 3, most of the turnover of transnational corporations is in the financial sector, in addition, its weight and impact are increasing.

We compare the list of industries that brought global corporations maximum revenue in 2018 with the 2014 list, which are shown in Table 4.

Table 3

The ranking of the most profitable industries in the world in the activities of transnationals in 2018

Industry name	Share of total revenue, %
1. Banks and finance	21
2. Trade	15
3. Pharmaceutical	7.5
4. Distribution	7
5. Fuel and energy	6.5
6. Others	43

Source: compiled by the authors (Fortune-500, 2018).

Table 4

Ranking of the most profitable industries in the world of multinational corporations in 2014

Industry name	Share of total revenue, %
Banks and finance	26
Fuel and energy	11
Pharmaceutical	8
Technology	7
Car manufacturing	5.5
Others	42.5

Source: compiled by the authors (Fortune-500, 2014).

Comparing the data, it can be seen that the pharmaceutical and financial sectors have held the leading position for 5 years, while the automotive, fuel and energy and high-tech industries have lost their places, and have been replaced by trade and distribution.

Problematic aspects of the activities of transnational corporations and finding ways to solve them. The study showed that in those sectors of the world economy where the concentration of transnational corporations has not reached critical importance, there transnational companies demonstrate a sufficiently high efficiency in the organisation and production of goods or services and the use of resources. For example, such companies pay a great deal of attention to scientific and technological developments, the introduction of new technologies, the search for new ways to improve their own competitiveness. However, in those areas where transnational corporations have reached a monopoly level, there are problematic aspects that cause threatening trends in their development to national economies and the world economy as a whole, namely:

1. Food industry. In 1963, the World Health Organization (WHO), together with the Food and Agriculture Organization (FAO) at the United Nations, created the Codex Alimentarius Commission, whose task is to develop and implement uniform standards in the production, packaging and labelling of foodstuffs, pharmaceuticals and agricultural products. At present, the commission consists of 188 members and representatives of manufacturing companies as non-voting observers. The document developed and approved has come into force since 2010 (Gostiuk, 2010).

At first glance, it is a very useful and necessary initiative to unify approaches to the processes of production, labelling and standards of analysis and verification of foodstuffs in order to protect consumers and resolve disputes between producers. However, Codex contains rather ambiguous points that reinforce the role of transnational food corporations and protect them from competition from small national producers.

In addition, according to the Codex provisions, animals, milk and meat used for commercial purposes must be used with growth hormone and antibiotics, otherwise, the product is not allowed on the market.

For example, in 2009, a law was passed in the United States requiring organic farms to buy seeds from only one Monsanto supplier. However, studies carried out in France by the independent CRIIGEN Institute together with UNICAEN have shown that MON 810 corn and its seeds from this producer are dangerous to human health because they are a genetically modified product and cause diseases of the cardiovascular system, kidney, liver, etc. (Cârlea, 2010).

2. Pharmaceutics. The previous paragraph covered the main provisions of the Codex Alimentarius, the effect of which extends to pharmaceuticals and healthcare.

According to Stefan Manea, head of the Romanian medicine company HOFIGAL, "Codex Alimentarius is, in theory, a collection of food standards adopted internationally for the stated purpose of protecting consumers' health, in fact, Codex Alimentarius intends to ban any alternative method of health protection. For example, natural therapies, the use of dietary supplements and vitamins, and all that will be a potential competitor for pharmaceutical chemistry". The Code's standards are designed to meet the needs and protect the interests of a narrow range of pharmaceutical giants comprising BASF, Pioneer, Monsanto and Aventis (Gostiuk, 2010).

3. Finances. Transnational companies are concentrating large financial resources that can be compared to the budgets of entire sovereign countries in size. For example, the gross value added of the largest Walmart company in the world corresponds to Vietnam's GDP. This fact allows transnational companies to influence the financial market, currency fluctuations and the state of development of national economies of individual countries (Cobham et al., 2017; Vogiatzoglou, 2008).

Following the 2001 default, Argentina's difficult negotiations with the lender community found an agreement to restructure its debt. The Elliott Management Corporation hedge fund, whose core business is independent sovereign debt operations, in the fall of 2012, owning 7% of Argentina's bonds, sued New York to recover $ 1.3 billion, destroyed the agreement between Buenos Aires and the creditors built to improve the country's economy. However, the decision was made in favour of Elliott Management Corp., was the cause of the new crisis of 2014 and the second default of Argentina since the beginning of the 21st century (Katasonov, 2018).

This was made possible by the existence of a mechanism such as the Investor-State Dispute Settlement (ISDS), which seeks to resolve contradictions that arise between states and their investors. The body that performs worldwide arbitration functions using this mechanism is the International Center for Settlement of Investment Disputes (ICSID), which is part of the

World Bank. Thus, corporations have been given the legal instrument to challenge certain decisions of sovereign states that interfere with their interests. At first glance, such a practice seems to be quite useful, but in practice, this reputable international body has become a tool for blackmailing and taming untruthful governments (Matrosova, 2016).

Most transnational corporations actively use the transfer pricing mechanism in their activities. Due to their multinational structure, these companies are actively manipulating prices, enabling them to compete effectively with other producers, as well as to avoid paying taxes. Yes, the tax authorities of economically developed countries effectively monitor the transfer pricing of transnational corporations, but other countries either do not have adequate legislation or sufficient resources, or the desire to counteract abuse to replenish their own budgets. It is possible to change the situation by adopting and enacting legislation that prevents multinational corporations from hiding from taxation, but practice shows that corporations are coming to the protection of ISDS again. A striking example is the situation in India through tax changes, which resulted in the British company Cairn Energy filing a claim for compensation of $ 5.6 billion on June 28, 2016 (Morse, 2018).

Ever since the mid-1970s, work has been done at the level of the United Nations Economic and Social Council to regulate the activities of transnational corporations. Thus, from 1977 to 1992, the Commission on Transnational Corporations actively worked to develop a Code of Conduct for Corporations that would address all the issues at stake, but due to the wide divergence of views between corporations and host countries, it remained at the level of recommendations. At the same time, the role of transnational corporations has increased so much that at the UNCTAD level at the UN there are calls for the involvement of transnational companies in decision-making on international economic law. However, in recent years, the attention of various countries has been turning to regulate the legal aspects of the behaviour of transnational companies in the world markets, which allows us to hope that this time consent will be found (Moghaddam et al., 2012).

4. Ecology. The practice of some transnational corporations has been monitoring the activities of affiliates in host countries related to the aggressive use of natural resources. For example, Oceana Gold, a Canadian-Australian company, mined gold in El Salvador with major environmental violations, which triggered major public outcry and, ultimately, a legislative ban on mining in that country.

A more striking and global example is the pollution of the oceans, with 90% of all dirt floating on its surface being 350 million tonnes of plastic. Measures and research conducted by Greenpeace, along with other environmental organisations in 2016-2017, revealed that the main sources of this dirt were plastic packaging from Coca-Cola, PepsiCo and Nestle (Greenpeace, 2018).

Greenwash is a global phenomenon today, a strategy of multinationals aimed at positioning themselves as eco-oriented companies in order to hide the negative impact of their activities on the environment. To this end, advertising companies are being developed, and some transnational corporations are even financing environmental forums. A striking example is the practice of Coca-Cola. The concept of Greenwash was formed in the 1970s, when societies in developed countries reached a high level of environmental awareness (Werhane,

2016). Thus, the pursuit of profits pushes transnational corporations to neglect the environmental impact of their activities.

The problem is compounded by the fact that the "greening" of the consciousness of societies in different countries is at different levels. For example, in developed countries, the public, with a high level of consumer responsibility, is forcing transnational corporations to change their own approaches to technological processes to meet their demands. In developing countries, the environmental requirements of goods and technological processes are much lower than in developed countries. This is due to the fact that these countries are deliberately neglecting environmental requirements in order to obtain the fastest economic effects (Tomohara et al., 2011).

However, there is also a positive trend in this regard, as some transnational corporations have recently made high environmental demands on raw material suppliers, most notably in the food industry. This phenomenon is associated with increased price competition and the importance of social policy for companies (Mataloni, 2014).

Development prospects. Active changes in development priorities and competitiveness factors in the post-industrial globalised world transnational corporations are increasingly paying attention to innovation. It is no wonder that technology corporations have been developing so fast lately. Thus, in the structure of expenditures on research activity in the second-most competitive economy in the world – the US 68% falls on the corporate sector, 20% – on private non-profit organisations, 12% – on public spending. In other leading countries for innovation development and the number of parent transnational corporations, the share of these companies in R&D is: Japan – 70%, Germany – 66%, France – 53%, the United Kingdom – 49% (Ushanov, 2017; Stroeva et al., 2017).

Table 5

Dynamics of changes in the income and profits of the companies with the highest market capitalisation for 2014-2018

Rank	The name of the transnational corporation	2014		2015		2016		2017		2018	
		Revenue, billion USD	Profit, billion USD	Revenue, billion USD	Profit, billion USD	Revenue, billion USD	Profit, billion USD	Revenue, billion USD	Profit, billion USD	Revenue, billion USD	Profit, billion USD
1	Amazon	74	0,27	89	-0,24	107	0,6	136	2,37	178	3,03
2	Microsoft	78	21,9	86,8	22,07	93,6	12,2	85,3	16,8	90	21,2
3	Alphabet (Google)	60	13	71,5	0,44	75	16,4	90,3	19,5	111	12,6
4	Apple	171	37	182	39,5	233	53,4	216	45,7	229	48,4
	Разом	383	72,17	429,3	61,77	508,6	82,6	527,6	84,37	608	85,23

Source: compiled by the authors (The Wall Street Journal, 2019).

Not for nothing, on January 7, 2019, the largest technology corporations in the world, that is, the most expensive brands were American technology companies. Although the largest 20 transnational corporations include only 2 of them. However, according to The Wall Street Journal, January 7, 2019, companies with the highest level of market capitalisation in the

world are transnational corporations that work in the technology industry. This rating is presented in Table 5.

This fact speaks for itself and underscores the importance and promise of high-tech developments.

As can be seen from the table, the total income of these companies in the five years increased more than 1.5 times, but their total profit over the same period increased at a slower rate – almost 1.2 times. Apple saw the highest revenue growth and Amazon revenue.

We make a forecast of their further development, using their income and earnings data for five years based on an exponential smoothing method using the following formula:

$$\hat{Y}t + 1 = k \times \dot{Y}t + (1 - k) \times \hat{Y}t, \quad (1)$$

Where: Ŷt + 1 – forecast for the next period t + 1; Yt – the values used for the forecast for the current period t (gross profit for years); k – row smoothing coefficient, 0<k<1; Ŷt – the value of the forecast for the current period t.

In addition, in the first period (year) Ŷ1 = Y1, that is, Ŷt in the first period is equal to the income in that period.

The results of the calculations for forecasting the dynamics of the development of total income of technology companies with the highest level of market capitalisation for the next 2019-2022 years are shown in Table 6.

A graphical representation of the development scenarios is shown in Figure 3.

The results of forecasting changes in the overall trend of profitability of these enterprises show optimistic indicators, even the pessimistic scenario shows steady growth that will allow to cross the border in $ 800 billion by 2022. However, no forecast is able to account for unforeseen circumstances that can dramatically change the location of forces and performance indicators of enterprises.

Table 6

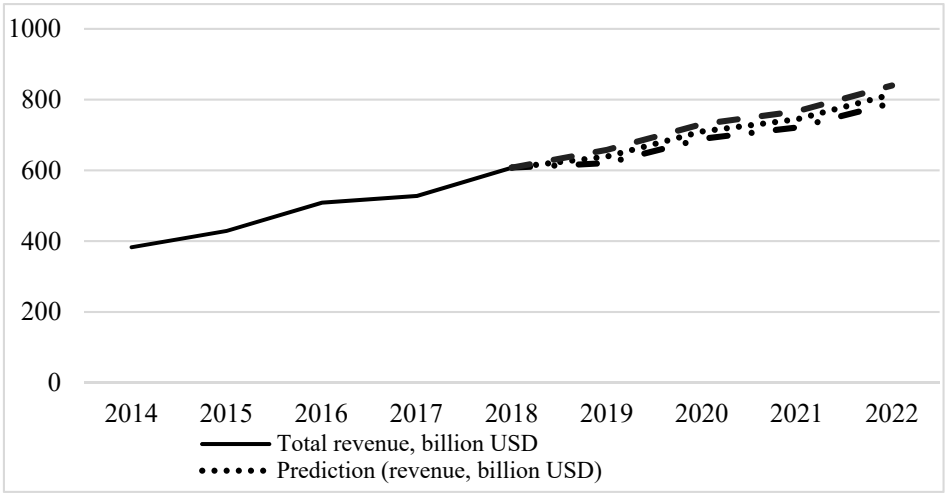
Forecast of dynamics of total income of technology companies with the highest level of market capitalisation for 2019-2022

Year	Total revenue, billion USD	Prediction (revenue, billion USD)	Lower Confidence Border (revenue, billion USD)	Upper Confidence Limit (revenue, billion USD)
2014	383,00			
2015	429,30			
2016	508,60			
2017	527,60			
2018	608,00	608,00	608,00	608,00
2019		639,4131598	620,74	658,08
2020		710,2142617	689,33	731,10
2021		744,4331863	721,52	767,34
2022		815,2342882	790,47	840,00

Source: compiled by the authors.

Figure 3

Prediction of total income of technology companies with the highest level of market capitalisation for 2019-2022, billion USD



Source: compiled by the authors

To confirm the calculations and select the more likely scenario, we will predict Apple. This choice is due to the fact that this company has the highest turnover and profit among the above, and, according to Forbes magazine, the listed transnational corporation for the 2018 results for the eighth consecutive time was the most expensive brand in the world (Forbes, 2019). Against the background of recent earnings reports for this company, a pessimistic outlook seems more likely. Yes, according to Reuters news, the Cupertino-based company plans to cut prices for its products in some non-U.S. markets by reducing revenue in the fourth quarter of 2018 by 15% over the previous year (Nellis, 2018).

On this basis, the most likely scenario for this group of companies is the pessimistic one, which still predicts a steady increase in revenues (Table 7).

Table 7

Apple's revenue dynamics prediction for 2019-2020

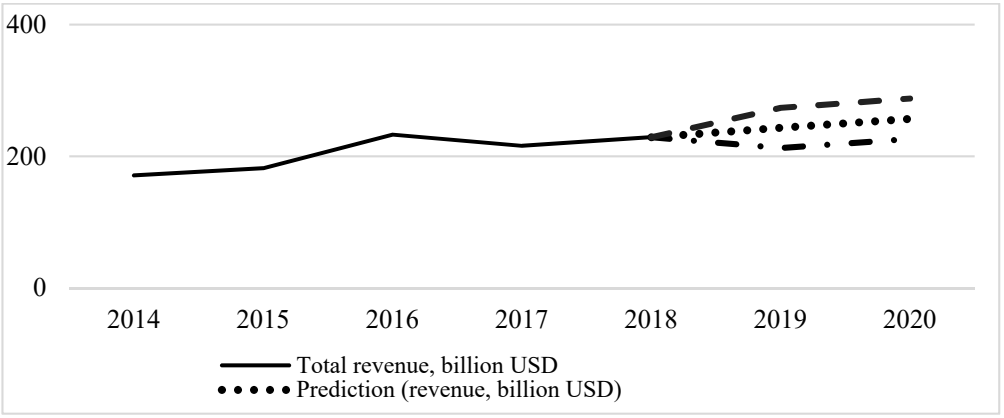
Year	Total revenue, billion USD	Prediction (revenue, billion USD)	Lower Confidence Border (revenue, billion USD)	Upper Confidence Limit (revenue, billion USD)
2014	171,00			
2015	182,00			
2016	233,00			
2017	216,00			
2018	229,00	229,00	229,00	229,00
2019		243,212624	212,69	273,74
2020		257,0302449	226,35	287,71

Source: compiled by the authors.

The figure shows that the pessimistic scenario shows the fall in Apple's revenue in 2019 to 2017 and return to 2018 in the next 2020.

Figure 4

Apple's revenue dynamics prediction for 2019-2020, $ billion



Source: compiled by the authors

Conclusions

The material presented in the article suggests that recently the development of transnational corporations has moved beyond the optimisation of production processes by expanding the geographical location and becoming a process of monopolisation of global markets with all the negative consequences.

One of the most dangerous changes to which transnational corporations are involved is institutional ones, namely the emergence of global supranational bodies and regulations that uphold the economic interests of corporations with signs of violating the sovereignty of individual countries where subsidiaries and subdivisions of these companies are located (Tokayeva, et al., 2016).

In some areas of activity, global monopolisation has reached such a level that political forces are involved in order to gain the benefits of fierce competition, that is, global politics has become an instrument of economic development for large companies. A striking example is the US decision to ban the activities of Chinese Huawei Corporation in their territories over allegations of espionage in favour of the Chinese government. Most experts are inclined to see in these actions of the US government the protection of interests of Apple, which has been losing its position recently, and its direct competitor was Huawei. There are also cases where transnationals are used as a tool of pressure in the geopolitical game.

The prediction of the development of the leading companies of the high-tech industry, which is one of the most promising areas of activity, gives optimistic hopes for their future. However, despite the large investments of transnational corporations in R&D in various fields, revolutionary changes and technological leaps do not occur, due to the fact that most

developments are carried out in the field of marketing, consumer impact and masked by cosmetic pseudo-innovations. The lack of conceptual technological breakthroughs is leading to stagnation of productive forces and deepening of the economic crisis, which is now observed in most national and global economies.

Analysing all the above, it can be argued that transnational corporations are not entities that determine the principles and strategies of the world economic order. Concentrating on achieving only commercial goals deprives transnational corporations of a broad strategic vision, which is inherent only in government entities that have ambitions for global or at least regional leadership. Such states, by supporting domestic transnational corporations and promoting their interests in the global market, consolidate their positions and create bridgeheads to achieve larger national goals. Thus, in a sense, transnational corporations act as tools in the skilful hands of politicians of great powers in promoting national interests. Such states include the United States, China, the Russian Federation, Japan, and South Korea, which are actually creating a new world economic order.

Based on the above, it can be argued that the solution of the problems mentioned in the article lies primarily in the institutional plane. This is due to the fact that the existing international regulations governing the activities of transnational corporations are declarative in nature and have no mechanisms for their implementation. That is why the global economy and the world community have an urgent task in terms of creating an effective framework of legal regulation measures, both at the national and international levels, concerning the activities of transnational corporations. The solution to this issue is the key to both ensuring the state sovereignty of each individual state and creating the conditions for the development of free competition and the promotion of scientific and technological development. To solve these problems, we suggest:

First, to promote the implementation of the Code of Conduct for Transnational Corporations within the United Nations in order to obtain Articles of Compulsory International Law.

Second, the Economic and Social Council of the United Nations should take stock of existing international legal instruments pertaining to the activities of transnational corporations and establish their accountability and compliance.

Third, competition has always been an incentive to develop, search for and innovate, so protecting global competition must be a priority in ordering international economic law.

The development of specific projects according to the outlined proposals is the task of further research that requires the involvement of international law specialists.

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ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 30 (2), 2021

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ABSOLUTE AND CONDITIONAL CONVERGENCE: A STORY ABOUT CONVERGENCE CLUBS AND DIVERGENCE IN THE EU[3]

We examine beta and sigma convergence in the European Union in 2000-2019. Our study shows that the hypotheses for both beta and sigma convergences are not rejected. While the process of convergence is occurring in the EU it is not fast enough, and it is much more concerned with convergence clubs' formation instead of community convergence. Our estimations of speed and years of convergence show that some countries, mostly from Eastern and Southern Europe, will need higher growth rates to catch up with the average level of income. Since the global economic and financial crisis of 2008 divergence process in the EU is underway and it threatens the functioning of the euro area. Facing such challenges, the EU needs an Investment Deal to carry out the fundamental idea of the Single Market and foster the process of convergence.
JEL: O47; R11; F43

Introduction

Economic convergence is a process that depends on and is determined by the macroeconomic performance of both developed and developing countries. The core of income convergence between the two country groups is economic growth that makes the cohesion processes inherently macroeconomic in their nature. However, the level of convergence is an emanation of all ongoing economic processes both at a national and regional level that reflect cyclical changes in the economy; catching-up development and labour market conditions; poverty and social inequality; efficiency of institutions, and political stability. In this vein, the observed differences in groups of the Member States of the European Union (EU) – between

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[3] *The paper is based on the second part of the project „Economic Growth and Convergence in the EU", developed within the Research Programme of the Economic Research Institute at BAS. The paper is supported also by the Bulgarian Ministry of Education and Science under the National Program for Research „Young Scientists and Postdoctoral Students". The program was approved by a Decision of the Council of Ministers of the Republic of Bulgaria № 577/17.08.2018.*

the growth rate of GDP per capita, its levels and the degree of balance/imbalance of the economy – give us reason to assess the degree of convergence in the EU in 2001-2019. The period is chosen due to specificities of macroeconomic processes in clearly distinguished stages of the economic cycle in the EU.[4]

Our study focuses on identifying the factors that have influenced the convergence to the average EU income levels by groups of countries based on an econometric assessment of beta and sigma convergence. In line with the vast body of literature, we analyse the distribution of the GDP per capita to determine if sigma convergence has occurred for the period under review. Additionally, we employ a cross-sectional regression to check for the presence of unconditional and conditional beta convergences between countries in the EU. Our results show that both beta and sigma convergences occurred, but the convergence process is much more concerned with convergence clubs' formation instead of community convergence.

Absolute and Conditional Convergence: Theories and Empirics

To lay a foundation for the current analysis, we will first give the definitions for the different types of convergence. The hypothesis for the existing of sigma (σ) convergence states that the standard deviation for some income distribution should become smaller over time. The hypothesis for the existence of beta (β) convergence implies that countries with high per-capita income in some initial period will exhibit slower future economic growth than countries with low per-capita income. The β convergence can then be expressed as an absolute convergence and conditional convergence. Absolute convergence means that the hypothesis for β convergence is not rejected without the presence of other factors that affect economic growth while conditional convergence indicates the same hypothesis is not rejected when controlling for other factors that affect economic growth.

Sigma convergence was first studied by Easterlin (1960) and Borts and Stein (1964). One of the first seminal papers that studied both conditional and absolute beta convergences was written by Robert Barro (1991). The author showed that both conditional and absolute beta convergences exist in a large sample that includes most major economies in the world. Mankiw (1992) again confirmed this result by deriving the main econometric equation from the Solow growth model and testing both hypotheses in different samples. From here on different studies and authors used the established methodology to study both σ and β convergences in different samples of countries. For example, Xavier Sala-i-Martin (1996) extends these results to the United States, Japan, and some European states. Quah (1996) also showed that convergence is observed across the United States by using a different methodology. More recent studies that explored the issue on two different types of

[4] The impact of the COVID-19 pandemic on convergence assessment cannot be substantially covered yet. The main reason for this is the economic uncertainty caused by the development and duration of the epidemic, as well as the trajectory of its effects - whether they will be symmetrical or asymmetrical in countries. The limited availability of up-to-date statistics at present also narrows the possibilities for detailed analysis. For macroeconomic implications of the fight against COVID-19, see Yotzov, Bobeva, Loukanova, Nestorov (2020) and Tsvetkov, Georgieva (2021).

convergence were conducted by Higgins (2006), Villaverde and Maza (2011), Robert Barro (2016) and Battisti (2020). An overview of the methodology and the established literature can be found in Durlauf (2005) and Rangelova (2009).

Convergence in the EU was studied as a separate sample from the beginning of this century. Barry (2003) compares the economic performance of Greece, Spain, Portugal, and Ireland to identify the processes that have promoted or inhibited real convergence prospects at various points in time. Yin and Zestos (2003) confirmed both absolute and conditional β convergence and σ convergence in the EU using different subperiods in 1960-1995. Cappelen (2003) also showed that there is a tendency towards β convergence in the EU and that structural funds had a positive effect on the long-run growth. Cuaresma (2008) studied EU-15 countries and showed that the length of EU membership has a significant positive effect on economic growth and convergence. Simonescu (2015) shows that for the period 1960-1995, there is evidence of ongoing σ and β convergences among the EU apart from the period 1980-1985. Moreover, Simonescu (2017) used a panel data approach to show that in 2003-2016 there is evidence in favour of the convergence process, but the different countries do not have the same speed of convergence towards the steady state. Cabral and Castellanos-Sosa (2019) found evidence that the process of convergence in the EU was facilitated by the institutional integration and the creation of the EU itself. Battisti (2020) showed that β convergence cannot be viewed as a convergence between countries, but as convergence towards a country' own productivity level. Haller (2020) found evidence of slow σ and β convergences in 2012-2018.

Assessment of Absolute Convergence in the EU

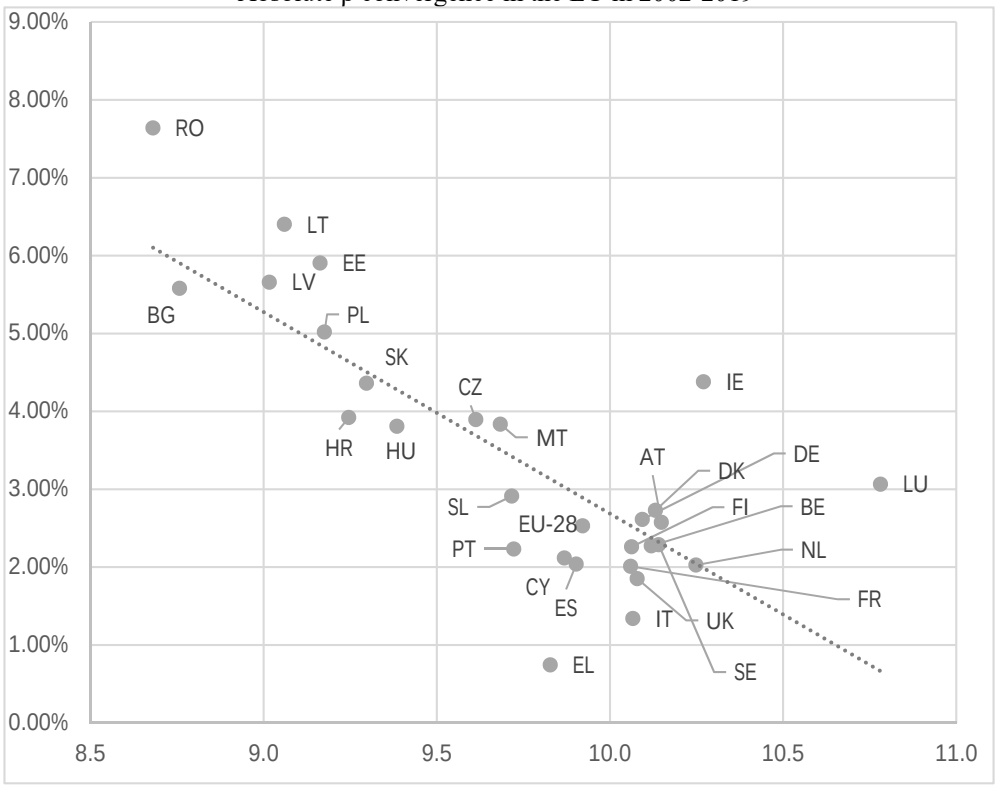
First, we study whether absolute β convergence is observed within the EU during the period under review. Following the hypothesis of absolute convergence lower-income countries should grow faster than high-income ones, i.e. to catch up with economic development, leading to convergence with the average income levels for a certain group of countries. To test the validity of this hypothesis for the EU we graphically represent the relation between economic growth between 2002 and 2019 on the ordinate and the logarithmic value of GDP in the initial period – 2002 on the abscissa (Figure 1). The established correlation coefficient is negative -0.78 and shows faster growth of low-income economies: the lower the level of income in the initial year, the higher the economic growth rates.

Graphically shown the absolute β convergence implies that Romania is the EU Member State that makes the strongest leap in its economic development, allowing it to move closer to the Baltic States as regards convergence that managed to quickly overcome the financial turmoil after 2008. The decisive measures taken in Romania to increase the average income in all age groups are yielding results in terms of accelerated catching up with the average European levels, as in 2020 Romania is already ranked by the World Bank as a high-income economy. In 2001 Romania was at the same level of GDP per capita as Bulgaria, but by 2019 the Romanian economy significantly surpasses the Bulgarian one, reaching the level of Latvia and ahead of Greece. In terms of economic growth in 2002-2019 Bulgaria (5.58%) ranks after Romania (7.64%), Lithuania (6.40%), Estonia (5.91%) and Latvia (5.66%). The three Baltic states are among the countries most affected by the global financial and economic

crisis of 2007-2008. This is especially true for Latvia, whose GDP has shrunk by 25% because of the crisis. The Baltic states are also interesting case due to the often highlighted similarities with Bulgaria, but the achieved results are markedly different: the GDP per capita in Lithuania increases by 42 p.p. compared to the EU-28 average for 19 years; Romania and Estonia recorded an increase of 40 p.p. in the period under review, while in Latvia the GDP per capita is higher with 31 p.p.

Figure 1

Absolute β convergence in the EU in 2002-2019



Source: Authors' calculations based on Eurostat data

The other group of countries that can be identified are the Member States with a lagging convergence rate below 2 p.p. on average during 2001-2019. These countries include Poland, Slovakia, Bulgaria, Czechia, Hungary, Croatia, and Slovenia. All these countries have gone through a transition to a market economy and although their absolute GDP per capita varies, their convergence rates are relatively similar. An exception here is Slovenia where the GDP increased by 7 p.p. over the period under review while in Poland, Bulgaria, Slovakia, Czechia, Hungary, and Croatia the change varied between 26 and 17 p.p.

On the other hand, the Member States that are in the group of high-income economies, fully in line with the hypothesis of absolute convergence, recorded significantly lower economic

growth rates during the period: Austria (2.58%), Germany (2.61%), Denmark (2.73%), and Luxembourg (3.07%). Austria, Denmark, and Germany have consistently recorded GDP per capita around the EU average over a 19-year period, which shows the economic stability they have achieved at various stages of the economic cycle. However, this cannot be said for Ireland, whose economic growth between 2002 and 2019 is 4.38% and illustrates the cyclical fluctuations that the country goes through during the global financial and economic crisis. In this way, we can distinguish Luxembourg, Ireland, Austria, and Germany as euro area Member States that are steadily increasing and maintaining their high economic level in the European Monetary Union.

The EU Member States that are steadily moving away from the average European levels of GDP per capita are Italy, Greece, Cyprus, Spain, and Portugal. These countries are the hardest hit by the euro area debt crisis, which clearly emphasises that the global financial and economic crisis had the most serious impact on the euro area, causing divergence. In this vein, Italy is particularly impressive. In 2001 Italy was ahead of the GDP per capita as compared with France and the United Kingdom while by 2019 the Italian GDP per capita decreased by 24 p.p. and amounts to 94% of the EU-28 average, on a par with the Czech Republic. Meanwhile, Greece (0.74%), Italy (1.34%) and the United Kingdom (1.85%) are the countries with the lowest economic growth in the long run across the EU. This process reiterates the strong cyclical effect of the global crisis on the economies under review, threatening them to become structurally incapable of catching up with previous levels of well-being.

The conclusions drawn can be illustrated by tracking the dynamics of economic growth in the long run for the period under review, as well as the assessment of the years assumed to reach a certain average income.

The economic growth calculations between two periods are made using the following formula:

$$economic\ growth = \frac{lnrealGDP_{t_1} - lnrealGDP_{t_0}}{n} \quad (1)$$

where the period t_1 is the final year we use – 2019, and t_0 is the initial year 2002 with a length of the time interval $n = t_1 - t_0$.

To estimate the years one country will reach the average EU income level we use the following formula:

$$years\ of\ convergence = \frac{100 - y^i_{t_1}}{\sqrt[n]{\frac{y^i_{t_1}}{y^i_{t_0}}} * 100 - 100} \quad (2)$$

where:

100 is the average European income level;

$y^i_{t_1}$ is the value of GDP per capita in country i in period t_1;

the denominator shows the average annual rate of change of GDP per capita in country *i* between two periods, respectively t_1 and t_0.

The data on economic growth by country shows the relation between growth and convergence (Figure 2). The economies of the Member States that are growing fastest and approaching the average European income levels are Romania and the three Baltic countries, while the countries that were most affected by the 2008 crisis – Italy, Greece, Cyprus, Spain, and Portugal – registered lower rates of economic growth and showed divergence processes.

Figure 2

Economic growth between 2002 and 2019 (%)

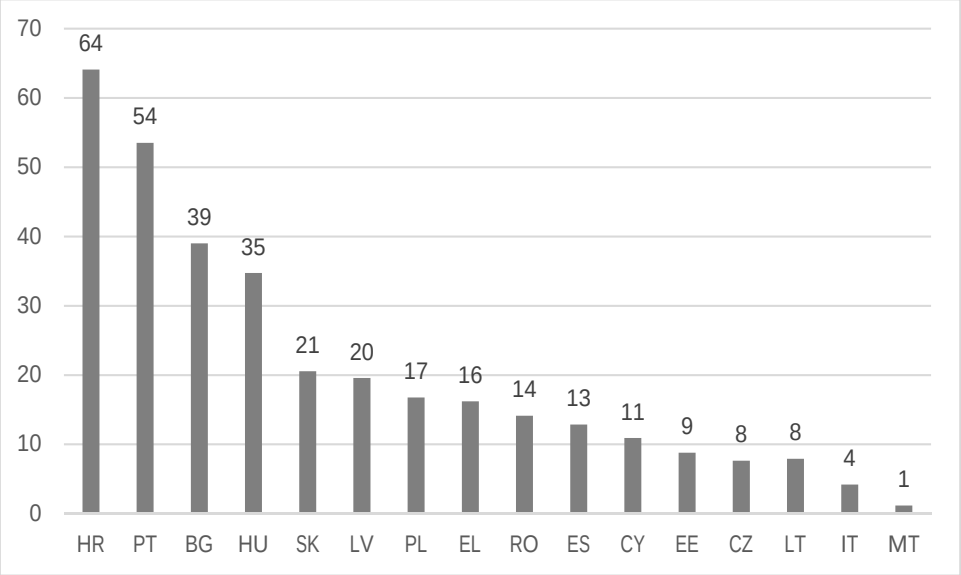
Source: Eurostat.

However, Bulgaria is an exception in this process. Although the country registers relatively high economic growth in the long run, the pace of convergence with the average European income level remains relatively low – 1.2%. Thus, Bulgaria remains the lowest-income country in the EU with real GDP per capita of 48% of the EU average in 2019. At these rates of catching-up, it will take 39 years Bulgaria to reach the average EU income level other things being equal. Only Croatia (64 years) and Portugal (54 years) are ahead of Bulgaria while their economies were more hardly hit by the global financial and economic crisis than Bulgarian one (Figure 3). Two factors have a serious impact on Croatia – the real integration within the EU began 6 years after Bulgaria because Croatia joined the EU in 2013 and the country experienced a 5-year recession that leads to a slower pace of convergence – 0.6% per year to the average EU level. Apart from the fiscal and financial problems in the country because of the crisis, Portugal has consistently lagged in the convergence process and for the whole period 2002-2019 the convergence rate is negative (-0.4% per year). This is due to the structure of the Portuguese economy, where tourism has a leading position and makes it cyclically vulnerable. The strong competition from Eastern European countries and China against which the level of wages in Portugal remains higher consequently leads to a reorientation of production and foreign investments. These factors also partly explain the low

rate of convergence in Hungary. We estimate Hungary will need 35 years to reach the average European level of real GDP per capita at an average convergence rate of 0.8% per year.

Figure 3

Number of years to reach the average European level of GDP per capita at the pace of convergence estimated in 2002-2019



Source: Authors' calculations based on Eurostat data.

Two groups of countries should be exclusively highlighted in our study. In the first place, these are Romania and the Baltic States with intensified convergence to the average European income levels. It seems that Lithuania will achieve the average EU level of income within 8 years following the currently reported convergence rate of 2.3% per year; 9 years for Estonia at a convergence rate of 1.9% per year in 2002-2019; 14 years for Romania with a convergence rate of 2.2% per year, and 20 years for Latvia with 1.6% convergence per year. Therefore, accelerated economic growth in these countries, despite cyclical fluctuations, leads to a faster pace of income convergence at EU level and to sustainable convergence process. The other group of countries – Italy, Greece, Spain, and Cyprus – show the most serious signs of divergence. However, the already achieved higher level of income even with signs of divergence between -1% and -2% per year allows these countries maintain relatively close income levels around the Central European ones (except Greece). It also justifies the consideration of convergence in two points of view – absolutely in terms of achieved levels of GDP per capita and relatively as regards the convergence rate to a certain average level of GDP per capita.

Our estimation of years a country to reach the average European income level differs from the speed of convergence. The speed of convergence is assessed econometrically based on the following relation:

$$\frac{\Delta Y_t}{Y_t} = \beta \frac{\overline{Y_t} - Y_t}{\overline{Y_t}} \quad (3)$$

where:

$\frac{\Delta Y_t}{Y_t}$ is the economic growth for period t;

$\frac{\overline{Y_t} - Y_t}{\overline{Y_t}}$ is the difference between the GDP when the steady state of the economy is achieved and the value of the GDP in period t;

β is the speed of convergence.

In econometric form, the speed of convergence (β) is estimated following the relation between the average economic growth by a country in 2000-2019 (γ) and the logarithmic value of real GDP for 2000 (Y). The results are presented on Table 1.

Table 1

Absolute convergence in the EU-28 for the period 2000-2019

Dependent variable – long run economic growth for the period 2000-2019				
	Coefficient	Std. error*	t-statistic	p-value
Intercept	16.40	1.75	9.39	0.000
$\ln Y_{t_0,i}$	-1.49	0.18	-8.12	0.000
$Adj.R^2$	0.69			
F-statistic	61.45			
p-value	0.000			

**White heteroskedasticity-consistent standard errors*

We correct the heteroskedasticity by the White heteroskedasticity-consistent standard errors and covariance.

For the EU, the speed of convergence amounts to 1.49% per year with the negative sign in the regression equation illustrating the absolute convergence hypothesis. This result is lower than the widely known coefficient of 2% in the literature (Barro, Sala-i-Martin, 1992). However, it corresponds to more recent studies where the speed of convergence varies between 1% (Fernandez, Ley, Steel, 2001) and 1.3% (Doppelhofer, Miller, Sala-i-Martin, 2004). The estimated speed of convergence in the EU of 1.49% per year reflects cyclical fluctuations and divergence processes, especially in some countries of the so-called core of the euro area. Moreover, it points out the already achieved high average European income levels that lead to a slowdown in growth rates and approaching to the steady state. If we apply the dependence that if a variable increases by X% per year, its doubling will take 70/X years, it follows that it will take 47 years to eliminate 50% of the income disparities by Member State. This result supports *the view of "Europe at several speeds" or more precisely of "Europe of convergence clubs" that demonstrates the insufficient focus of the EU economic governance framework and priorities on cohesion and economic integration*.

Assessment of Conditional Convergence among EU Member States

The results achieved in terms of absolute convergence draw attention to the impact of specific factors causing the observed processes. In the economic literature, such an analysis implies an assessment of conditional β convergence. One of the main methods for studying conditional convergence is the static one which seeks to answer the question how certain economic variables affect economic growth in the long run, and hence have an impact on speed and state of convergence. The standard equation in econometric form has the following form (Durlauf, Johnson, Temple, 2005):

$$\gamma_i = \alpha + \beta_1 lnY_{t_0,i} + \beta_2 lns_i + \beta_3 lnSOLOW_i + \boldsymbol{\varphi X} + u_i \quad (5)$$

where:

γ_i is the long-term economic growth based on equation (1);

$lnY_{t_0,i}$ is the logarithm of GDP in the initial period of our study for country *i*;

lns_i is the logarithm of long-run savings rate in country *i*, which is calculated by the average share of gross capital formation at the constant price GDP;

$lnSOLOW_i$ is the so-called the Solow variable, which is the sum of population growth in country *i*, technological growth and the rate of depreciation of fixed capital. The last two are generally assumed to be 5% (Mankiw, Romer&Weil, 1992);

X is a vector that reflects all other variables that may be added to the conditional convergence equation.

We employ the standard cross-sectional growth regression estimated with ordinary least squares (OLS) knowing its limitations. We believe that while the panel variation of the growth regression will solve the problem of potential endogeneity, it will estimate a misleading coefficient of convergence due to the way average growth rates between two years are constructed. Because of the nature of panel data models, the period under review will need to be divided into multiple subperiods. Then the closer to each other the two years are, the shorter the periods for which the average growth rate will need to be calculated is. This means that if the two years are one after another, the average growth rate will be calculated for one year. Then it is only natural to assume that there will be a very strong relation between the GDP per capita in a year and the growth rate associated with the following period. However, we don't believe that this relationship can be interpreted as a (or the lack of) beta convergence due to the reason that we will be looking at a short run (or in the best-case a medium run) dynamics.

In the process of selecting economic variables when assessing the equation (5) the statistical significance of various variables was tested:

- *openness of the economy* – intra-EU trade and foreign direct investments[5] in order to capture the effect of functioning of the Single Market in the EU as a convergence tool following the official EU doctrine;
- *structure of budget revenues and expenditures, and government debt* – the role of government in stabilising but also hindering the sustainable convergence;
- *social factors* stemming from the new dimensions of Europe's economic convergence processes in line with the EU's Annual Sustainable Growth Strategy – education; energy intensity of the economy; poverty and income inequality; migration; technology and innovation; efficiency of institutions[6], and corruption.

We find statistical significance for the following variables within the vector X:

- openness of the economy calculated as a share of foreign trade balance in GDP ($lnopenness$);
- government debt as a share of GDP ($lngdebt$);
- percentage of population age 15-19 with tertiary schooling (edu) which allows us to consider the impact of human capital on economic growth following the endogenous growth theory.

Although migration proved to be statistically insignificant, in our assessment its effect is indirectly captured by the long-run population growth, a part of the Solow variable. The impact of technology and innovation is visible through two other variables – the long-run savings rate and the proxy for human capital we use. The effect of labour productivity, which is an important indicator when assessing real economic convergence, is indirectly considered through total factor productivity (TFP) despite all the limitations of this indicator (Rangelova, 2008). Based on research by William Easterly and Ross Levine (Easterly, Levine, 2001) about 60% of the increase in labour productivity is due to improvements in TFP.

Following the abovementioned assumptions, we econometrically estimate the following equation:

$$\gamma_i = \alpha + \beta_1 lnY_{t_0,i} + \beta_2 lns_i + \beta_3 lnSOLOW_i + \beta_4 lnopenness_i + \beta_5 lngdebt_i + \beta_6 edu_i + u_i \quad (6)$$

Using data in 2000-2019 for all 28 EU Member States we obtain the results shown on Table 2.

[5] Aspects of geographic sustainability and geographic concentration of international trade also matter as shown by Nestorov (2019).

[6] The economic and social risks of institutional instability in different aspects are studied by Shalamanov (2018).

Table 2

Conditional convergence in the EU-28 for the period 2000-2019

Dependent variable – long run economic growth for the period 2000-2019					
	Coefficient	Std. error*	t-statistic	p-value	VIF
Intercept	17.04	4.48	3.80	0.001	-
$\ln Y_{t_0,i}$	-1.25	0.21	-5.93	0.000	3.62
lns_i	0.14	0.94	0.15	0.885	1.99
$lnSOLOW_i$	-2.65	1.70	-1.56	0.134	7.88
$lnopenness_i$	0.64	0.25	2.55	0.019	2.15
$lngdebt_i$	-0.54	0.14	-3.93	0.001	1.38
edu_i	0.86	0.30	2.92	0.008	2.13
$Adj.R^2$	0.85				
F-statistic	27.49				
p-value	0.000				

**White heteroskedasticity-consistent standard errors*

We find that four variables have an impact on long-run economic growth as follows:

- initial value of GDP whose change by 1% leads to 0.0125 p.p. higher economic growth, and respectively affects the degree of convergence;
- openness of the economy – 1% increase in the trade openness resulted in 0.00637 p.p. higher economic growth in the long run;
- government debt – its increase with 1% has a negative effect of 0.0054 p.p. on the long-run economic growth;
- the impact of human capital – when the percentage of the population age 15-19 with tertiary schooling increases with 1 p.p. the estimated effect on long-run growth is 0.86 p.p. The estimated significant effect of this indicator stems from its specificities – for the EU 1% share of the population age 15-19 with tertiary schooling is reported only in Ireland (2.15% as of 2005), Croatia (1.81% as of 2010), and Slovakia (1.68% as of 2010). Given these data, the increase in the young population with professional skills by 1 p.p. will be a significant step forward for the EU so it is not surprising that it would also have a significant effect on economic growth.

The four factors identified are among the most important for economic development in general. They also emphasise the structural problems not only of the convergent process itself, but also of the functioning of the EU – we find that the long-run savings rate and the Solow variable, which includes technological progress, are not statistically significant. Having in mind all the restrictions of our study, this result shows *a lack of long-run potential for economic development in the EU and a permanent loss of competitiveness under the transition to the Industry 4.0 and digital transformation of economic processes*. From this point of view, the Investment Plan for Europe or the so-called the Juncker Plan should be seen not only as a strategy for tackling the cyclical fluctuations in the European economy after the global economic and financial crisis in 2008 but also as a foundation of the EU's long-run economic strategy. Unfortunately, currently the Investment Plan for Europe has

limited results and the priority focus on green policies is an additional constraint on accelerating economic growth, especially for catching-up economies.

Higher energy efficiency would create more jobs and increased competitiveness in developed Western EU countries such as Finland, France, the Netherlands, Spain, and Sweden (Wijkman, Skånberg, 2016). However, for countries like Bulgaria and Poland fossil fuels replacement with biofuels would lead to a significant change in the energy mix, the shutdown of coal-fired power plants and increased costs for electricity. In 2018, the slowdown in economic growth in Germany was due to the restrictions on some diesel vehicles in certain districts of the country and the new carbon emissions standards to be met by the automotive industry. These processes gave some experts reason to talk about signals of recession in the euro area, and hence – inevitably a slowdown in highly dependent economies through international trade and financial flows such as the Bulgarian one. These examples illustrate that *the EU does not see convergence as a starting point for economic policy and is much more focused on fostering convergence clubs with a focus on high-income Member States. In other words, instead of a Green Deal, the EU needs an Investment Deal to carry out the fundamental idea of the Single Market.*[7]

The other two variables that our econometric assessment identifies as significant for economic convergence are government debt and percentage of the population age 15-19 with tertiary schooling. The negative effect of government indebtedness was at the heart of the so-called vicious circle that implies the interplay between the euro area's financial and sovereign debt crises.[8] This negative effect should not be exaggerated, although it creates significant fiscal imbalances that require monitoring of debt dynamics (Ignatov, 2020). In 2010 the budget deficit in Ireland was -32% of GDP due to bank bailouts. However, in 2015 Ireland experienced 25.2% economic growth and succeeded in doubling its GDP per capita in 2001-2019. The "Irish Miracle" is also seen in the variable we use to assess the impact of human capital since Ireland is the only EU Member State that has sustainably maintained a share of over 2% of the population age 15-19 with tertiary schooling since 2000. All these prerequisites support the functioning of the real economy that can tackle any cyclical fluctuations and demonstrate that the negative effects of financial instability can have a limited long-run impact, which is not the case in France and the Netherlands, for example. Croatia has also been steadily increasing the population age 15-19 with tertiary schooling, but clear results have been still missing – Croatia is among the lowest income convergence club in the EU and has been in recession for 5 years in a row. In the field of economic policy, these examples are important because they broaden *the debate on the effectiveness of government over-indebtedness and draw attention to tertiary education among young people as a tool for building a functioning real economy that seems to be a powerful convergent tool, including in terms of structural policy.*[9]

[7] The smooth functioning of the Single Market that foster convergence process within the EU have different aspects, including in the field of Common Agricultural Policy. See Beluhova-Uzunova, Hristov, Shishkova, 2020.

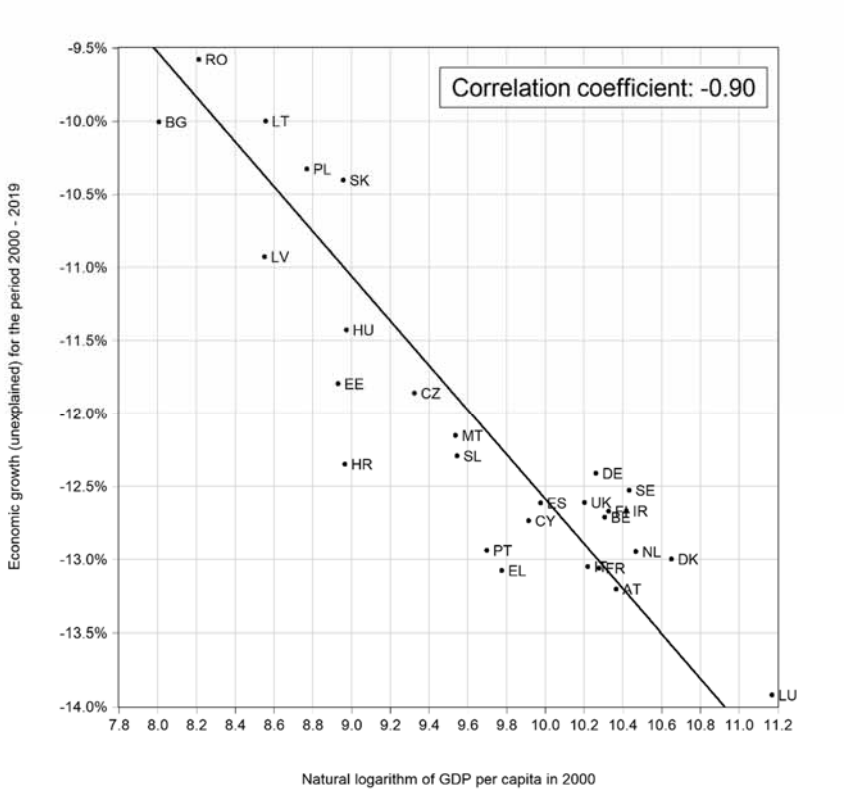
[8] The behavioral finance perspective on debt issues in public and corporate sector are studied by Nedev (2019).

[9] The importance of structural reforms in sustainable economic development model are studied by Petranov (2016).

Graphically, the level of conditional β convergence can be represented by subtracting all the estimated parameters in equation (7) except the initial value of GDP from the economic growth in 2002-2019 (Figure 4). Subsequently, a partial correlation between the residual (unexplained by the other factors) economic growth and the initial value of GDP is calculated. The strongly negative correlation (-0.9) illustrates the hypothesis of convergence that countries with higher GDP grew at lower rates other things being equal. The variance of the residual economic growth between 9.5 and 14% shows that about 4.5% of the economic growth is explained by the variables included in equation (6). A similar result – approximately 5% – was obtained by Robert Barro (1991) in a study of 98 countries using data between 1960 and 1985.

Figure 4

Conditional β-convergence in the EU in the period 2002-2019



Source: Authors' calculations based on Eurostat data.

Having considered the presence of absolute and conditional β convergence, next we estimate the σ convergence which is a necessary condition for β convergence. In essence, σ convergence reflects the trend of convergence or divergence in each sample of countries.

As the β convergence hypothesis states to reduce these differences (i.e. convergence of per capita income) relatively lower-income countries should grow faster than higher-income countries. The term σ convergence derives from the variance and is calculated by the following formula:

$$\sigma^2 = \frac{1}{n}\sum_{i=1}^{n}(y_i - \bar{y})^2 \quad (8)$$

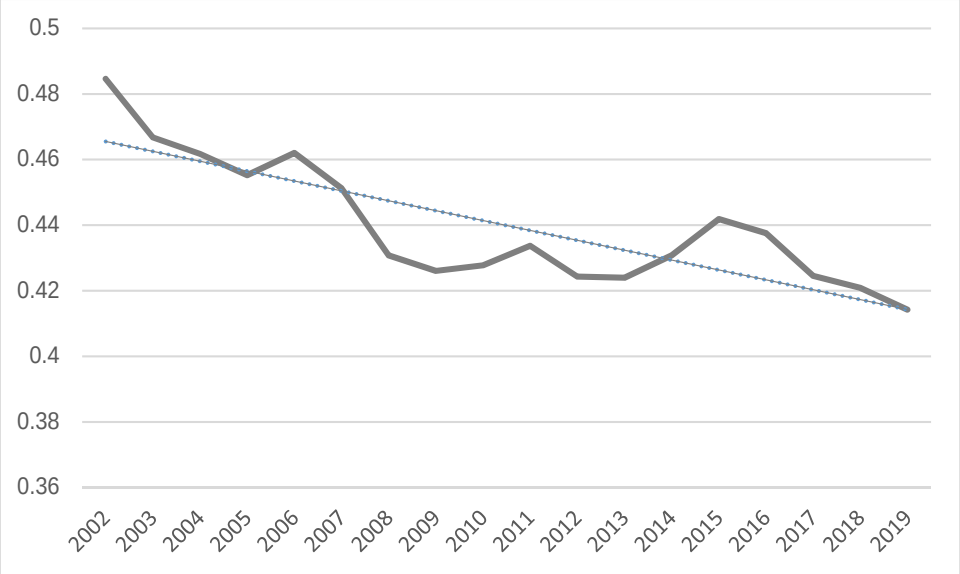
where y_i is a level of income in country *i*, and $\bar{y}$ is the arithmetic mean of income against which the degree of convergence is estimated and amounts to:

$$\bar{y} = \frac{1}{n}\sum_{i=1}^{n} y_i \quad (9)$$

In this study we use the coefficient of dispersion to describe σ convergence calculated for each time period:

Figure 5

Sigma convergence in the EU in the period 2002-2019



Source: Authors' calculations based on Eurostat data.

$$D_t = \frac{{\sigma_t}^2}{\bar{y_t}} \quad (10)$$

The results show that the coefficient of dispersion decreases on average by 0.92% annually and there is a strictly negative relation as postulated by the theory. However, between 2002 and 2008 the narrowing of the income gap, i.e. convergence, is much stronger (the coefficient of dispersion decreased by 1.68%) while in 2009-2016 this process slowed down, and the coefficient of dispersion changed by 0.52%. Since 2017 a sharper decline in coefficient of dispersion and a return to convergence processes began to be observed again. This data show

the divergence in the EU since the global economic and financial crisis of 2008 and outline the dependence of convergence processes on the stage of the economic cycle – *when economies grow the convergence processes are much stronger while under economic shocks the convergence slows down and the high-income countries even show divergence trends*. Divergence can be described as a process of income convergence but to a lower income level which in the context of club convergence is well observed for the Southern EU Member States – Italy, Greece, Cyprus, Spain, and Portugal. As we have already noted, in 2000-2019 Italian economy registered 24 p.p. decrease of GDP per capita relative to the EU average. Since 2010 Spain experienced 9 p.p. lower GDP per capita due to the serious financial problems in the country and the huge budget deficit. Cyprus was ahead of the average EU GDP per capita in 2005-2010. However, the strong cyclical dependence of the country's economy given its service-oriented profile and the transfer of financial flows caused a serious signal of economic divergence between 2015 and 2017. Greece and Portugal registered an increasing divergence with the average EU GDP per capita since 2010 due to the debt crisis in the euro area, which originally started from them. Thus, the assessment of σ convergence confirms the cyclical conditionality and dependence of the convergence processes in the EU.

Conclusion

The convergence processes within the EU are developing steadily but at a club level. Some EU Member States such as Romania and the Baltic States show a steady trend towards speed up convergence with average European income levels while others – Bulgaria and Croatia – lag significantly behind. Nevertheless, absolute β convergence is observed in the EU, which is indicative of faster growth of low-income economies. For Bulgaria, however, this growth is not sufficient, and the country continues to be the lowest income EU Member State. At this pace of catching up, Bulgaria will need 39 years to reach the average level of income in the EU other things being equal. Croatia (64 years old) and Portugal (54 years old) are ahead of Bulgaria due to the stronger effect of the global financial and economic crisis of 2008 on their economies. The econometric analysis we employed for the period 2000-2019 shows that the conditional β convergence in the EU is determined not only by the expected factors such as savings rate, technological growth, population growth but also by the openness of the economy, government indebtedness, and the percentage of the population age 15-19 with tertiary schooling.

It seems that the EU does not have a clearly defined strategy for promoting convergence processes and the EU economic governance is much more focused on fostering convergence clubs with a focus on the high-income Member States. Instead of a Green Deal, the EU needs an Investment Deal to build a long-run investment potential in the digital era. The sustainability of convergence processes would be achieved through the effective use of government debt and the development of vocational education, which facilitate the building of a functioning real economy that can be a strong convergence tool as the Irish experience shows. This is a way the deepening of divergence processes in the EU be overcome and the trend of convergence clubs' formation instead of community convergence to be reversed.

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ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 30 (2), 2021

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THE INFORMAL EMPLOYMENT – FACTORS AND PUBLIC POLICIES FOR ITS LIMITATION

The purpose of this study is to outline the perspective public policies to limit informal employment. They are based on a study of its influential factors through The Doing Business international rating in the European Union and the EU candidate countries. For the group of "old" European countries, the priority measures are to improve the contracting procedures it terms of their numbers and time-consuming. For the group of new EU members, such measures are the reductions of the number of procedures to obtain electricity. For EU candidate countries, key steps to improve the regulation of informal employment include the raising legal awareness, reducing specific types of taxes and fees and increasing credit opportunities for business and people.
JEL: E26; E69; J21; J68

Introduction

Regulation of the European labour market is not rigid since each country's government implements its own employment programs and models and has responsibility for it. But in accordance with the yearly Employment Guidelines for the employment policies of the Member States has presented common priorities and targets for the national employment policies, in particular to increasing the employment rate, creating more job opportunities, reducing labour market disparities, supporting training, skills development, and

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entrepreneurship, fighting undeclared work and fostering the transition towards open-ended forms of employment, etc. (EC, 2018). The guidelines were first adopted together ('integrated package') in 2010, underpinning the Europe 2020 strategy. The integrated guidelines remained stable until 2014. Revised integrated guidelines were adopted in 2015. In 2018 the employment guidelines were aligned with the principles of the European Pillar of Social Rights proclaimed in November 2017 by the European Parliament, the Council and the Commission, with a view to drive reforms at a national level and to serve as a compass for a renewed process of convergence across Europe and remained unchanged in 2019 (EC, 2020a; EC, 2020b). Of course, European countries are characterized by different employment problems that need to be addressed. Western European countries traditionally have a higher employment rate and a higher level of labour market infrastructure development. In turn, Central European countries have a fairly balanced and competitive labour market. The countries of Eastern Europe, mainly post-socialist countries, have a lower employment rate, relatively weak institutional development of national labour markets, and a significant "shadowing" of social and labour relations. This issue is also relevant for Ukraine, as the informal employment is quite significant in this country. In addition to the positive changes in the employment area in all European countries, there is such a negative phenomenon as the informal employment, which leads to deterioration of the qualitative characteristics of the economically active population, negates the potential benefits from the implementation of national and regional programs and is a threat to economic and social safety.

The shift in the focus of researchers to the area of informal employment in the economy happened in the process of rethinking of its activities. These investigations by management scholars have been not only because of the significant impact of informal firms on the overall world economy, but also because of the dominant role informal firms play in the economy of many individual nations (Bruton et al., 2012, p. 2). Thai and Turkina have emphasized that 'Understanding the determinants of formal and informal entrepreneurship can be beneficial for managers. Both formal firm and informal firms compete in the market. Since informal firms operate outside the regulatory system, their competition dynamics can be different from formal firms and their activities are not easily traceable. Moreover, a company's supply chain may be made up of both formal firms and informal firms' (Thai et al., 2014, pp. 491-492). Martha Alter Chen has justified definition, "The informal economy is comprised of all forms of 'informal employment' – that is, employment without labour or social protection – both inside and outside informal enterprises, including both self-employment in small unregistered enterprises and wage employment in unprotected jobs" (Chen, 2007).

There is no common terminology in the scientific world to describe the phenomenon of informal employment. Scholars and governments from different countries use different terms to describe informal employment, and there are situations where the same terms have different meanings.

According to the Recommendation of ILO the term "Informal economy" refers to all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements; and does not cover illicit activities, in particular the provision of services or the production, sale, possession or use of goods forbidden by law, including the illicit production and trafficking of drugs, the illicit manufacturing of and trafficking in firearms, trafficking in persons, and money laundering,

as defined in the relevant international treaties" (ILO, 2015). ILO considers undeclared labour in the context of a broader concept of the informal economy. In 1998, the European Commission introduced the following concept: 'Undeclared work is therefore defined here as any paid activities that are lawful as regards their nature but not declared to the public authorities, taking into account differences in the regulatory system of Member States' (EC, 1998; EC, 2007). However, the ILO classification of the informal economy does not cover all types of undeclared employment in the EU. Therefore, a more precise definition of the components of undeclared activities may differ in each country, taking into account the particularities of the law. However, in practice, the meaning of "undeclared labour" in developed countries is mostly the same. Informal employment comprises the total number of informal jobs whether carried out in the formal sector enterprises, informal sector enterprises, or households, during a given reference period. According to documents of the International Labour Organization, 'Informal employment includes the following types of jobs:

- own-account workers employed in their own informal sector enterprises;
- employers employed in their own informal sector enterprises;
- contributing family workers, irrespective of whether they work in formal or informal sector enterprises;
- members of informal producers' cooperatives;
- employees holding informal jobs in formal sector enterprises, informal sector enterprises, or as paid domestic workers employed by households;
- own-account workers engaged in the production of goods exclusively for own final use by their household' (ILO, 2003).

Consequently, the main sign of informal employment is the fact of unregistered employment relationships in the government agencies or non-compliance with legal requirements for the formulation of employment contracts. Therefore, in this research, we used the concept of informal employment (ILO documents), which covers undeclared workers and employees not covered by labour law.

1. Literature Review on Factors That Affect Informal Employment

The research of the factors that affect informal employment is a difficult task, as a significant number of factors may be not included in official statistics or be immeasurable.

Elbahnasawy N. G., Ellis M. A. and Adom A. A. have investigated the political environment that causes governments to choose policies that allow the informal economy to develop. The authors have argued that the political environment affects the government's incentive to invest in the efficiency of tax collection, and therefore the ability of the government to detect informal production. The results of the research have suggested that efforts to reduce informal production should shift from an emphasis on the proximate causes to political reforms. However, the results have implied that democratic reforms that change the authority pattern

from autocracy to democracy can increase informal economic activity if it increases political instability (Elbahnasawy, et al., 2016, p. 37).

Dibyendu M. and Chandril B. have shown that a democratic government prefers to weaken the enforcement level a bit to keep taxation, provides the level of security of property rights, the integrity of contracts and checks of corruptions can be chosen by a state to regulate informal employment in the economic system. (Dibyendu et al., 2020, p. 266).

B. D. Mathias, Sean Lux, T. Russell Crook, Autry C. and Zaretzki R. have leveraged 13,670 responses from entrepreneurs distributed across 59 countries and provided evidence that two constraining institutions, economic and financial regulations lead to more obstacles presented by informal activity (Mathias et al., 2015, p. 253).

Igudia E., Ackrill R., Coleman S. and Dobson C. have found the factors responsible for the origin and expansion of the Nigerian informal economy to include: unemployment, a need to be autonomous/self-employed, corruption of government officials/agencies, participants' desire to pay less tax, and participants' need to survive (Igudia et al., 2016, p. 175).

Researchers have argued that firms choose to be informal or formal partly driven by industry conditions. Based on a large data set of Brazilian businesses, they gave found that firm informality is positively associated with dynamism, yet negatively associated with munificence and concentration (Siqueira et al., 2016, p. 179).

Horvath J. has recognized the importance of a large informal economy and interest rate fluctuations for business cycles in emerging countries and documented a positive relationship between the relative volatility of consumption to output and the size of the informal economy, and countercyclical interest rates in emerging countries (Horvath, 2018, p. 110).

Some researchers have tended to view informality as a forced decision of entrepreneurs by the lack of formal economy employment opportunities (Perry et al., 2007), or by the distrust of the government policy and of various macroeconomic institutions (Maloney, 2004; Rosser et al., 2000). Other researchers have offered an alternative motivation for informality which asserts that participation in societal institutions may be essential to growth, and therefore at least partially voluntary. This model based existence of the informal sector solely on the institutional distortions, market failures, or excessive government regulation (Levenson et al., 1998). In our opinion, the main reasons of informal employment are: lack of knowledge about the procedures of labour relations registration, tax avoidance, social security contributions, preservation of the right to get social benefits, difficulties with access to the ordinary labour market, unemployment, inconsistency of legislation with the realities of the labour market, bureaucracy, not tight enough sanctions.

The literature review has shown that, in spite of a certain amount of scientific research, it is important to identify a set of factors that can affect the informal employment rate to improve the public policy regard to limiting informal employment and reducing its the negative influence on the economy. There are many studies regarding the factors that affect the informal employment rate and the specificities of influence on these factors. But most studies use sociological tools, respectively, they have drawbacks in the non-systematic conduct and complexity of use, when comparing results across countries through different methodologies for collecting and processing information. It is advisable to use the results obtained through

sociological researches to form a common understanding of the problems of informal employment, its scope and peculiarities of manifestation. However, these results are not sufficient to make valid conclusions and take measures to reduce it. Some other investigations are based on official statistics from different countries. The results obtained through formal surveys on informal employment can be used to formulate specific directions of regional or national policy, but due to the limited range of factors analyzed, they may not account the complex impact on the informal employment rate. Our empirical approach is based on the study of ILO and EU regulations, the results of statistical and sociological surveys of undeclared labour in EU and EU Member States, and the experience of labour inspections in EU countries to overcome this phenomenon.

2. Data and Methodology

Geographically, our study included the European Union and EU candidate countries. The data on Informal employment, calculated by the International labour Organization on household survey micro datasets (the last available date is 2012). This data was selected to avoid incorrect comparisons due to the different approaches of the national statistical services to the assessment of informal employment. ILO estimates of informal employment are based on common operational criteria. As a result, data presented are comparable across countries and regions, but they might differ from national statistics (ILO, 2020).

The framework of measuring informal employment had been developed by the ILO to support the discussion on decent work and the informal economy during the Seventeenth International Conference of Labour Statisticians Geneva, 2002. “It had been tested successfully by a number of countries. It disaggregates total employment (in terms of jobs) according to the type of production unit (formal sector enterprises, informal sector enterprises, households) and by status in employment and the formal versus informal nature of the job. In respect of each status-in-employment category, the ILO had made a proposal for defining informal jobs. Some concern was expressed regarding the use of the term “informal employment”, which is considered rather vague and which might lead to confusion with the term “employment in the informal sector”. Clarification was sought regarding the statistical treatment of illegal workers engaged in activities, which, as such, are not illegal. It was confirmed that such workers would be considered as having informal jobs in accordance with draft guidelines. Subject to the amendments agreed upon, the Conference endorsed the guidelines unanimously’ (ILO, 2003).

Data informal employment in EU countries were selected from official publications made by the ILO (2018) and by the European Commission (2019), data of informal employment in EU candidate countries and Ukraine are obtained from the official ILO website (ILOSTAT, 2020).

In the course of this research, we studied the correlation analysis of the cross-sectional 2012 data. A correlational analysis includes determining the relationship between variables. Consequently, data collected in a cross-sectional can be analyzed using correlational approaches for establishing a relationship between variables. The correlation coefficient has calculated using MS Excel 2016. The equation for the correlation coefficient is as follows:

$$Correl\ (x, y) = \frac{\sum(x - \bar{x})(y - \bar{y})}{\sqrt{\sum(x - \bar{x})^2 \sum(y - \bar{y})^2}},$$

where $\bar{x}$ and $\bar{y}$ are the mean of the samples AVERAGE (array1) and AVERAGE (array2) (EE, 2020; ET, 2020; S, 2020).

The correlation analysis provides an output table, a correlation matrix, that shows the CORREL value applied to each possible pair of dimension variables. Correlation analysis has made it possible to establish whether datasets are associated in magnitude, i.e. large values from one dataset are associated with large values of another set (positive correlation), or vice versa, small values of one set are associated with large values of another (negative correlation), or the data of the two ranges are not related in any way (zero correlation).

The correlation analyze is especially useful when more than two dimension variables are used for N array as the cross-sectional data. Cross-sectional data is a type of data collected by observing many subjects at one point or period of time. Analysis of cross-sectional data consists of comparing the differences among selected subjects (Brady et al., 2006; Gujarati et al., 2009). P. M. Robinson has provided a general class of tests for correlation in time series, spatial, spatiotemporal and cross-sectional data. A broad class of computationally simple tests is justified in the research (Robinson, 2008, p. 13). Chen Y. has used in his research Pearson's correlation coefficient based on the global cross-correlation coefficient. As an example, the methodology is applied to the relationships between China's urbanization and economic development to illustrate how to model spatial cross-correlation phenomena (Chen, 2015). Therefore, a cross-sectional data design involves collecting data from a varying characteristic at the same time. Moreover, the correlation analysis has been chosen to determine the impact of various factors on the informal employment rate.

The connection between variables (on the scale of Chaddock) can be very high, high, significant, moderate and weak. Connections determine on the size of coefficient of correlation that can take on values from, -1 to +1 inclusive. We only considered high, significant, and moderate correlations (on the scale of Chaddock) when interpreting the correlations obtained. There were no weak and moderate correlations in the study. We regarded a correlation of 0.65 as significant in our research where there may be a greater contribution from complicating factors.

3. Results

We have formulated the following hypothesis: there is a certain correlation between informal employment rates and The Doing Business Rating due to the fact that this international rating includes a significant number of indicators of both quantitative and qualitative states of the economy, respectively, determine a sufficiently justified comparison of positions of different countries.

Informal employment rates are main to assess the quality of employment and its regulation and are relevant to both developing and developed countries. ILOSTAT has presented information from official national sources on various indicators. The ILO has developed a

harmonized series on the informal sector and informal employment.[5] This is very important given the lack of international comparability that emerges from the differences of the national concepts.

The data on informal employment in EU countries and EU candidate countries indicates a significant heterogeneity in the informal employment rate in the studied countries. Therefore, it is possible to conclude that the historical and cultural factors of the country's development significantly influence this indicator. These are the countries exhibiting relatively low informal employment rate: Luxembourg (1,2%), Slovenia (5%), Finland (6,3%), Estonia (6,9%), and, accordingly, these are the countries with a sufficiently higher informal employment rate – Albania (66,6%), Turkey (35,3%), Bosnia and Herzegovina (33,7%), Greece (32,8%), Romania (28,9%) and Spain (27,3%) (ILO, 2020; ILOSTAT, 2020) (Figure 1).

The Doing Business Rating is one of the main indicators of business development in the country and one of the most authoritative international ratings. The informal employment reduction program requires regulatory actions by the state, respectively, The Doing Business rating provides objective measures of business regulations.[6] Thus, these regulations could foster or press on the informal employment. In addition, the estimation of the factors that affect informal employment is a difficult task, since many factors lie beyond the available and official statistics, so we suppose that using this rating probably partially solves this problem.

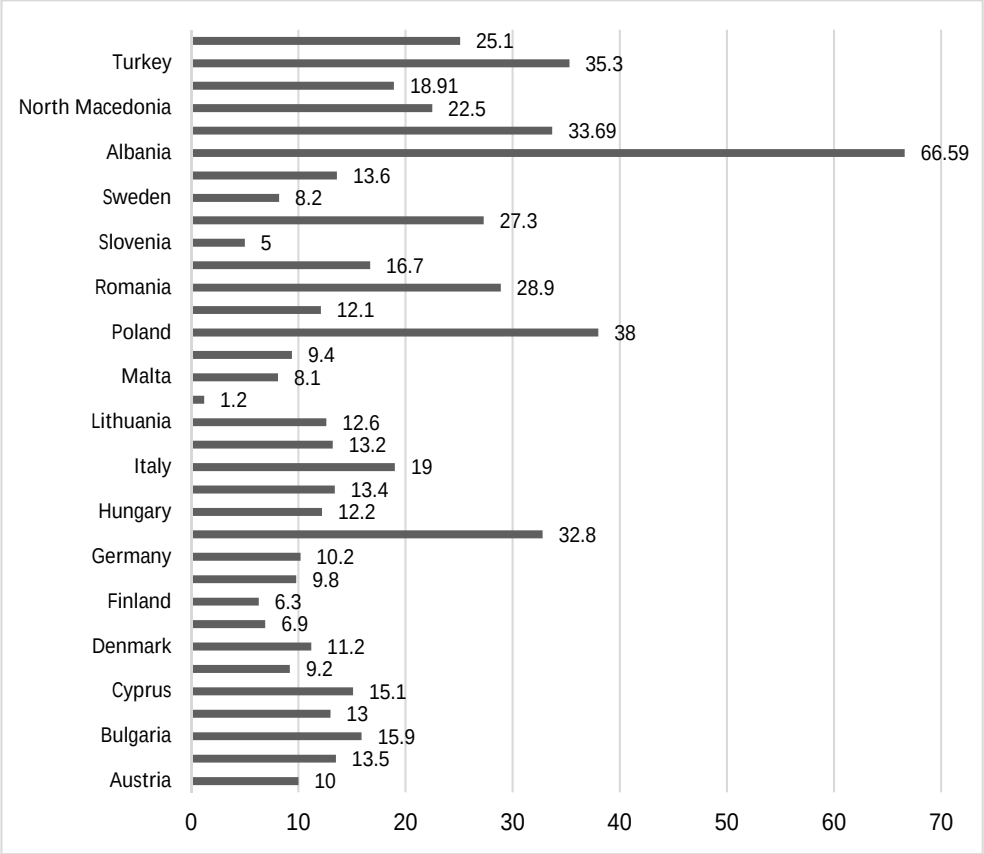
According to the methodology, the rate the ease of Doing Business in the country is measured on a scale from 0 to 100, where 0 – this is the worst result, and 100 – the best. The countries (among EU countries and EU candidate countries) exhibiting relatively high rate the Ease of Doing Business in 2012 are: Denmark (84.6), United Kingdom (83.7), Sweden (82.2), Finland (81.7), Germany (79.4), Ireland (79.8), Estonia (78), Austria (75.9) and, accordingly, these are the countries with a sufficiently low rate the Ease of Doing Business – Bosnia and Herzegovina (58.4), Greece (60.1), Albania (60.9), Malta (62.7) and Croatia (64.7). The lowest rate the Ease of Doing Business among countries, which have been studied, was in Ukraine in 2012 (45.5) (WB, 2012).

[5] ILOSTAT information of informal employment data has featured statistics on the share of informal employment in total employment and the share of employment outside the formal sector, disaggregated by sex and presented separately for the total economy and for non-agricultural activities. The harmonized series on informality has derived by the Department of Statistics from processing national household survey microdata files using a consistent navigational path. The process has involved identifying the production unit (formal sector, informal sector or household) and the nature of the job (formal job or informal job) of each employed person in their main job in order to derive the final indicators (ILOSTAT, 2020).

[6] By gathering and analyzing comprehensive quantitative data to compare business regulation environments across economies and over time, The Doing Business encourages economies to compete towards more efficient regulation; offers measurable benchmarks for reform; and serves as a resource for academics, journalists, private sector researchers and others interested in the business climate of each economy. The methodology for rating and for its estimation is described on the official website of The Doing Business (WB, 2020a).

Figure 1

Informal employment as a percent of employment in 2012, harmonized series (%)



Source: ILO, 2020; ILOSTAT, 2020.

The next stage of our study was to identify the correlation between informal employment rates in 2012 and the components of The Doing Business Rating in 2012. The description of the used correlation analysis is in the Data and Methodology section. We have looked for the dependence of the informal employment rate at the same time on the components of The Doing Business Rating in ungrouped EU countries and EU candidate countries. The correlation analysis has not given positive results. We attribute the fallacy of this hypothesis to the fact that the performance of EU countries and EU candidate countries is very different. That is why, in the course of further research, we have grouped the indicators by the logic of the EU's historic enlargement:

- Group № 1: EU-15 countries (EU enlargement till 1995) – Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal,

Spain, Sweden, United Kingdom (the latest official informal employment data is from 2012, so the UK's exit from the EU is ignored).

- Group № 2: countries that joined the EU from 1995 to 2012 – Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia.
- Group № 3: EU candidate countries – Croatia (the latest official informal employment data is from 2012, so the country's accession to the EU in 2013 is ignored), Albania, Bosnia and Herzegovina, North Macedonia, Serbia, Turkey. Ukraine is also considered due to the perspective of joining the pan-European employment system and to the necessity of addressing the low-productivity of solving the informal employment problem.

Table 1

Correlation matrix between informal employment rate and components of The Doing Business rating for the Group №1

Reference area	Informal employment as a percent of employment (%)	Ease of doing business score (DB10-14 methodology)	Components of the rating									
			Starting a Business	Dealing with Construction Permits (DB06-15 methodology)	Getting Electricity (DB06-15 methodology)	Registering Property (DB05-15 methodology)	Getting Credit (DB05-14 methodology)	Protecting Minority Investors (DB06-14 methodology)	Paying Taxes (DB06-16 methodology)	Trading across Borders (DB06-15 methodology)	**Enforcing Contracts** (DB04-15 methodology)	Resolving Insolvency
Austria	10.0	75.9	79.6	70.7	87.7	81.1	68.8	53.3	76.8	87.2	80.7	73.5
Belgium	13.5	71.1	91.2	73.6	56.4	42.2	56.3	70	75.7	85.1	77.7	82.9
Denmark	11.2	84.6	91.2	91.6	91	90.9	81.3	63.3	91.7	92	68.8	84.5
Finland	6.3	81.7	92.3	80.2	85.3	83.5	75	56.7	88.8	88.6	73.5	93.3
France	9.8	71.1	92.5	76.8	81.2	55.4	56.3	53.3	71	89.8	76.2	58.9
Germany	10.2	79.4	81.6	82.8	98.3	66.5	81.3	50	76.8	88.1	76.7	91.5
Greece	32.8	60.1	78.7	62.9	78.3	41.5	50	33.3	78.7	77.3	46.1	53.7
Ireland	13.4	79.8	90.9	60	61.4	68.7	87.5	86.7	95.3	92.7	75.5	79.6
Italy	19.0	66.2	83.8	62.9	78.2	75.1	50	56.7	60.6	82.1	42.2	70.4
Luxembourg	1.2	66.8	88.5	78.4	73.9	56.8	25	43.3	88.4	82.5	85.7	45.3
Netherlands	9.4	73.5	86.9	65.8	75.4	74.5	56.3	43.3	86.4	87.7	75.1	83.3
Portugal	12.1	73.8	90.7	68.9	79.1	83.7	50	60	77.7	84.8	59.9	83.5
Spain	27.3	70	78.2	63.2	58	68.2	68.8	53.3	84.2	84.6	63	78.2
Sweden	8.2	82.3	92.2	80.1	94.9	89.6	81.3	63.3	81.9	92.9	68.2	78.3
United Kingdom	13.6	83.7	89.8	86.9	80.8	71.3	100	80	89.6	88	68.4	82
Correlation		-0.5088	-0.6287	-0.5391	-0.3516	-0.3745	0.0016	-0.1835	-0.2381	-0.5481	**-0.7480**	-0.1512

Source: own calculations based on (WB, 2012).

This grouping of informal employment rates gave positive results by establishing a correlation between the informal employment rate and the individual components of The Doing Business Rating. The description of the used correlation analysis is in the Data and Methodology section.

A correlation analysis between the informal employment rate and the components of The Doing Business rating for Group № 1 (EU-15 countries) showed a negative correlation with the "Enforcing Contracts" component (-0.7480), indicating that the increase in this component of the rating leads to a decrease in the informal employment rate, which is a targeted result of any policy aimed at reducing the informal employment rate (see Table 1).

The score for Enforcing Contracts is "the simple average of the scores for each of the component indicators: the procedures, time and cost for resolving a commercial dispute through a local first-instance court" (WB, 2020b). Let's analyze in more detail the impact of this component of the rating on the informal employment rate (see Table 2).

Table 2

Correlation matrix between the informal employment rate and the "Enforcing Contracts" component for the Group №1

Reference area	Informal employment as a percent of employment (%)	Enforcing Contracts (DB04-15 methodology)	Enforcing Contracts – Procedures (number)	Enforcing Contracts – Time (days)	Enforcing Contracts – Filing and service (days)	Enforcing Contracts – Trial and judgment (days)	Enforcing Contracts – Enforcement of judgment (days)	Enforcing Contracts – Cost (% of claim amount)	Enforcing Contracts- Attorney fees (% of claim)	Enforcing Contracts – Court fees (% of claim)	Enforcing Contracts – Enforcement fees (% of claim)
Austria	10.0	80.7	25	397	30	277	90	20.4	13.6	4.1	0.4
Belgium	13.5	77.7	26	505	15	400	90	17.7	9.7	5.5	2.5
Denmark	11.2	68.8	35	410	60	260	90	23.3	5	3.3	15
Finland	6.3	73.5	34	375	14	255	106	16.2	10	3.5	0.2
France	9.8	76.2	29	447	22	270	100	17.4	10.7	2.7	4
Germany	10.2	76.7	31	394	29	310	55	14.4	6.6	5.4	2.4
Greece	32.8	46.1	39	1100	60	920	120	22.4	10	4.6	7.8
Ireland	13.4	75.5	21	650	60	500	90	26.9	18.8	2.3	5.8
Italy	19.0	42.2	37	1210	40	900	270	30.4	21.8	3.9	4.7
Luxembourg	1.2	85.7	26	321	21	240	60	9.7	6.9	1.9	0.9
Netherlands	9.4	75.1	26	514	10	442	62	23.9	13.7	5	5.2
Portugal	12.1	59.9	34	870	30	660	180	16.4	10.6	5.2	0.5
Spain	27.3	63	40	515	50	285	180	17.2	12.7	4.5	0
Sweden	8.2	68.2	31	476	21	365	90	31.2	28	3.1	0.1
United Kingdom	13.6	68.4	29	399	30	313	56	41.7	35	5.5	1.2
Correlation		-0.7480	**0.6253**	**0.6526**	**0.6438**	**0.6151**	0.4918	0.1983	0.0612	0.3625	0.2171

Source: own calculations based on (WB, 2012).

The data from the table 3 demonstrate that, in order to reduce informal employment, it is advisable to pay particular attention to reducing the number of contract procedures and the time required to execute these contracts, specifically "Filing and service (days)" and "Trial and judgment (days)", since these particular variables have the highest correlation with the informal employment rate.

Similar studies were conducted in the Group №2 – the countries that joined the EU from 1995 to 2012 (see Table 3).

Table 3

Correlation matrix between the informal employment rate and components of The Doing Business rating for the Group №2

Reference area	Informal employment as a percent of employment (%)	Ease of doing business score (DB10-14 methodology)	Components of the rating									
			Starting a Business	Dealing with Construction Permits (DB06-15 methodology)	Getting Electricity (DB06-15 methodology)	Registering Property (DB05-15 methodology)	Getting Credit (DB05-14 methodology)	Protecting Minority Investors (DB06-14 methodology)	Paying Taxes (DB06-16 methodology)	Trading across Borders (DB06-15 methodology)	Enforcing Contracts (DB04-15 methodology)	Resolving Insolvency
Bulgaria	15.9	69.3	84.7	64.8	65.6	71.1	81.3	63.3	70.5	76	64.3	51.2
Cyprus	15.1	66.2	89.1	60.9	61	53.8	68.8	60	80.4	83.7	54.2	50.6
Czech Republic	9.2	70.2	79.2	57.3	80.2	78.2	68.8	50	70.5	77.6	65.9	73.9
Estonia	6.9	78	90.9	85.4	80.1	90.7	75	56.7	80	92.5	68.8	60.5
Hungary	12.2	67.7	91.4	69	60.6	78	68.8	43.3	70.2	75.4	67.6	52.4
Latvia	13.2	77.7	91.5	64	79.6	81.8	93.8	60	82.3	83.6	78.3	62.5
Lithuania	12.6	74.3	84.7	77.9	70.1	92.2	68.8	56.7	81	86	74.8	51
Malta	8.1	62.7	75.6	64	75.5	69.9	18.8	56.7	85.9	81.3	61.7	38.3
Poland	38.0	68	78.6	66	61.5	61.5	93.8	60	65.7	80.5	56.8	56
Romania	28.9	65	87.8	53.8	36.2	80.6	87.5	56.7	49.3	75.9	66.1	56
Slovakia	16.7	70.7	81.1	61.5	77.4	91.9	75	46.7	63.8	75.9	63.9	69.8
Slovenia	5.0	67	94.4	53.5	85.5	60.9	37.5	66.7	77.3	79.2	51.9	63.4
Correlation		-0.2362	-0.2984	-0.1838	**-0.6939**	-0.1825	0.6191	0.0514	-0.6695	-0.2843	-0.1397	-0.0650

Source: own calculations based on (WB, 2012).

A correlation analysis between the informal employment rate and the components of The Doing Business rating for the Group №2 (countries that joined the EU from 1995 to 2012) showed a negative correlation with the "Getting Electricity" component (-0.6939), which indicates that the increase in this component of the rating leads to a decrease in the informal employment rate. For this group of countries, it is advisable to, first of all, pay attention to reducing the number of procedures in order to obtain electricity, since it is this variable that has the highest correlation with the performance indicator (see Table 4).

Table 4

Correlation matrix between the informal employment rate and the "Getting Electricity" component for Group №2

Reference area	Informal employment as a percent of employment (%)	Getting Electricity (DB06-15 methodology)	**Getting Electricity – Procedures** (number)	Getting Electricity – Time (days)	Getting Electricity – Cost (% of income per capita)
Bulgaria	15.9	65.6	6	130	366.6
Cyprus	15.1	61	5	207	125.5
Czech Republic	9.2	80.2	4	115	33.5
Estonia	6.9	80.1	4	111	222.5
Hungary	12.2	60.6	4	252	120.3
Latvia	13.2	79.6	4	108	439.1
Lithuania	12.6	70.1	5	146	63.3
Malta	8.1	75.5	4	135	480.2
Poland	38	61.5	6	163	209.3
Romania	28.9	36.2	10	204	854.1
Slovakia	16.7	77.4	5	89	297.2
Slovenia	5	85.5	5	38	119.1
Correlation		-0.6939	**0.6695**	0.4101	0.3817

Source: own calculations based on (WB, 2012).

The investigation of the correlation between informal employment rates and the components of The Doing Business rating has also been conducted for the Group №3 – EU candidate countries. As of 2019, Albania, Northern Macedonia, Serbia, Montenegro and Turkey are the official candidates for EU membership. Also, a course on rapprochement with the EU is conducted by Ukraine. Croatia is a member of this group due to the fact that the country was not yet a member of the EU in the studied period (see Table 5).

At first it may seem that the results of the study do not have a certain economic meaning, since increasing of the "Protecting Minority Investors" component leads to an increase in informal employment in the country's economy. However, it is appropriate to analyze the obtained results considering the level of legal awareness that is manifesting in the compliance with the law. It is logical that the higher is the protection of minority investors' rights, the better is the investment climate in the country, which in turn attracts investors, increases business activity. However, since the countries from the Group № 3 are candidates for EU membership, the legal culture may not be yet at a high level, so we can assume that the residents of the country working with foreign capital are attracting workers to informal employment or withholding a part of their official wages in order to minimize the tax burden. Let us analyze in more detail the impact of this component of the rating on the informal employment rate in the Group№ 3 (see Table 6).

Table 5

Correlation matrix between the informal employment rate and The Doing Business components for the Group №3

Reference area	Informal employment as a percent of employment (%)	Ease of doing business score (DB10-14 methodology)	Components of the rating									
			Starting a Business	Dealing with Construction Permits (DB06-15	Getting Electricity (DB06-15 methodology)	Registering Property (DB05-15 methodology)	Getting Credit (DB05-14 methodology)	**Protecting Minority Investors** (DB06-14	Paying Taxes (DB06-16 methodology)	Trading across Borders (DB06-15 methodology)	Enforcing Contracts (DB04-15 methodology)	Resolving Insolvency
Croatia	13.0	64.7	82.9	24.4	85.6	66.3	75	46.7	75.2	72	65.7	53.5
Albania	61.0	60.9	87.6	0	57.9	54.4	87.5	70	54.7	72.3	58.9	65.4
Bosnia and Herzegovina	30.5	58.4	54.3	34.4	75.3	66.7	62.5	46.7	51.9	69.4	56.9	65.7
North Macedonia	22.5	70.4	88.5	74.1	73.2	69.6	68.8	56.7	75.8	74.1	56.6	66.4
Serbia	19.8	61.8	86.7	19.3	75.9	74.8	81.3	46.7	52.4	70.5	58.6	52.2
Turkey	35.3	65.7	81.4	52.7	79.8	75	56.3	56.7	80.6	72.2	65	37
Ukraine	25.1	45.5	79.8	12	32.4	47.9	81.3	40	20	48.8	67.2	25.7
Correlation		-0.0608	0.0464	-0.3559	-0.2896	-0.3633	0.2177	**0.8012**	-0.0845	0.1364	-0.2313	0.2276

Source: own calculations based on (WB, 2012).

Table 6

Correlation matrix between the informal employment rate and the "Protecting Minority Investors" component for the Group№ 3

Reference area	Informal employment as a percent of employment (%)	Protecting Minority Investors (DB06-14 methodology)	Protecting Minority Investors – Extent of disclosure index (0-10)	Protecting Minority Investors – Extent of director liability index (0-10)	**Protecting Minority Investors – Ease of shareholder suits** index (0-10)
Croatia	13	46.7	3	6	5
Albania	61	70	7	7	7
Bosnia and Herzegovina	30.45	46.7	3	6	5
North Macedonia	22.5	56.7	7	7	3
Serbia	19.81	46.7	4	6	4
Turkey	35.3	56.7	9	4	4
Ukraine	25.1	40	4	2	6
Correaltion		0.8012	0.5303	0.1819	**0.6080**

Source: own calculations based on (WB, 2012).

The highest level of correlation in the "Protecting Minority Investors" component of The Doing Business rating has the "Ease of shareholder suits" index, which confirms our hypothesis about the possible abuse of resident business owners about formal and informal employment of workers. 'The ease of shareholder suits index measures how likely plaintiffs are to access internal corporate evidence. It has six components: whether shareholders owning 10% of the company's share capital have the right to inspect the Buyer-Seller transaction documents before filing a suit; whether shareholders owning 10% of the company's share capital can request that a government inspector investigate the Buyer-Seller transaction without filing a suit; what range of documents is available to the shareholder plaintiff from the defendant and witnesses during trial; whether the plaintiff can obtain cate-gories of relevant documents from the defendant without identifying each document specifically; whether the plaintiff can directly examine the defendant and witnesses during trial (0-2); and whether the standard of proof for civil suits is lower than that for criminal cases' (WB, 2020d). Accordingly, the processes of managing and hiring employees are not included in the list of components that minority investors may have access to.

Also, a more detailed examination of the individual components of The Doing Business rating in regarding their correlation with the informal employment rate indicates the presence of other variables, which significantly affect the performance indicator (see Table 7).

Table 7

Correlation matrix between the informal employment rate and individual components of The Doing Business rating for the Group № 3

Reference area	Informal employment as a percent of employment (%)	Starting a Business – Cost (% of income per capita)	Registering Property – Cost (% of property value)	Getting Credit – Credit bureau coverage (% of adults)	Paying Taxes – Other taxes (% of profit)	Enforcing Contracts – Court fees (% of claim)
Croatia	13	8.4	5	100	1.9	4
Albania	61	29.3	12	0	4.8	9.9
Bosnia and Herzegovina	30.45	27.9	5.3	39.6	3.9	6
North Macedonia	22.5	1.8	3.2	68.3	2	6.9
Serbia	19.81	7.8	2.7	100	2.3	7.1
Turkey	35.3	18.1	3.3	60.5	2.6	6
Ukraine	25.1	5.2	3.9	17	1.6	7.4
Correlation		0.7649	0.8347	-0.7791	0.8463	0.7899

Source: own calculations based on (WB, 2012).

It is noteworthy that in countries with a lower level of economic development (countries from the Group №3) there is a bigger dependence on various taxes and fees. For example, significant direct impacts on the informal employment rate have such components: cost (%

of income per capita) of Starting a Business, cost (% of property value) of Registering Property, Paying other taxes (% of the profit), court fees (% of claim) of Enforcing Contracts. Accordingly, an increase in these taxes and fees leads to an increase of the informal employment rate in the economy. Another variable that affects the informal employment rate is – Getting Credit – Credit bureau coverage (% of adults). The credit registry coverage reports the number of individuals and firms listed in a credit registry's database as of January 1 with information on their borrowing history from the past five years, and the number of individuals and firms that have had no borrowing history in the past five years but for which a lender requested a credit report from the registry in the previous calendar year (WB, 2020c). This variable is inversely related to the informal employment rate, indicating that a decrease in the percentage of adult credit register coverage leads to an increase in informal employment. Obviously, this is due to the fact that one of the conditions to get a credit is the presence of official income. And the concepts of official income and informal employment are incompatible.

Conclusions

Nowadays, the measures to promote the transition to formal employment are more and more often regarded as a major component of national employment programs. The heterogeneity of informal employment makes it impossible to apply the same tool or policy to all countries. It all depends on the analysis of the factors that affect informal employment in a particular country or region. The development of effective measures aimed at reducing informal employment is based on the recognition of the heterogeneity of its structure, as well as of the various factors that stimulate its growth or decrease. World experience has shown that success in reducing informal employment can only be achieved by pursuing a comprehensive policy that covers different regulatory areas and integrates different strands of action. However, in the current context of institutional challenges, "strict" measures to regulate informal employment are less effective than "soft" measures, since only policy-making methods reduce economic activity as a whole.

Therefore, policies that are aimed at reducing informal employment in different countries should be based on the so-called "soft" regulation tools:

- improvement of the institutional and business environment (reduction of administrative barriers, stimulation of entrepreneurial activity, increase of the level of accessibility to public funding programs);
- improvement of procedural transparency (simplification of procedures, shortening of time, reduction of bureaucratic load, development of online systems);
- conducting an information campaign aimed at increasing the trust level in state and municipal authorities, taxation and social protection systems (use of tools that demonstrate current or prospective benefits to employees, consistency and transparency of fiscal policy, implementation of the "voucher for service" address system).

Using the correlation analysis of the impact of the components of The Doing Business rating, we can identify the following priority recommendations to improve the employment to limit its informal component:

- For the Group №1 (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom). Priority measures are reducing the bureaucratic contracting procedures, including reducing the number of contract execution procedures (direct procedural steps in the presence of a commercial dispute before a court) and the time required to execute contracts, such as filing and service, trial and judgment time.
- For the Group №2 (Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia). Priority measures are reducing the bureaucratic procedures to obtain electricity, particularly reducing the number of procedures to obtain electricity (all interaction of the company's employees with external parties, such as the electricity distribution utility, electricity supply utilities, government agencies, electrical contractors and firms. Also, internal wiring inspections and certifications are counted as procedures).
- For the Group №3 (Croatia, Albania, Bosnia and Herzegovina, North Macedonia, Serbia, Turkey, Ukraine). Priority measures include enhancing legal awareness by reducing the "human" factor at all stages of getting information and resources, which will also reduce the corruption component, increasing the transparency of the judicial and law enforcement systems, developing online systems of access and registration, expanding the access to public information as well as to the information on the activity of enterprises, which is not a trade secret. Also, an important direction is the reduction of taxes and fees when Starting a Business (fees and costs to start a business, including all official fees and fees for legal and professional services), reducing the cost of Registering Property (fees, transfer taxes, stamp duties and any other payment to the property registry to notaries, public agencies or lawyers), reducing court fees when Enforcing Contracts. It is also advisable to consider the possibility of a differentiated approach to tax rates for these types of taxes: property taxes, turnover taxes and other taxes (such as municipal fees and vehicle taxes). In addition, increasing the availability of credit resources for businesses and households should also be a direction of the employment policy.

Therefore, the use of the correlation between the informal employment rate and The Doing Business rating data has great potential for improving national and regional employment policies for as for a specific country as for the ILO strategic policies, as it provides an opportunity to explore the effectiveness of the tools used to affect the influential factors of informal employment in a particular country, and also gives an opportunities to evaluate the effectiveness of the measures produced by the international community, the EU countries to reduce the informal employment rate of population.

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ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 30 (2), 2021

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INDUSTRIAL RELATIONS – PAST AND PRESENT

This article is a retrospective of the development of industrial relations from their inception to the present day. It clarifies the essence of the basic principles on which they operate and the main participants in these relations. It examines the main trends in modern conditions and the formation of new "players" in these relations. It also clarifies the main changes occurring in the conditions under which industrial relations operate and will have to function in the future.
JEL: J50

History

When we consider the history and emergence of industrial relations, the first thing we see and feel are conflicts. Industrial relations emerge and develop as a conflict and a process of its resolution.

The term "industrial relations" forms where there is an industry, i.e. they (industrial relations) are an integral part of industrial society and develop with and through it. If we go into the field of history, we will see that the first conflicts arose in industrial England, they were sporadic, disorganized, spontaneous, and they were based on achieving particular economic interests. These interests boil down to two things:

On behalf of the employer, the realization of maximum profit that will allow him to develop production and receive entrepreneurial income at such a level as to cover the risks he undertakes, and notably, while minimizing the cost of resources (including labour) to such an extent that it achieves the planned economic result.

On behalf of workers, their economic interest is mainly related to satisfying their understanding of normal life. And this means working conditions that ensure their health and ability to work, and to receive such payment for the work done, which will allow them the normal existence of them and their families, under the specific conditions and understandings of society. Moreover, they consider this interest of theirs as their natural right, independent of the interests of employers.

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Of course, as has always been the case in history, conflicts were first resolved by force. This leads to a response, to an awareness of the group interest of both workers and employers. Yet, historical practice shows that resolving conflicts by means of force is not a solution. Using force can suppress them, slow them down, delay them, but never resolve them. Moreover, in most cases, such actions play the role of a catalyst for the development of other processes. Namely, to processes of association, of awareness of the common interest, of the development of models of counteraction to force, etc., and eventually to the realization of the idea that conflicts can and should be resolved through dialogue and mutual compromises. This, in turn, leads to a new stage in the development of employer-employee relations.

The process of realizing the need for dialogue and mutual compromises is a two-way process. It develops in both workers and employers. In their development, the views of employers and workers reach a point where a zone of unity opens up to the economic interests of both parties.

In the transition from the stage of confrontational opposition to the stage of dialogue and collective negotiation, the need for normative regulation of this process also arises. Here the state appears with its institutions, naturally in the face of its three powers - executive, legislative and judicial.

The intervention of the state in these relations opens up a new horizon in their development. From chaotic, related to the resolution of individual specific collective disputes, they move to regulated, institutionalized, and extended in their scope. This participation of the state in these relations, of course, is driven by the achievement of certain goals in certain periods. It is the achievement of the goals of the state that gives rise to the need to build a foundation for these relations.

With the intervention of the state, industrial relations acquire a new characteristic; they socialize with two very important traits:

FIRST. These are collective labour relations, i.e. these are relations between organizations, which are the basis for settling the relations between the employer and the individual employee.

SECOND. These relations are carried out by different parties, which perform different functions and stand on different sides in the social system.

These characteristics define industrial relations as multi-layered and their manifestation can have different dimensions and forms in public practice.

Here it is worth noting that industrial relations in their development reach a level at which they cross national borders and the need arises for their transnational settlement based on common understandings of the tasks and functions of these relations in the social system. This need emerges at a stage in which all participants in this process worldwide have realized the impossibility of confrontational action to resolve labour conflicts.

This awareness emerged after the First World War and led to the creation of an international structure (International Labor Organization) for the regulation and development of industrial relations.

On the basis of the Versailles Peace Treaty[2], the first understandings of the international settlement of industrial relations were proclaimed. They are contained in the three main motives for the establishment of the International Labor Organization:

- Universal peace based on social justice;
- Improving working conditions;
- Establishing a truly humane regime of work worldwide;

In its essence, the International Labor Organization is the field in which industrial relations are still carried out and developed to this day.

It should be noted that the development of industrial relations is directly related to the development of the economy. Including the crossing of national borders in these relations are the result of the development of the economic system itself, and in it there are significant changes in the last years of the twentieth century and the beginning of the twenty-fist century.

Ultimately, the crossing of national borders in the development of industrial relations, as collective labour relations and the growing diversity of their manifestation, requires that this development be carried out on the basis of general principles for the functioning of industrial relations.

The Principles

As we have already pointed out, the development of industrial relations naturally leads to the need for their regulation and institutionalization. The implementation of such actions requires a basis on which to perform them.

At the heart of industrial relations as we know them today are several generally accepted basic principles, which we can formulate as follows:

Principle of the unidirectionality of goals. Some authors formulate this principle as replacing the slogan “Class Struggle” with the slogan “Class Cooperation and Coordination of Interests” (Shopov, 2006).

The essence of this principle is to look for the intersections of the goals that the parties have set for achieving and to work on these intersections in order to reach an optimal compromise for solving certain issues.

If we look at this principle from another angle, we will see that it essentially shifts the field of action from the political to the socio-economic trajectory of these relations, i.e. from political confrontation and the achievement of goals by force, to the search for a compromise and achieving socio-economic balance in society.

[2] Chapter XIII of the Treaty of Versailles "Labor".

The principle of free and unconditional association of the individual parties in industrial relations, which opens the horizon for the implementation of collective labor negotiation and the formation of independent organized entities in this process.

The principle of tripartism in industrial relations, as the main tool for the development and/or implementation of a certain economic or social policy. This principle derives from the need to seek efficiency in the implementation of certain policies or in the settlement of labour and social security relations, or in resolving the issues of raising the living standards of the population.

Principle of legislative regulation of the process of industrial relations. By looking at industrial relations as a system, it would be all the more efficient the more orderly and functioning it is, based on clear and precise rules. In this sense, the creation of a necessary regulatory framework for cooperation between the parties is a prerequisite for its effectiveness. The system of legislative regulation of the functioning of industrial relations assumes a set of regulations at different levels and of different ranks. These levels can generally be defined as follows:

- International legal norms regulating basic issues of economic and social policy, regarding labour rights in the context of fundamental human rights;
- National laws governing the formation of national policies in the field of labour and social security relations;
- Normative acts of national governments, regulating the realization of the labour and social security rights of the workers;
- Normative acts of national governments, regulating the functioning of the system of industrial relations;
- Decisions of the labour courts and the labour arbitrations for settling collective labour disputes and conflicts.

Principle of balancing liberalism and the regulatory function of the state. This principle is dictated by the need to seek the optimal balance, in the specific conditions, between liberalism in economic relations and the intervention of the state as a regulator of these relations. Moreover, this balance is always very fragile.

Ultimately, the effectiveness of industrial relations largely depends on maintaining the optimal balance.

Principle of equality. This assumes the creation of conditions for ensuring an equal right of each of the parties and of each participant in the system of industrial relations to protect its economic and social interests.

There can be no understanding and consensus between unequal parties. In order to be effective in industrial relations, it is necessary to create such a balance in the rights of the parties involved in this process so that each of them can achieve the protection of their economic and social interests to the same extent and with equal opportunities.

Principle of autonomy and independence. The autonomy and independence of the countries derive from the very essence of industrial relations, i.e. each of the parties is independent of each other and performs different and specific functions in the socio-

economic system. The parties act solely and independently of each other, taking into account above all their economic and social interests and the established regulations for the process of industrial relations.

When we talk about the autonomy of individual parties, the question of their legitimacy and representativeness comes to fore. Participants in the process should have sufficient representation and be able to prove their specific function in society. The clearer, more transparent and more distinctive the specifics of the individual parties, the better the basis for the effectiveness of industrial relations is.

Principle of interconnection between the economy and people's living standards. Taking into consideration the interrelationship and dependence between the condition and the level of development of the economy and the social status of people is the basis and one of the main prerequisites for the effectiveness of the interaction between individual parties in the industrial relations. Economic practice shows that there is a direct relationship between the economic growth of a country and the standard of living and social status of people. Taking into account this fact presupposes the solution of the issues of employment, people's security, income and living standards and issues of interest of one or another party in general, to be solved based on the possibilities of an economy.

Principle of pluralism in the institutionalization of relations. Viewed through the prism of industrial relations, the principle of pluralism can be considered in two dimensions. As creating conditions for participation in the process of more and different in its organizational and functional composition organizations of both workers and employers as well as a variety of forms through which modern industrial relations are realized.

Ultimately, pluralism in industrial relations makes it possible for these relations to be more effective, as the criteria for access to the system and the forms of interaction cannot be imposed unilaterally. Their choice can only be made by consensus and mutual understanding between all participants in the process of industrial relations.

Principle of the negotiation. This principle requires that all issues between the parties in industrial relations be resolved based on negotiations and finding consensus solutions. In practice, this contains several main aspirations in the negotiation process:

- Negotiations at all levels of industrial relations;
- Expanding the scope of problems that are solved and are subject to cooperation and interaction between the parties and participants in industrial relations;
- Participation of workers and employers in the negotiation process in decision-making on issues that directly affect them.

Negotiations at all levels provide an opportunity to find a solution and the negotiators to comply with the specific conditions and opportunities of the individual levels and the individual areas in which the process of negotiations and finding specific solutions takes place. This in turn is a prerequisite for greater efficiency and sustainability of decisions.

Principle of social understanding and partnership. Interaction and cooperation between the participants in the process of industrial relations do not necessarily mean unanimity,

understanding and like action. The meaning of this principle is that in the process of interaction each party should proceed with an understanding of the position of the other parties and taking into account the nature of their claims.

Recognition of the other party's right is the first step towards reaching a consensus. Only with an understanding of the essence of the demands or claims can solutions that are acceptable to each of the parties be sought. On the other hand, an understanding of the other party's claims is necessary, but insufficient, to achieve the effectiveness and sustainability of the solutions reached. In order to achieve sustainable solutions, the parties must also cooperate in the implementation phase. In other words, any decision will be stillborn if the parties refuse to cooperate in its implementation. In other words, in the process of industrial relations, social understanding (the recognition of the right of the other party) and social partnership (cooperation to achieve what has already been agreed) are inextricably linked and any rupture of this relationship will lead to inefficiency of the process.

Principle of specificity of conditions. This principle is caused by the fact that the initiation and development of industrial relations is strongly influenced by the specific conditions and level of socio-economic development in individual countries and regions. From this point of view, the principle requires compliance with these facts. The compliance of the system of industrial relations with the specific conditions is of particular importance in choosing the model of these relations. In this sense, in order to achieve full compliance with the specifics, it is necessary to answer a few basic questions:

- What are the traditions in industrial relations?
- What are the laws governing industrial relations?
- What are the interests of the parties in industrial relations?
- What is the balance of power of the individual parties?
- What is the degree of association of the parties at different levels?
- How centralized is the system of economic management in the country?

Depending on the answers to these questions, we observe different concepts for the functioning and development of industrial relations in different countries.

These basic principles of industrial relations derive from the established practice of many countries around the world. They are observed everywhere, regardless of the accepted models in individual countries. Of course, this is the place to note that principles are not a fixed and given, they undergo development in time and space, caused by the very development of industrial relations and in general by the development of socio-economic systems.

The Parties

As already mentioned, different parties are involved in industrial relations, each of which is distinct and performs different specific functions in the socio-economic system. The traditional participants in this process are the state, employers and their organizations, and

workers and employees' organizations, with their specific functions, which in most cases are diverse and very often contradict each other. What are these specific functions for the various participants in the process of industrial relations?

Trade unions or workers and employees' organizations. The definitions of employee organizations are diverse, but we will focus on the most common of them and in line with modern conditions. It is founded in UK law and, according to it, these are permanent or temporary organizations consisting entirely or mainly of workers with the same or similar occupational characteristics, whose main purpose is to regulate the relations of the concerned workers with their employers or their organizations (Shopov, 1999). Based on this definition and the ILO Conventions, the specific functions that outline the organizations of workers in the socio-economic system are framed. They come down to a few basic traits:

- These are voluntary associations of workers with similar professional characteristics.
- The main goal of these associations is to protect the labour rights and economic and social interests of their members.
- These associations are called upon to regulate the relations with employers and their organizations.

Employers and their organizations. When we talk about employers, we must note two main characteristics that determine their specific place in the socio-economic system, in terms of industrial relations.

First, the employer participates in the process of industrial relations directly in labour negotiations in the individual enterprise, moreover, in the enterprise, he is the bearer of the individual labour relation with each individual worker.

Second, the employer participates indirectly, through its organizations, in collective labour relations, thus protecting the common interests of employers. This raises the question of the common goals of employers. They are diverse, very often opposite and divergent. This also determines employers' organizations to be of different structure and content.

This diversity, especially in terms of the goals of employers' organizations, often leads to attempts to move out of the field of labour and social relations and to the desire to raise issues that are outside of the process of industrial relations, which inevitably leads to low productivity of relationships.

The state with its three powers. The interest of the state, as we have already emphasized, occurs at a certain point in the development of industrial relations and can be sought in two dimensions.

In the political field, this interest is related to the achievement of the necessary conditions for:

- The development, adoption and implementation of economic and social policy;
- Guaranteeing and protecting basic human rights;
- Protection of the main interests of enterprises;

- Reducing or eliminating, where possible, social contradictions.

In the organizational field, the state in the process of industrial relations is the main engine of the functioning of these relations.

Here is the place to note that the state is the only party in industrial relations that manifests itself and has more than one specific functions in the system of industrial relations. On the one hand, it is the main organizer and coordinator of the process, but on the other hand, it often acts as an employer in this process. From this point of view, it is naturally closer to the problems of employers than to those of workers' organizations. For the state, the issue of balance of interests is much more difficult than for other parties in these relations.

In recent years, the development of industrial relations has seen the emergence of **a new "player"** and these are the structures of civil society. The question arises as to what civil society is, what are its structures and what is its place in industrial relations.

Modern social theories assume that civil society is universal. The main discussion is about what is included in the concept of civil society - only civil society organizations, not including public organizations for economic purposes or the entire private field, including the market and its institutions.

Followers of neo-Marxism such as Gene Cohen and Andrew Arato, Claus Offe, John Keane, Agnes Heller or Jürgen Habermas see civil society as a self-organizing public domain based on solidarity and communication. Habermas uses the term "life world", different from the logic of economics (market) and administration (state). Cohen and Arato define civil society as "a sphere of social interaction between the economy and the state, composed primarily of the intimate sphere (especially the family), the sphere of associations (especially voluntary associations), social movements and forms of public communication."

On the other hand, liberal views of civil society define it as a community of independent individuals and their organizations encompassing the entire private sphere. This is the organized private field, including market institutions, but also civil, religious, cultural and other associations and organizations. According to Thomas Carothers, "civil society is a broader concept that includes all organizations and associations that exist outside the state (including political parties) and the market."

Other authors, such as Larry Diamond, define civil society as "intermediate to the private sector and the state", which excludes individual and family life, but also private profit-making activities (the market) and political activities aimed at establishing control over the state (parties). According to him, civil society is limited to civil associations of a non-political nature.

Ernest Gellner, for example, defines it as "that set of non-governmental institutions that are strong enough to serve as a counterweight to the state without depriving the state of the ability to act as a peacemaker and arbiter between major interests, however, it can prevent it from dominating and atomizing the rest of society." Another representative of liberalism, Ralf Dahrendorf, points to three main characteristics of civil society: the diversity of its elements, the autonomy of many organizations and institutions, and "polite, tolerant, nonviolent" human behaviour.

Despite the different views, they all agree on one statement. Civil society is seen as a counterweight, especially to the state. It is defined as a set or network of various and autonomous elements (organizations) without a single organizing centre.

The natural question arises, what are these organizations and how can we identify them?

Typically, civil society organizations can be divided into two large groups: service providers (providing public services most often in the field of social and health care, education, sports, culture, environmental protection, etc.) and advocates (those who promote civic engagement, human rights and other important issues of common interest and participate in policy development). Many of these organizations actively play both roles, as the practice is not black and white and their work and activities have different impacts, often interrelated.

Despite the great differences in the organization, status and goals of these organizations, it should be noted that they are a significant economic force, surpassing most large industries and activities in the scale of their workforce. In 2014 alone, an estimated 28.3 million full-time workers (paid and volunteers) were employed in this sector in the EU member states, or nearly 13 percent of the European workforce. Of the 28 million full-time employees, more than half (55%) are volunteers[3].

All that has been said so far shows that industrial relations in their development are entering a new phase of significant changes, different from those we have observed so far. In order to understand the alterations that are taking place and to find an adequate approach to them, it is important to be aware of the situation in which they are taking place.

The main changes that occur and will lead to the development of new processes affecting society in general and in particular industrial relations can be considered in three directions:

Changes in the Economic and Social Sphere

The last decade of the 21st century marks the acceleration of changes taking place in the economic and social sphere, characterized by several main priorities.

First of all, the failure of the liberal economy, the mantra that the market resolves everything in the economy and that profit is the one important thing, turned out to be ineffective. The first symptoms of this failure were felt with the crisis of 2008. In 2010, in his book Freefall, Joseph Stiglitz emphasized, "The temptation of easy profits from lending and servicing loans has detached many banks from their core functions. The banking systems of the United States and many other countries have neglected lending to small and medium-sized businesses, which is at the heart of job creation in any economy, and instead focused on securitization." (Stiglitz, 2010, p. 37).[4] The lack of understanding of the essence of this crisis and the search

[3] The future evolution of civil society in the European Union by 2030 https://www.eesc.europa.eu/sites/default/files/files/the_future_evolution_of_civil_society_in_the_eu_by_2030.pdf

[4] Securitization is a process in which illiquid assets are aggregated into a portfolio serving as collateral for securities.

for solutions in the direction of improving the liberal model led to the continuation of the negative processes.

What was not understood?

It was not understood that the so-called "free self-regulating market" was not a panacea. The absolutization of the market's ability to self-regulate has led to a number of distortions in society, the most striking of which is the huge divide between rich and poor.

It was not understood that market regulation was necessary for its maintenance and efficient functioning. The loss of the main goal of any economy - meeting human needs, has been replaced by another - profit or making money, more money for the sake of money itself. This change of goals had the greatest impact on the social field and led to the placing of social services under the control of the market, which further deepened the division between rich and poor.

Secondly, the accelerated development of the productive forces. Here, indeed, the degree of acceleration is so great that everyone is now convinced that this is a revolutionary change. These changes are reflected in the rapid and at times spontaneous entry of innovative technologies and digitalization in all spheres of the economic and social life of society. The incredibly rapid changes in technology and information systems are literally changing the lives of each individual and social groups as a whole.

Third, the state of production relations. Inevitably, the changes that occur in society and the productive forces cause changes in production relations. These changes are expressed in a change of attitude to three main things.

The first significant change is the attitude towards time and in particular towards working hours. In principle, each system functions over time and has its own idea of its assimilation as a key element of the production cycle. If so far society and business have functioned in a specific time regime, then the changes that have taken place have led to a disruption in this regime, to say the least. The main thing in this disruption is the blurring of the boundaries between working time and time for rest and social life. In his book 'Precariat, the New Dangerous Class', Guy Standing points to two main characteristics of this breakage: The first concerns the growing disrespect for the biological 24-hour clock of the human body. The second change concerns how we ourselves perceive the concept of "time" (Standing, 2013, pp. 246-247). This change will eventually lead to a new concept of time and its use in the process of creating physical and non-physical goods.

The second change is related to the attitude towards work in general. The problem that arises from the changes that are taking place is that the hitherto ruling understanding of the work done in a specific occupation in a factory, institution, office, etc., loses its meaning. Modern technology has allowed for this work to be implemented in different places, in different conditions, at different times. This has led to a change in perceptions of what labour is and how effective it is. These issues are still not given much attention, but these are processes that are evolving and will inevitably lead to the reasonable question of what is work and its content in modern conditions.

The third change is related to the intensification of labour. The blurring of work time boundaries and the ever-expanding practice of teleworking have created the opportunity to work in more than one place. The reasons for this are different. One of them is related to the continuous reduction of wages, another to the need to meet various social needs, in some cases, this is related to the risks of the work environment, etc. The Covid-19 pandemic only accelerated this process. This leads to what some authors call "overwork" and others describe as overtime. No matter how we define it, and regardless of a number of ILO conventions and EU directives on its limitation, it is ultimately a matter of labour intensification.

In any case, the processes that are developing and will continue to develop, require the answer to the question of whether this intensification of labour is healthy, necessary and inevitable for society as a whole.

Changes in the Labour Market

Against the background of the changes occurring in the economic and social sphere, changes in labour, and hence in the labour market, inevitably occur. What exactly are those changes in the labour market that occur in the modern settings?

The first change is related to job creation. Usually, the advent of automation and robotics in all fields of life, and especially in the field of production, is associated with the fear that this leads to job losses when certain tasks performed by workers are taken over by automation. At first glance, this is the case, but it should be noted that these are routine jobs, which are mostly monotonous and with repetitive work activities. At the same time, based on technological changes and innovations for the period from 1999 to 2016 in Europe alone, more than 23 million new jobs have been created, representing almost half of job growth over the whole period. New technologies have created the opportunity to create new types of jobs through the so-called "online work". It is true that a number of jobs may disappear, others will acquire new characteristics, but parallel to this, new occupations will appear related to essentially new types of work arising from the new requirements as a result of changes in technology.

The second significant change is related to the content of work, and hence to the requirement for new knowledge and skills of workers. There will be an increasing demand for skills that cannot be replaced by robots. These are characteristics related to general cognitive skills, such as critical thinking and socio-behavioural skills related to recognizing and managing emotions, teamwork skills and more. If we turn to the figures, we will see that for the period from 2001 to the present day, the share of cognitive and socio-behavioural jobs in economically developed countries has increased from 33% to 41%, and in developing countries, albeit at a slower pace, this percentage has risen from 19% to 23%. We can conclude that this change will at best lead to a symbiosis between robots and workers, i.e. robots will complement workers who engage in non-routine tasks requiring cognitive and socio-behavioural skills. Changes in the content of work also require a new set of skills that allow workers to adapt quickly and effectively, allowing them to easily and quickly change from one occupation and job to another.

The third change is related to the geography of jobs, and hence to labour mobility. Online work platforms have created conditions for breaking the link between the company's location and the place of work. There are different interpretations in this regard. One of the most common is formulated by Klaus Schwab, who says: "Professional activities are broken down into precise tasks and discrete projects, after which they are "thrown" into a virtual cloud inhabited by ambitious workers located in different parts of the globe. This is the new on-demand economy, where labour providers are no longer employees in the traditional sense of the word, but rather independent mercenaries who perform specific tasks." (Schwab, 2016). Inevitably, with the development of cloud technologies, freedom and mobility of labour, and the ability of the worker to choose the work he performs will be achieved. This will lead to greater independence and an increase in the share of self-employed workers. This change will also lead to the need to look for new forms of social and employment contracts that respond to the changes in terms of labour mobility. At the same time, it raises a number of issues related to the level of exploitation, working conditions, occupational safety, social security and others.

The fourth change is related to labour efficiency. Undoubtedly, technological changes and the rapid penetration of information technology create preconditions for greater efficiency of work and human labour in general, but they also create a strange contradiction. This is the contradiction of the increased complexity of technologies on the one hand and the need for higher, and in some cases, hyper-specialization of labour. This contradiction is yet to be resolved and the level of job satisfaction depends on its resolution. Here again, the question arises of maintaining workers' knowledge and skills throughout their working lives, or as it is popular to say, "lifelong learning". The main challenge is to find the balance between fundamental knowledge and cognitive and socio-behavioural skills.

Whether these changes will lead to greater freedom of labour or will deepen its exploitation remains to be seen. One thing is clear, however, digitalization and new communications will reshape the understanding of labour and its use.

From the above, we can conclude that the described changes and evolving processes will lead to significant changes in the development and functioning of industrial relations as a whole. What direction they will take and how these relations will develop will also depend on what are the views and what policies the participants in this process will develop in order to adapt to the changes that are taking place.

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ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 30 (2), 2021

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POLICIES FOR LIMITATION OF THE REGIONAL DISPARITIES DIFFERENCES IN THE EDUCATIONAL INFRASTRUCTURE

The study is dedicated to the current and insufficiently developed problems related to the setting of priorities in the policies aimed at overcoming the existing regional differences in the educational infrastructure of the country. This statement predetermines the main goal of the study – on the basis of the existing European and national regulatory frameworks in the field of regional development and education, as well as the author's study of the differences in educational infrastructure by regions and districts of the country, to propose policies for their restriction.

In view of the main goal, an analysis and evaluation of the European and national regulatory frameworks, as well as of the current legal documents in the fields of education and regional development have been carried out. The focus of the study is: the proposals made for priority policies to reduce regional disparities by regions and districts, according to their concrete specifics features. These policies have a targeted nature and practical applicability in the activities of the relevant local authorities in this area. The proposed policies in territorial terms are defined by different levels of education.

In a conclusion of the study, systematized conclusions are made, which expresses the opinion that the set of proposed policies is a guarantee for achieving minimal differences between regions and districts in terms of their educational infrastructure.

JEL: R11; I2; J71; R58

Introduction

The European Strategy for the Development of the Member States "Europe 2020" launches the introduction of a European economic model through the achievement of economic sustainability and smart growth; social security and "inclusive growth", focusing on training and employability. The Strategy devotes an important place to education as an object of socio-economic policies for its innovative development. This fact is expressed in the formulation of two main goals of the development of the educational system:

- At the end of the forecast ten-year period – 2020, on average for the EU at least 40% of the population in the age range 30-34 is expected to have received higher education;

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- The reduction of the share of early school leavers/education will continue as to 2020 the set national goals will be reached (in percentage terms).

In addition to these main objectives, the overall strategy in the field of education defines other objectives of particular importance, namely the transformation of lifelong learning and educational mobility into reality. Policies to increase the quality and efficiency of education are envisaged as universal for all elements of the education system.

The development of the educational system and, above all, of its institutional infrastructure largely determines the changes in the indicators for the level and quality of life of the population. There are direct and feedback links between these two areas, through which the real interactions are revealed, leading to the determination of the priorities and the policies for their improvement. Of special scientific and applied significance is the study of the educational infrastructure in a territorial aspect – by regions and districts of the country. This approach reveals regional differences, as well as opportunities for efficient allocation of investment resources, as a result of which the cumulative effects are multiplied, both in education and in terms of living standards. The identified regional differences point to concrete specific policies to limit them.

It should be noted that the author has completed an in-depth detailed study of the state of educational infrastructure, both with average values of selected specific indicators for Bulgaria and with specific values for six territorial regions and 28 districts of the country (Hyuseinov, 2020, pp. 44-78).

The profile analyzes and assessments of the regional differences provided an opportunity for their measurement by levels of education. The obtained real results allow to systematize the problems in the development and the differences between the territorial units, which is a rich specific information about the regional differences by regions and districts. On this basis, the proposals for conducting targeted policies to limit them are based.

From the point of view of these formulations the main goal of the research is formulated: to propose policies in line with the European and national normative frameworks in the field of regional development and education, aimed at increasing the efficiency and quality of the educational infrastructure on the basis of reducing regional disparities.

The specific research tasks derive from the main goal of the research:

1. Analysis and evaluation of the European and national regulatory frameworks for regional development;
2. Analysis and evaluation of the European and national normative frameworks in the field of education;
3. Proposals for effective policies through which to reduce the differences between the minimum and maximum values of the territorial differences by levels of education – pre-school, school and higher education;
4. Proposals for specific policies and measures to achieve a minimum share of school leavers.

The expected results from the implementation of the main goal and in particular of the research tasks will direct the respective local as well as state bodies to the correct choice of profiled policies for reduction/elimination of inequalities in the development of the educational infrastructure by regions of the country.

1. European and National Regulatory Framework in the Field of Regional Development

It is worth noting that in the field of regional development, there is a very effective regulatory framework and programming documents that address issues related to both regional developments as well as interregional and intraregional differences.

One of the objectives of the Treaty on the Functioning of the European Union[2] is to reduce inequalities between the levels of development of the various regions and the backwardness of the most disadvantaged regions. The European Union also supports the achievement of these objectives through the actions it takes through the Structural Funds (European Agricultural Guidance and Guarantee Fund, Guidance Section, European Social Fund, European Regional Development Fund), the European Investment Bank and other existing financial instruments.

First of all, it should be noted that in 2008 a new Regional Development Act (RDA) was prepared and adopted, which is in line with the provisions of European law. With this act, Bulgaria, as a member state of the European Union, has achieved harmony between the national legislation for regional development and the legislation of the European Community. The act regulates the objectives of the policies for regional development and reduction of regional differences with regard to:

- The degree of economic, social and territorial development;
- Providing conditions for accelerated economic growth and a high level of employment;
- The development of the territorial interconnections.

In the same year 2008, the European Commission published a Green Paper on Territorial Cohesion, which addresses the current objectives and opportunities of territorial interconnections in order to improve the use of the living environment and the territorial dimensions of sectoral policies.

The objective of territorial cohesion, adopted in the Treaty of Lisbon (2009), has been added to the objectives of economic and social cohesion. Territorial cohesion policies must focus on areas with specific geographical and demographic problems.

[2] Consolidated texts of the European Union Treaty and of the Treaty on the Functioning of the European Union – Consolidated version of the Treaty on European Union – Consolidated version of the Treaty on the Functioning of the European Union – Protocols – Annexes – Declarations annexed to the final act of the Intergovernmental Conference Treaty of Lisbon, signed on 13 December 2007, Official Journal C 326, 26/10/2012 P. 0001 – 0390

Of particular importance in the field of regional development is the EU Strategy "Europe 2020" (adopted in 2010), which aims to improve the coordination and linkage of various policies and national strategies for balanced and sustainable regional development within the EU. Achieving smart, sustainable and inclusive economic growth must meet today's global challenges for the development of countries and regions regarding the introduction of innovative technologies, the creation of highly educated and competitive human resources.

The European policy for territorial cohesion is also implemented through the adoption of the very important document "Territorial Agenda of the European Union – 2020". This document focuses on the territorial dimension of European cohesion policy, as well as on the Europe 2020 Strategy. The main goal for achievement is "territorial cohesion in the conditions of growing challenges in the field of regional development:

- Growing globalization and structural changes since the 2009 economic crisis;
- The changes of the European Union in connection with the growing dependencies between the regions;
- The demographic situation in the different territories and the social challenges.

Territorial cohesion policies are also relevant in the Fifth Report on Economic, Social and Territorial Cohesion published by the European Commission in 2011, which outlines cohesion priorities and policies after 2013. The report emphasizes the need to concentrate European and national resources in a limited number of priorities. This approach means setting clear and measurable goals and indicators for the expected results.

According to the requirements of the Europe 2020 Strategy, Bulgaria is developing a "National Program for Reforms of the Republic of Bulgaria". This long-term framework document sets out ten-year development objectives and policies for all sectors and their territorial dimensions.

The achieved positive changes in the development of the European and national normative frameworks in the field of regional development created preconditions for the development of the National Strategy for Regional Development (NSRD) for the period (2012-2022). This Strategy defines the main goals, priorities and specific goals, in accordance with the requirements of the Europe 2020 Strategy, taking into account the guidelines of the EU Territorial Agenda 2020, as well as the National Reform Program of the Republic of Bulgaria (2012-2020) and the National Development Program "Bulgaria 2020". The overall system of strategies and programs is the main strategic documents defining the goals and priorities for the regional development of the country until 2022.

From this point of view, it is important to note that the NSRD includes a separate section that deals with the problems of the territorial and spatial development of the country and its regions. The Methodological guidelines for the development of the National Concept for Spatial Development (NCSD) of the Republic of Bulgaria for the period up to 2025 have been reported.[3]

[3] The national concept for spatial development will be developed by the end of 2022.

According to Regulation 2015/1017, the European Parliament and the Council[4] of the EU need comprehensive action created by the lack of investment and growing disparities between regions, as well as to strengthen confidence in the Union economy, and incentives to create an investment-friendly environment in the EU. Member States could support economic recovery. Along with the renewed boost in investment finance, effective and economically and socially sustainable structural reforms, as well as fiscal responsibility, are a way to create beneficial synergies where investment projects help increase employment and demand and lead to a lasting reduction in the gap between real and potential GDP, as well as to increase potential growth. The European Fund for Strategic Investments (EFSI), strengthened through the involvement of the Member States, must complement the overall strategy to increase the Union's competitiveness and attract investment. The Regulation emphasizes that the European Fund for Strategic Investments (EFSI) should also support projects in the fields of education, training, ICT development and digital education, as well as projects in the cultural and creative sectors, in tourism and in the social sphere. Investment in these areas should be based on a holistic approach, which in any case shows that the value inherent in education and culture is being duly respected.

2. European and National Normative Framework in the Educational Infrastructure

The right to education, according to the UNESCO definition, should be understood as a multilateral law[5] that has at least two dimensions:

- quantitative – everyone has the right to education[6]
- quality – access to all forms of education.

The concept of primary education has expanded the scope of the right to education, namely: "from primary or elementary education to lifelong learning".

The need to promote regulation in order to universalize access to primary education is recognized in the UNESCO Medium-Term Strategy (2002-2007). The strategy states: "UNESCO's big task will be to support member states in policy reforms as well as legal instruments to promote universal access to basic education."

The Convention against Discrimination in the sphere of education[7] introduces a definition of discrimination. The Convention contains an extremely detailed definition of discrimination

[4] Regulation (Eu) 2015/1017 of the European Parliament and of the Council of 25 June 2015 on the European Fund for Strategic Investments, the European Investment Advisory Hub and the European Portal for Investment Projects and amending Regulations (EU) № 1291/2013 and (EU) № 1316/2013 – European Fund for Strategic Investments.

[5] See Unesco operational definition of basic education Thematic Framework (December 2007).

[6] Universal Declaration of Human Rights, 1948, Article 26.

[7] The Convention against Discrimination in Education was adopted by the General Conference at its eleventh session on 14 December 1960 in Paris. It was ratified by Bulgaria by Decree 508 of November 17, 1962.

in education, which covers all possible signs that could violate equality in treatment in education.

In the Convention, education refers to all of its types and levels and includes access to education, the level and quality of education, as well as the conditions under which it is provided.

In a recommendation of the Council of Ministers on policies to reduce early school leaving, minimizing early school leaving[8] is essential to achieving a number of key objectives in the framework of the Europe 2020 strategy. Reducing early school leaving affects both the goals of "inteligant growth" by raising the level of education and training and the goals of "inclusive growth", addressing one of the main risk factors for unemployment, poverty and social exclusion. School drop-outs are barriers to employment and economic growth and are closely linked to poverty, social exclusion and discrimination. A comprehensive analysis of the factors behind the phenomenon of "dropping out", including social aspects, is needed. In his publication, the author[9] defines the scale of the phenomenon of "dropping out of school". The article reveals the territorial differences by reasons for leaving and by levels of education. The changes in the differences were identified and the changes in the range of drop-outs by groups of classes, reasons for leaving and regions for the whole studied period were analyzed. Proposals have been made for appropriate policies and measures to achieve minimum relative shares of school leavers.

A European Parliament[10] resolution states that from 2008 to 2018, the levels of early school leavers in the EU are consistently high at 10.6%. The European Parliament calls on the Commission and the Member States to step up their efforts to reduce early school leaving, especially among disadvantaged people, as well as to implement comprehensive prevention strategies and to involve early school leavers in education and training. One of the EU's priorities and the main goal of Europe 2020 in the field of education is to reduce the share of early school leavers from 15% to less than 10%, which will significantly contribute to poverty reduction, given the that a sufficient level of skills and competences is a prerequisite for young people to be employed in the labour market.[11]

In the National Normative Framework in the sphere of education has acted a special Protection against Discrimination Act, which has been in force since 01.01.2004. It regulates the protection of all natural and legal persons on the territory of the Republic of Bulgaria against all forms of discrimination. The Protection against Discrimination Act, clearly

[8] Council Recommendation of 28 June 2011 on policies to reduce early school leaving (Text with EEA relevance) 2011 / C 191/01.

[9] Hyuseinov, B. "The problem of "dropping out of school" – challenges, causes, policies","Population" Magazine, Institute for Population and Human, Book 1, Article 6, 2020.

[10] REPORT from the Committee on Employment and Social Affairs on the European Semester for economic policy coordination: employment and social policy aspects in the Annual Strategy for Sustainable Growth 2020 Motion for a European Parliament resolution; https://www.europarl.europa.eu/doceo/document/A-9-2020-0025_BG.html#title2

[11] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, The European Platform against Poverty and Social Exclusion: A European Framework for Social and Territorial Cohesion, European Commission, Brussels, 16.12.2010.

regulates the rights of citizens to access education. All aspects concerning the prevention of discriminatory practices in the Bulgarian school are affected.

The exercise of the basic constitutional right to education, which must be exercised without discriminatory manifestations, is also proclaimed in the Law on Preschool and School Education, which contains anti-discrimination provisions.

The preschool and school education act[12] explicitly defines the principles that characterize education as a national priority:

- equal access to quality education and inclusion of every child/student;
- equality and non-discrimination in the conduct of pre-school and school education;
- preservation and development of the Bulgarian educational tradition;
- inclusion through education in Bulgarian language (art. 3, para. 2, items 3-7).

The main goals of preschool and school education are:

- acquisition of competencies for application of the principles of sustainable development;
- early detection of the talents and abilities of each child and student and promotion of their development and realization;
- acquisition of competencies for understanding and applying the principles of democracy and the rule of law, human rights and freedoms, active and responsible civic participation;
- formation of tolerance and respect for the ethnic, national, cultural, linguistic and religious identity of each citizen;
- formation of tolerance and respect for the rights of children, students and people with disabilities;
- knowledge of national, European and world cultural values and traditions (Art. 5, para. 1, items 2, 4, 5, 7-10).

The set of the stated main goals predetermines the motivation of the Bulgarian families to provide their children with quality education, provided by the innovative regional development of the educational infrastructure.

The higher education system has a Higher education act (HEA), which contains regulatory clauses for non-discrimination in the field of education: “In higher education, privileges and restrictions related to age, race, nationality, ethnicity, gender are not allowed, social origin, political views and religion, except for the cases explicitly stated in the Regulations for the activity of the higher school in accordance with the peculiarities of the education and the future profession” (art. 4).

According to the Higher Education Act (Art. 22), the autonomy of higher education cannot be violated by: carrying out activities that violate the constitutional rights of members of the

[12] Law on Preschool and School Education, in force since 01.08.2016 (Promulgated SG No. 79 of 13 October 2015),

academic community related to race, nationality, ethnicity, origin, religion, belief, political affiliation.

The law also contains measures for the so-called positive discrimination against different categories of persons. According to Art. 68, para. 3 of the Higher Education Act, under facilitated conditions and in accordance with the procedure determined by the regulations for the activity of the higher school, the following candidate students are accepted, who have successfully participated in the competitive examinations:

- persons with permanent disabilities and reduced working capacity (70% and over 70%);
- war invalids and war victims;
- round orphans;
- mothers with three or more children;
- twins, when they have applied at the same time in the same professional field and higher school and one of them has been accepted.

In addition, Art. 70, para. 2 stipulates "Students, doctoral students and postgraduates – orphans, people with sensory disabilities and others with permanent disabilities and reduced working capacity 70% and over 70%, war invalids, and war victims and persons raised until adulthood in homes deprived of parental care, mothers with children up to 6 years of age and those who have a medical examination, are entitled to special benefits, regulated in the regulations of the higher school".

Thus, by creating favourable conditions for training of students with special needs, the opportunities for access and for expanding the range of students in the regional educational infrastructure are significantly increased.

In this regard, an important role is assigned to the so-called Priority axis 3 "Regional educational infrastructure", which has a greater territorial significance. It covers municipalities in view of its specific profile related to national/regional social and economic needs. The educational infrastructure includes vocational, specialized, auxiliary, sports schools, schools of culture and arts, as well as universities. In this sense, Priority Axis 3 is in support of the measures identified in the Partnership Agreement, in the National Development Program: Bulgaria 2020, as those provided for in the National Reform Program, regarding the regional dimensions of the education system.

The priority axis will ensure the implementation of the most important activities related to the modernization of higher education institutions, in accordance with Objective 5 "Modernization of the university management system and clear definition of university types and educational qualifications" under the plan for the implementation of the Strategy for development of the higher education in the Republic of Bulgaria.

The analyzes and assessments of the European and National regulatory frameworks provide a solid basis for the development of specific policies for the different levels of education regarding the regional differences in the educational infrastructure of the country.

3. Priority Policies for Limiting Regional Disparities in Educational Infrastructure

3.1. Specific policies for changes in the pre-school infrastructure

The systemized analyzes, assessments and conclusions about the development of the educational infrastructure in the regional aspect by regions and districts revealed the specific character of pre-school education as the foundation of the educational system.[13] Achieving the necessary high quality of pre-school education requires innovative development of the educational infrastructure.

The regional profiles of the study provide opportunities, by analyzing and systematizing conclusions based on rich information processed, to shape the problems in the field of pre-school education. In doing so, the disparities found between regions, and in particular between districts, point to the correct choice of effective and efficient policies that will reduce the differences, especially with regard to their minimum and maximum values.

It should be emphasized that the adopted Law on Preschool Education (in force since 01.06.2016) provides the appropriate policies, measures and modules aimed at achieving innovative education for children. It is extremely valuable to say that it is only through quality pre-school education that it is possible to ensure full individual development of each child in accordance with the modern requirements.

Before outlining the specific policies/measures for individual regions and districts, it is important to note that territorial disparities are not significant and did not cause significant changes in the coverage of children during the 2010/2017 survey. This fact destines the type of policies/measures that should be specific. They should target the regions/districts with lower net odds values, especially those below the average for Bulgaria.[14]

High-quality education and care in early childhood play a key role in creating equal opportunities and limiting early school leaving and low achievement at a later stage.[15] In Bulgaria, the percentage of children under 3 years of age enrolled in official childcare facilities is much lower than the EU average (16.2%; EU average 33.2%), especially in some areas and among vulnerable children groups. Attendance is also limited by the lack of places in kindergartens, especially in the large cities.

The high degree of aggregation of territorial differences across regions of the country in some ways limits the possibilities for more specific policies to reduce them. Obviously, at this regional level, policies to increase the reach and availability of children in the age group of

[13] The indicated analyzes, assessments and conclusions are contained in the above mentioned by the author study (p. 1).

[14] The net coefficients measure the scope, respectively the children's access to pre-school education. The statistical name of this coefficient is: Net enrollment ratio in kindergartens of children in the age group 3-6 years by regions and districts. Its essence consists in calculating the relative share of enrolled children of a certain age group to the number of permanent residents of the same age group.

[15] European Semester 2020: assessment of progress in the structural reforms, prevention and correction of macroeconomic imbalances and results of in-depth reviews in accordance with Regulation (EU) № 1176/2011, Brussels, 26.2.2020.

3 to 6 are indicative, i.e. they should target the areas with the lowest net odds values, as well as the "Places per 100 children in kindergartens" indicators.

Of interest are the values of these indicators in the Southwestern region: in terms of the number of places in kindergartens, there is a minimal shortage – 97 places per 100 children for 2017. This fact is explained by the formation of the area as a developed educational regional centre, which is confirmed and its net odds ratio of 83% is the highest compared to other regions.

Therefore, policies towards the South-west region need to focus on expanding its kindergarten facilities. All other areas have such a base in excess of their needs. However, it is clear that having a large material base in these areas does not always mean a high level of enrollment of children in pre-school education. This is the case with the South-east region, where the places of 100 children in kindergartens are 105, but in terms of coverage, it has the lowest net coefficient – 76.8%. The situation is similar in the North-west and South-central regions.

The policies in these areas should be differentiated according to the specific regional reasons for the lower reach of children, despite the availability of kindergarten facilities. The aim of these policies should be to limit/eliminate the impact of regional causes of lower attendance of kindergartens.

The results of the horizontal and vertical analyzes of the values of the net coefficients for pre-school education by districts of the country identified the set of areas to which concrete, specific policies should be addressed, tought with a slight decrease for the 2010-2017 study period. Such were the districts of Razgrad, Dobrich and Targovishte. Definitely, it could be stated that in these areas not only that there is no deficit of places in kindergartens, but they have a very wide material base compared to their needs. In Razgrad district there are 134 places for 100 children in kindergartens; in region Dobrich – 130 places and in the district of Targovishte – 113. These findings are aimed at developing policies aimed at limiting the causes that have led to a reduction in the reach of children, i.e. targeted policies to increase the reach of children in pre-schools are needed in these areas.

Vertical analysis of the net coefficients shows that 16 districts have values below the average net coefficient for Bulgaria, which amounts to 80%, of which only 5 regions have net coefficients below 75% – Kardzhali, Haskovo, Pazardzhik, Targovishte and Sliven. Again, the lower values of net coefficients in these areas are not the result of scarcity of places in kindergartens, but are due to regional reasons, usually of socio-economic nature. This finding clearly sets out the directions of the relevant regional policies to increase the reach of children in pre-school education, namely to take measures that would ensure the elimination of the reasons preventing the increase in the reach of children.

It is necessary to point out that in 25 districts the places in kindergartens are above the reference level, i.e. over 100 and in only three districts – Sofia (capital), Plovdiv and Varna are 90.94 and 94 respectively, which despite the insignificant differences, directs the implementation of policies/measures to achieve full coverage of children in kindergartens. The main reason for this relatively minimal scarcity of places is the large influx of settlers in these major cities. Policies should be guided in two directions: on the one hand, reaching full

coverage and on the other, measures to limit the influx of settlers, which would complicate not only educational but also economic, social and spiritual infrastructure.

In direct relation and influence on the values of the net coefficients for pre-school education, i.e. the coverage of children by regions and districts of the country is the problem of the fuller coverage of children of ethnic origin from day nurseries and especially in kindergartens and pre-school classes. It is clear that the solution of this problem is first and foremost related to the level of command of the official Bulgarian language. As is well known, pre-school education and training are assigned too responsible tasks to prepare children for a smooth transition to the next educational stage – primary education. The main factor for the realization of this requirement is unconditional knowledge of the Bulgarian language at the necessary level for the school education.

The analyzes and evaluations show that there are no problems with regard to the available material base for more comprehensive coverage of children from ethnic communities. Obviously, the reasons for their incomplete coverage are mainly due to the difficulties associated with their inclusion. This fact, once again clearly proves the need for the development of policies and concrete measures for their integration, first of all, by applying appropriate forms for learning the official Bulgarian language.

The adopted "Strategy for the Educational Integration of Children and Students from Ethnic Minorities in Bulgaria" (2014-2020) focuses on the providing access to education and training of disadvantaged ethnic groups with a focus on Roma children. This statement adds to the requirement in the education system to cover all children who have difficulties mastering the official language.

Coverage of all children, and especially children of ethnic groups from the earliest age, can be achieved in the system of childcare facilities for upbringing, upbringing and training:

- Nursery from two/three years of age to the age of four/five; child parenting and upbringing for a period of two years;
- Kindergartens – from four/five to six years of age, i.e. one/two years of parenting, upbringing and appropriate education for children;
- Pre-school class – from six to seven years of age, i.e. one-year education for a full and trouble-free transition to school education not only in speaking Bulgarian but also in the required level of knowledge and behaviour.

The proposed early childhood is an appropriate approach to policies for the coverage and inclusion of young children in a natural social environment, where they will be raised, educated and, accordingly, their age trained with due care and attention. In this way, they will build up modern values, will show curiosity and desire to go to school. It should be emphasized that policies and measures in this area need to include the establishment of appropriate teams with special education and, above all, the educators and teachers to meet the requirement to use literally Bulgarian fluently.

In order to achieve the results that are really desirable and to ensure the highest possible coverage of children, it is appropriate to make the attendance of childcare facilities compulsory. This applies more strongly to the children of parents who do not have or have

an educational degree lower than primary education and are therefore unable to educate and provide a quality environment for their children's education. Naturally, the approach proposed does not limit families with children whose parents have a higher level of education to prefer, i.e. on request, their children attend nurseries and gardens.

As a result of the proposed productions and approaches, a considerable potential contingent of young children was formulated, especially Roma, who will attend childcare facilities. Obviously, at district and municipal level, it is necessary to evaluate the available facilities by type of kindergarten, to prepare information on the number of parents with low/ no education and, accordingly, the number of their children who will attend obligatory kindergartens. This administrative act is of high social importance, especially for municipalities with compact Roma population. It should be noted that for families with children/in a relationship for who have been found by social workers that the home environment is completely unsuitable for their upbringing, behaviour and education, the compulsory approach is taken when placing children in appropriate childcare institutions.

The proposed approaches and measures require appropriate changes and additions to the existing legal framework in terms of material, financial and educational structure with a view to ensuring the full day coverage of children in pre-school education.

3.2. Priority regional policies for school education

The nature of policies to increase the reach of pupils in school education (grades I-XII) is determined by the degree of differences between territorial units. With the exception of the Southwestern region, which ranks first in student enrollment (85% in 2017), the other districts have lower enrollment and minor differences. From this point of view, it is appropriate to target regional policies to limit the differences to the areas with the lowest net odds values (below 80%). These are the districts of Silistra, Pazardzhik, Sliven and Targovishte. As a main reason is the decrease in the number of students in all three levels of education. One of the main reasons for the decline in the number of students is the phenomenon of "leaving the education" with its inherent specific causes that cause it.

The aim of regional policies is to bring students closer to the standard maximum, especially by limitation/elimination the phenomenon of "leaving school education". Obviously, this phenomenon, despite the not high values of its scale, has an effect on reducing the reach of students in the age range from 7 to 19 years.

The implementation of regional policies aimed at reducing the number of school leavers at the district level is mainly indicative, due to their high degree of aggregation. In order to achieve regional policy specification, it is necessary to disaggregate them by area, incl. in the constituent municipalities.

Over the course of study, an interesting paradox has emerged in a result of the increasing tide of population/students in the age group 7-19 from smaller to larger regional educational centres. This process leads to a decrease in student reach in large areas, incl. and in Sofia

(Capital), where for the eight-year period it is close to 5%.[16] It is clear that, in the districts/municipalities that are the "source" of students dropping out of local schools, active socio-economic policies need to be pursued. In this way, they will retain students and their families. First of all, it is appropriate to study their educational preferences and, accordingly, to provide the adequate facilities.

Through the implemented analyzes by grade level ascertained that the inflow of primary school students is highest, which implies an expansion of its school base. Obviously, this process is gaining speed, so it is imperative that appropriate policies be developed and implemented for young families with young students in primary education in order not to leave their places of origin. These policies must be targeted and based on an economic and social stimulus.

It should be made clear that the reach of students in school education is conditioned mainly by the leaving/drop-out of students from the education system. This is a serious limitation/liquidation problem that focuses mainly on the efforts of the Ministry of Education and Science, as well as the relevant regional authorities by districts and municipalities. It is appropriate they to direct their policies and measures to remedy the causes that have caused more the school leaving. Of particular importance is the approach that differentiates the strength of manifestation of the main reasons for leaving by education level.

The priority character of the policies to minimize the school leavers requires the organization and implementation of appropriate action measures, especially for primary education, for reasons that have left school. This approach provides valuable information needed to make specific targeted management decisions by districts/municipalities.

The results of the assessments of the ranking of the degree of influence of the main causes on the scale of school leavers show that the "family reasons" are identified with the greatest weight in all districts except Sofia (Capital). For these reasons, not only the socio-economic conditions but also the level and quality of family motivation and value orientation of both parents and children should be taken into account. Obviously, in a family situation that does not prevent leaving, it is necessary to implement prevention policies and, in some cases, intervention by the municipal authorities.

In these directions is orientated the developed Strategy to reduce the proportion of early school leavers (2013-2020), which is at the heart of policies and key measures to prevent early school leaving. The main prevention policies are:

- providing a positive educational environment;
- access to education especially for children with special educational needs;
- increase parental involvement; financial support for families in need.

Of particular note is the important reason for dropping out of school, namely the manifestations of various forms of discrimination against students. This factor is not examined directly by national statistics and therefore, no relevant information is published.

[16] Obviously, the reason for this paradox arises from the lack of school facilities, which cannot cover the high influx of students to the large regional centers.

However, there are scientific and sociological studies that reveal the existence of discriminatory manifestations in the field of education. This fact obviously has a negative psychological impact on discriminated students, who often leave school in a traumatized mental state.

Of interest are the results of an empirical legal and sociological study conducted by the Institute of State and Law (IDP) at the Bulgarian Academy of Sciences on "Discrimination in the field of school education – building anti-discrimination legal awareness".[17] It is noteworthy that the prevalence of discrimination on the grounds of "education" ranks second in the ranking by the degree of manifestation "very common" and "rather common" – 32.3%. With a higher prevalence is discrimination on the grounds of "ethnicity" (38.9%).[18]

The assessments of the anti-discriminatory legal awareness of teachers towards students are especially indicative. When asked whether they are aware of different treatment of students in similar circumstances, 14% answered "yes" and 86% answered "no". Again, the attribute "ethnicity" ranks first – nearly 35%, followed by the attributes "material status" – nearly 20%, "religion" – nearly 15% and "gender" – 5%. Another important point is the identification of the perpetrator of the discriminatory act: with almost 70% these are classmates and with almost 15% – teachers.

The results establishing the degree of risk of discrimination on various grounds are also of high significance – with equal relative shares in the second place are the students of Roma origin, as well as the students with disabilities – 43%. The first place, however, is occupied by students who come from poor families – 51%, i.e. poor students are at risk of discrimination by their classmates. This defines them as a strong vulnerable group with low social status. As the majority of poor families with students are predominantly of Roma ethnicity, the signs that discriminate against students are superimposed. In this case, there is multiple discrimination, which exacerbates the negative consequences mainly in psychological and social aspects.

The mentioned facts illustrate the complex but particularly important problem of discrimination against students, which requires counteraction with the application of European standards in order to significantly reduce it. This is the mechanism that would lead to a significant "narrowing" of the phenomenon of "dropping out of school". Exploring the close link between discrimination and school drop-outs by students at risk of discrimination and actual discriminatory action will allow specific anti-discrimination actions to be taken in school education, which in turn will limit the phenomenon of "dropping out "for this group of students.

In this regard, the results of the study conducted under the project "Prevention of discrimination and creation of equal opportunities" (funded by the Operational Program "Human Resources Development", co-financed by the ESF) are also of interest. With regard to the manifestations of discrimination in the field of education, the emphasis is on the

[17] Commission for Protection against Discrimination, 2017, "Identification and development of profiles of the groups and communities most affected by the risk of discrimination ", Consolidated analytical report by BGASIST OOD;
[18] As a percentage of the total number of respondents.

policies and measures, the implementation of which will ensure the so-called inclusive education. This process, in turn, as well as the implementation of the laws, will gradually lead to the "elimination of negative discriminatory practices in education". The risk groups of students at risk of discrimination are identified: from Roma origin, with disabilities, victims of violence, from rural areas, i.e. students at risk depending on their personal characteristics and social background. Important are the specialized educational problems for educating students in the behaviour of tolerance and mutual assistance.

It is necessary to create an environment of safety, security and appropriate protection of students from discrimination in the schools. Through the introduction of multicultural education, as well as the organization of the so-called mentoring programs for students at risk of dropping out of school education is possible to create conditions to prevent discriminatory actions.

Measures, taken to limit the number of school drop-outs by the Ministry of Education, have had some positive results – since the beginning of the 2018-2019 school year, when 3000 students who left/drop-outs school came back to the classrooms through "door-to-door" approach.

This fact confirms the implementation of a successful targeted policies by the Ministry of Education and Science, which realizes its operational goals, consisting in the development, implementation and monitoring of a comprehensive and integrated policy to increase the scope of the education system based on international cooperation with a clear division of responsibilities, interaction between different levels of management. A key point in the Strategy is the goal of "providing appropriate educational support for the development of each child and student".

Under the opinion of the author of this study, the multidisciplinary analyzes and evaluations of the phenomenon of "drop-out" show that it can be more restricted, since the necessary conditions and prerequisites for the education system and the relevant state, district and municipal authorities are available to integrate a mechanism to accelerate the achievement of real results with regard to the significant reduction of drop-outs. The modern educational infrastructure excludes manifestations of this negative phenomenon, which is incompatible with the requirements for a high quality of education.

3.3. Innovative policies for the regional development of the higher education

The condition and policies for changes in the educational infrastructure largely determine the access and reach of the population by regions and districts of the country in the higher education system. Its high importance places modern requirements on the structure and quality of the regional educational infrastructure. They consist not only in its quantitative but also in qualitative development, which provides dynamic links and interdependencies between the educational profiles of training and the demand on the labour market by highly educated specialists at European level. Obviously, the central problem lies in both improving access and increasing the share of graduates of higher education, as well as in achieving a purposeful, business-oriented structure of majors in higher education. The defined staging is

present in a number of strategies, programs and action plans, but has not yet been real implemented.

The share of higher education graduates is still below the target of Strategy Europe 2020, and the provision of higher education is partly in line with the needs of the labour market. In 2018, their share among people aged 30-34 reached 33.7%, but is still below the national target of the Europe 2020 strategy of 36%. In 2017, 8.1% of high school graduates, secondary education in Bulgaria completed their higher education abroad, and this number significantly exceeds the number of international students in the country. The share of higher education graduates in science, technology, engineering and mathematics (STEM) is still small (20.5% in 2017 compared to the EU average of 25.8%).[19]

In this context, the realization of the mentioned relations between the business and the educational infrastructure of higher education in territorial aspect and mainly by districts/ municipalities is of particular importance. Only in this way can it be purposefully restructured and formulated on a territorially determined market principle. This approach ensures the effective use of the existing higher education infrastructure as well as its updating according to the needs of the business profiled expansion.

Such a statement could be applied to the **Northwestern region**. In view of the strategic goals for its development, it is necessary for the relevant authorities to update their projected views on the structure of the economy of this region, which they should carry out jointly with business representatives. As a result of these actions, the need to create a higher education institution with appropriate profiles will emerge, which in turn will move the Northwestern region not only educationally and economically but also spiritually.

In view of the made proposal, it is appropriate to reduce to some extent the development of higher education in established university centres. This will lead to the regulation of a number of demographic, social and educational problems in territorial terms. Specifically, for the case "Northwestern region", such changes are appropriate in closer territorially located university centres. These are the districts of Veliko Turnovo and Gabrovo with the value of the net coefficients for 2017, respectively 186.5% and 167.5%. The determined values of the net coefficients, which are significantly higher than the coefficients for the districts of Varna (115.7%), Plovdiv (109.3%) and Sofia-Capital (128.1%) prove not only the possibility but also the need for transfer/return of students to the Northwestern region. It should be emphasized that the districts of Veliko Turnovo and Gabrovo are territorially smaller than the stated large districts and it can be argued that this fact causes a number of serious problems for the economic, social, transport, housing, health, etc. infrastructures.

The presented considerations for the development of the Northwestern region by creating the conditions for the construction of a modern educational infrastructure, including a higher education segment directly related to the current and future profiles of local businesses, will surely change the level and quality of life in the area. This act will also be in line with

[19] Report for Bulgaria for 2020 accompanying Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank and the Eurogroup.

European requirements for building a knowledge-based society and economy to provide innovative specialties/profiles in the labour market.

3.4. Synthesized conclusions concerning the proposed policies for reduction of the regional disparities

In a conclusion of the proposed in the study-specific policy for and the concrete changes in the different levels of education related to the respective educational infrastructure could be synthesized as the most important aspects of the policies:

Preschool education

- policies to make fuller use of the available educational infrastructure in order to increase net odds values, i.e. the reach of children in kindergartens. These policies should be of a differentiated nature and aim at limiting/eliminating the impact of regional causes that have led to lower attendance at kindergartens;
- policies to reinforce the fundamental nature of the objectives of pre-school education, namely to ensure that children move smoothly into the next educational stage – primary education. The main factor for achieving this goal is the removal of the language barrier, respectively the command of the official Bulgarian language, which implies a fuller coverage of children from ethnic communities, as well as the implementation of appropriate forms for its learning;
- policies to cover all children, and especially Roma children from early childhood, in the system of childcare facilities for upbringing, behaviour and education. In doing so, it is necessary to ensure regular attendance at childcare facilities by children whose parents do not have or have a low educational level, i.e. these parents are unable to educate and provide a quality environment for their children's education.

School education

- implementation of regional policies to limit the reasons for the incomplete reach of students in the age group of 7-19 years;
- policies to regulate the flow of students to the larger district centres, and in particular to Sofia (Capital). Implementing student retention policies in areas where there is a high tide, creating an appropriate educational infrastructure to suit their educational preferences;
- specific policies for young families with primary school children who register the highest inflow to larger district centres;
- a system of appropriate policies to limit/eliminate the "drop-out" phenomenon. They should aim at eliminating the reasons behind his "placement" in the school education;

- a package of policies targeting the families of children who have left school for family reasons, which have the greatest weight in all districts except Sofia (Capital). When conducting them, it is important to take into account not only the reasons of socio-economic nature, but also such as family motivation and value orientation.

Higher education

- policies for changes in the structure and quality of the higher education infrastructure in the regional aspect;
- policies to ensure a dynamic link between the educational profiles of training and the demand on the labour market for highly educated professionals at European level;
- policies for the creation and development of higher education infrastructure, tailored to the specific characteristics of relatively less deprived areas (Northwestern region), directly linked to current and future local business profiles in order to achieve noticeable changes in the standard and quality of life of the population in this region.

In conclusion, it is obvious, that in all three levels of education, there are important problems related to the development of their educational infrastructure, which requires the development and implementation of effective policies for its improvement, modernization and expansion in accordance with the contemporary requirements for achieving innovative education and, respectively, high-tech economic development and the society.

The development of the regional education system must guarantee equal access to quality education in order to ensure competition on the labour market and equal starting positions in equal other conditions. The existence of regional educational differences is a result of both economic imbalances and ethnocultural and social inequalities at national and local levels. The compensatory mechanisms are the policies for overcoming the differences – the social policy of the country in general and the possibilities for conducting the regional educational policy.

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ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 30 (2), 2021

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SOCIAL DESIGN AS TECHNOLOGY OF SOCIAL MANAGEMENT

Crisis socioeconomic developments our country has been facing lately gave rise a to brand new approach to managing social problems embodied in social design. Social design as a technology of social management has been taking ever more significant place in the development of the Ukrainian society. It has been a while since social design proved to have a significant impact in the developed countries, which extensively design and implement social projects. Social design as it is today should be considered as a social practice phenomenon of the globalized society. Research of social design as a functional, applied management methodology and technology is also important for the development of practical principles of social management and social security. This research is aimed to improve and further develop theoretical provisions and practical recommendations as to the use of social design as a technology of social management in the development of Ukrainian society. The object of this study is the process of use of social design as a technology of social management when addressing social problems of society. The subject of the study is theoretical and applied aspects of social design as a social management technology. The paper analyzes and generalizes the conceptual framework of social design; defines the role and function of social design as a technology of social management, offers a functional block diagram of social design (it details the object, the subject, the base principles, social design tools), substantiates the stages of social design.
JEL: B55; O22; H10

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1. Introduction

Crisis socioeconomic developments our country has been facing lately gave rise a to brand new approach to managing social problems embodied in social design. Social design as a technology of social management has been taking ever more significant place in the development of the Ukrainian society. It has been a while since social design proved to have a significant impact in the developed countries, which extensively design and implement social projects. Social design as it is today should be considered as a social practice phenomenon of the globalized society. Research of social design as a functional, applied management methodology and technology is also important for the development of practical principles of social management and social security.

One of the priority vectors of socioeconomic progress of Ukraine is its further development and reinforcement as a social state, which policy must be aimed at creation of the conditions that will promote decent living standards and human development. The concept of the social state is embodied in the constitutional provisions and existing laws of Ukraine. Thus, the Constitution of Ukraine states that Ukraine is a social state (Art. 1 of the Constitution of Ukraine) (Konstitutsiia Ukrainy, 2006). The list of obligations of the state before its citizens includes enforcement of rights set forth in Art. 25 of the Universal Declaration of Human Rights, as well as in the European Social Charter, the International Covenant on Economic, Social and Cultural Rights and other international documents.

Meeting the said objectives as well as identification of social processes call for the use of modern technologies of social management, with social design standing out among them. Problems of management of social projects in various spheres of functioning of the state and society have seen an increased interest lately.

The social design has become an indispensable part of social management in many countries of today's world, especially those that undergo reforms and transformations. This is why social design as a social management technology has a great relevance for the theory and practice of social economics. Interdisciplinary nature of social design as a system of theoretical provisions goes together with the variety of practical applications in the development and implementation of social projects.

Generally, project design is classified among innovative, creative activities since it involves the transformation of reality and is based upon a technology that can be unified, learned and improved. Today there is a great number of methods of project design in management since project activities have seen an active growth, finding use and application in all spheres of life.

2. Literature Review

The concept of "social design" is closely connected with the term "project", which in its derives from the Latin "Projectus" (i.e. jutting out); this is a process of creation of a prototype, a blueprint of the forecasted or possible object or state; it is a specific activity, which results

in defining options for projected and planned development of new processes and events backed by science, theory and practice (Antonyuk, 1978).

There are different opinions as to the timing when the concept came into being. Thus, philosophers believe that project design appeared as early as in the classical age, viewing the Republic by Plato as one of the first social projects.

The concept of the "project" first emerged in the Roman school of architecture of the XVI century and denoted sketches and plans. The project method originated in US agricultural schools in the late XIX century and was based on theoretical concepts of "pragmatist pedagogy" founded by John Dewey. According to his views, the only things that are true and valuable are those that are for the good of people, produce tangible results and are for the benefit of all society.

Other scholars think that project design could be actually distinguished only starting from the 20-30's of the 20th century, when the philosophy and ideology of project design activity was shaped.

Under another approach, project design came into being in the second half of the 20th century, when social issues moved to the core of social advancement. It was also the time when scientific research formed a systemic approach that defined project design as a type of system model-building.

Some scientists believe that the notion of "project design" or "design" in its modern sense emerged in engineering and technology, where it characterized and defined scientific provisions on the most effective ways of transformation of objects with the help of machinery.

Today project design gains ever wider foothold across the social sector. The importance of social design as a social technology that affects most of the social phenomena is considered to be due to its synergetic effect that shows itself in accumulation of the best social practices, development and implementation of effective forms and models of social activities.

Importance of knowledge of the main principles of social design is due to, firstly, the fact that this management technology has a wide area of application. Secondly, knowledge of the logic and technology of social design allows specialists to be more efficient in the performance of their analytical, management and other functions in the field of youth policy, physical culture and sports. Thirdly, project design management technologies offer a competitive advantage for the specialist in the job market since the skill of designing and substantiating socially important project as well as completing applications for their funding offers a real opportunity for career growth.

Completed national Ukrainian social projects and those implemented throughout the world (in education, healthcare, affordable housing, etc.) prove the relevance and importance of social design as a technology of social management.

Segregation of social design into a relatively independent domain was primarily a result of the international community becoming aware of global problems of the present day and the ecological problem in the first place.

Social design as a scientific term came into use quite recently – in the 1970-1980s of the last century. The 1970s saw the advent and use of social planning and programming, other innovations. However, due to the emergence of new complex tasks in the field of economics, culture, city planning and other types of social engineering, it was social planning that became prevailing.

In this way, social design in the XX century evolved gradually, that is the evolution of the concept of social design went all the way from design as manufacturing practice (machinery, engineering, architecture) to traditional project design (design, city planning) and further to forecasted project structured activity (social forecasting, designing, planning), and the final stage project design, that they started to call social design.

Problems of social design have been addressed in works of both Ukrainian and foreign scholars.

The interest to social design in market economy countries has been growing rapidly, starting from the 50's of the XX century. It was prompted by the wide application of project planning in commerce, where this approach proved to be undoubtedly effective amid increasing competition among product makers and service providers. Western academic literature considers problems of project activities in the framework of various branches of knowledge. Social scientists emphasize the role of projects in the development of social reality, effecting social changes, realization of innovation activities.

Yet, the formation of the concept of "social design", transformation of its meanings is still underway at the present stage of advancement of science.

Throughout the whole history of the development of social design, its theory and methodology underwent several stages: problem-oriented design, object-oriented design; problem and goal-oriented or forecasting design; subject-oriented design.

Being focused on the problem-oriented approach and speaking of the relevancy of the problem of social design in his works, Dridze (1994) reasons as follows: "there emerges a brand new and wide field for scientific research aimed at the incorporation of scientific knowledge into social practice, and in the practice of socially-oriented management in the first place". From the perspective of this approach, the social project is aimed at the creation or reconstruction of an existing object that performs an important social and cultural function. This could be a school, a hospital, a sports centre, but social ties and relation could also act as the object of project design.

According to Toshchenko (1982) and under the object-oriented approach, "social project panning is a specific activity associated with the scientifically grounded determination of options for the development of new social processes and phenomena involving a purposeful fundamental change of specific social institutes", with the priority of social design being the creation of social projects relying on the bulk of relevant information. A social project as a source of information represents certain purposefully developed scientifically valid characteristics, which give specific knowledge of the desired state of a social system or process. It should be noted that a social project is an execution model. The project reflects a future desired state of the system, which emerges as a result of certain actions by people,

availability of certain financial, labour, material, energy and fuel and other resources including intellectual, cognitive, heuretic, value ones.

Kurbatov and Kurbatova (2001) give an interesting and modern definition, who, being based on problem and task-oriented approach, understand social design as a practical activity aimed at creation of projects for the development of social systems, institutes, objects based on social forecasting, prediction and planning of their social project qualities and properties. This makes it possible to manage social processes and represents the novelty, which characterizes trends of social development. Therefore social design is associated with innovation activities and implementation of social innovations.

Drawing on the subject-oriented approach, Lukiv (2003) views social design as a specific research aimed at the achievement of a socially important goal with the allocated place, time and resources. Here, the aim is to create a new value, which is socially important for society, develop projects with a desired state of the social system, yet subject to availability of necessary resources. Social projects must be created on a scientific basis and have to meet generally accepted standards and reflect the current ideology of the society.

Bushuiev and Gurin (1998) define a project as a unique set of related jobs that have the following distinctive features: 1) time limit; 2) clear objectives and a number of technical, economical and other requirements that must be met; 3) internal and external interrelation of actions, tasks and resources; 4) preset dates for the project start and end; 5) limited resources; 6) certain level of uniqueness of the project objectives and conditions of its implementation; 7) imminence of various conflicts.

3. Methodology of the Empirical Research

The theoretical and methodological base of this research is formed by provisions of the theory of management and social management, works of Ukrainian and foreign experts in social design and management of social projects, legislative acts, statistical materials.

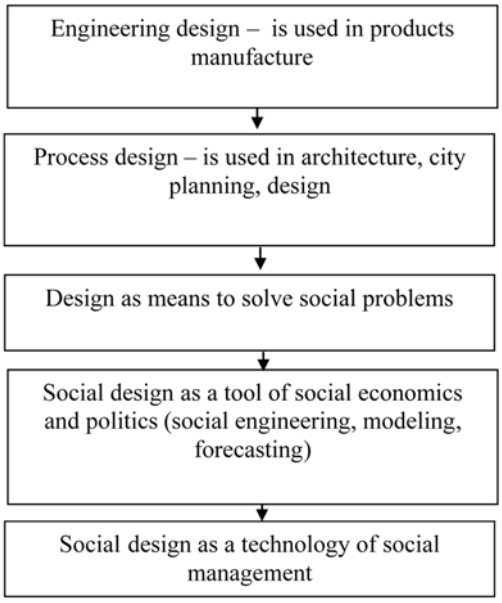
The following methods have been used in this paper: retrospective analysis (to investigate the evolution and development of social design); generalization method (to formulate conclusions and suggestions); scientific abstraction method (to define the notion of "social design"); analysis and synthesis (to reveal the content of the process of social design); graphical interpretation method (to present schematically main points of the study and trends of the social design application).

4. Findings

In summary, modern definitions of the social design reflect, first of all, its workability as a technology and social focus. The comparative analysis of evolutionary approach (Figure 1) and terms that describe the social design, resulted in the generalization of terms, which made it possible to conclude that social design encompasses both forecasting, model building, planning and designing aimed at solving social problems and evolves into the technology of social planning.

Figure 1

An evolutionary approach to the social design



Source: Authors.

In the current historical period, social design involves the design of social objects, social qualities, social processes and relations using respective technologies.

A distinctive feature of social design is its focus on the creation of a "social project", which may include social relations and interactions; social conditions and processes; social values and standards; social institutes and structures.

Category structure of the social design is a collection of definitions aimed at scientific representation of key parameters and characteristics of social systems, process, phenomena, etc. The key elements of project design are: goal, subject and object, social technology, methods of social design, project planning conditions (project background), etc. Let us have a closer view on these.

The main goal of social design as a technology of social management is the development and management of social projects with the use of information arrays.

By subject of social design, one should mean those who carry managerial functions – both individuals and organizations, teams, social institutes, who set their goal of organized, purposeful transformation of social reality, with an important trait of project design subject being its social activity, immediate participation in the project design process. The quality of a project under development is to a great extent a function of competences of the subject of

project planning, his or her culture of thought, ability to analyze information and generate original ideas.

The object of social design are systems, processes of organization of social ties, interactions being a part of design activity that is subject to impact from the project design subjects and act as the cause of such impact. These could be objects of different nature, including:

- a human as a social person and the subject of the process of social relations with his or her needs, interests, value systems, attitudes, social status, prestige, roles in the relationship system;
- different elements and subsystems of the social structure of society (staff, regions, social groups, etc.);
- various social relations (political, managerial, esthetical, moral, family and home, interpersonal ones, etc.);
- lifestyle elements (life attitudes, life quality and style, etc.).

By project background, we wean a total of conditions external towards the project design object that have a significant effect on its functioning and development.

Based on the practice of use of social management, among the most important methods and tools of social design, one should distinguish the following ones:

- "brainstorming" associated with ideas generation under the conditions of fair competition. This method helps to overcome weaknesses of traditional ways of resolving problem situations;
- business games – a complex method that covers all stages of the process of decision preparation and making. It is used in cases of problem situations that call for participation of many interested organizations to resolve it;
- role-playing – it helps to gain a better understanding of what must be done in the project planning process. This is an attempt for a deeper understanding of how to implement a project;
- analogy (case study) – it shows effective organizations, companies, cities, which managed to effectively resolve certain social problems, which can provide a good example;
- associations – it often happens that preparation of a project calls for fresh solutions to address drawbacks of existing practices. This needs an answer to the question of how to improve the state of matters, find a smarter and a more effective way of management;
- synectics, under which several suggested ideas are considered separately from one another, with certain co-relations established among them afterwards.

It should be noted that the list of methods and tools of social design is much longer, it is summarized in Table 1.

Table 1

Description of primary methods of social design and construction

Method name	Method description
Systematization	When developing a social project, treating it or a social framework as a kind of system with its own structure and functions
Inversion ("do the opposite")	Creating new developments by discarding the traditional approach and considering the problem at hand from the polar opposite viewpoint. When doing so, the elements and characteristics would normally swap their places (external – internal, harmful – useful, symmetric – asymmetric, primary – seconddary, central – peripheral, etc.)
Analogy (case study)	Use of advancements from other branches of science and practice. Similar solutions used to solve social engineering tasks may be adopted both from wild life and various spheres of society. The method uses analogy to social structures developed earlier.
Empathy	Association of the project designer/engineer with the object of development, that is the element/process by way of "living a role". This helps to have a fresh look on the task at hand
Combination	The use of certain components, processes and elements in different sequence and combinations in the project. This can help to find a new quality of the object leading to additional positive effect. There are three patterns that are used to combine elements: "new + old", "new + new", "old + old". Combination of elements could vary: straightforward combination with the help of intermediary elements, duplication, creation of multilevel constructions.
Compensation	Balancing unwanted or damage factors by means of opposite action
Dynamization	Conversion of stationary and unchangeable elements of one or another social structure into movable and changeable forms
Aggregation	Setting up a multitude of objects or sets of objects, which can perform different functions or exist in different conditions. This is achieved by changing the content of the object or the structure of its components
Compounding	Parallel connection of objects for better effectiveness (both independently and into a single social unit).
Block and module design	Formation of social structures of blocks and modules. A module is an element of the structure consisting mainly of unified units of different functional use
Redundancy (duplication)	Increasing the number of objects for better reliability of the social structure as a whole
Multiplication	Increase of effectiveness of the functioning of the object with the help of use of several working bodies that perform the same functions
Breakdown	Imaginary division of traditional social objects for the sake of simplification of their functions and operation into similar parts – sections, cells, blocks, chains
Association	Ability to find some matching features in different social objects, which make it possible to produce unconventional solutions
Transfer of attributes (of "focal" objects)	Putting the social object being designed into the "focus" of attention and assigning it qualities or functions of several randomly selected social objects
Search of unexpected angle	Viewing the social object being designed from unusual and unexpected perspectives, which often leads to a new and original design solution
Simplification	Simplification of a complex social phenomena in order to better understand its structure and make a full picture of the body of its elements

Method name	Method description
Elimination of the redundant	Identification of such elements, structure or functions in the social structure, which can be omitted without harm to the structure, while their elimination leads to its normalization and clearer arrangement
Extremalization	Imagining of social structure in extreme conditions and making them worse until the structure can stand it. This is a kind of extreme experiment
Metaphorization	Finding a metaphor, which characterizes the social structure, its detailed application. A metaphorical image of the structure often not only serves as a reach source for new design solutions, but also acts as a driver of creative intellectual efforts for the designers
Troubleshooting	Analysis of all aspects of social structure aimed at finding its faults
Trial and error method	A spontaneous method of creation of a social structure, where unsuccessful attempts for solution are discarded, while successful ones are selected. The method is arranged as follows: first we create something and make mistakes, then check it and correct the structure

Let us consider the basic principles (guiding principles) of social design, since they are the key to the efficiency of social design process.

The self-development principle. The source of social design of civil society could only be the need of society itself in self-development. A strategic plan is only a condition for the development of the community that gives rise to its public activity, but in no way presents a blueprint of the specific political or economic system adopted from the outside. What social design offers is merely a set of techniques, algorithms and forms of organization of strategic planning, but the content of a social project is each time formed by the community to the extent of its ideas about its desired future.

The social accountability principle. Social design is a process of development of new collective standards and rules not provided for in existing legislation. The ability of subjects of social design adhere to these standards and rules on their own testifies to compliance culture of an individual, society as a whole and government structures.

The social competence principle. Social design is based on the formation of such qualities of social competence as critical thinking, openness, tolerance and pluralism. At the same time, social design involves the ability of members of a community to offer positive social initiatives and take responsibility for their implementation. The functioning of various associations, funds, public organizations is indicative of social competence.

The principle of continuing education of general public. Design of the future is a situation, in which a person feels a great urge for new knowledge and competencies.

The principle of goal alignment and balance of interests of subjects of social design involves readiness of subjects of social design to align their goals on the level of values and technology and to form a balance of interests, which acts as the foundation and guarantor of civic society.

The openness principle suggests the ability of subjects of social design for consolidation around promising strategic goals for the community development and ability to propose such goals.

The community autonomy principle sets out a specific community as a project structure. The community can be of different scale of organization: locality, town, city, region.

Social design as a technology of social management is used for the development of social programs, social projects, development of the method, technique and technology of specific forms of social activity.

In general terms, a project is a set of coordinated actions with certain starting and ending points aimed at the achievement of certain goals within set deadlines, costs and performance metrics. In its turn, a social project is a constructed social novelty aimed at creation, modernization or support of material or spiritual value, which has space, time and resource limitations and which influence on people is considered positive in view of its social significance (Plyshevskiy, 2001).

Social projects can be aimed at:

- creation of conditions for the development of the sociality of the subject (individuals, groups);
- self-realization of the individual in the main areas of his or her life;
- ensuring favourable conditions for the socialization of the individual in various areas of social environment;
- elimination or minimization of unfavourable conditions for the socialization of the individual

The above approaches to the classification of projects allow to determine basic attributes of social projects.

These attributes include (Bezpalko, 2010):

- goal – reflects ideas of the developers of the project as to the ideal result of their activity;
- social orientation – the presence of a situation in social life, which calls for a solution by means of the introduction of innovations and specific changes;
- time – each social project has the start and the end, which in its turn can be the start for continuation of the next project or its finish;
- territory – clearly defined regions and communities subject to project measures;
- social and institutional – institutions, organizations, bodies where project actions are implemented;
- innovation – presence of new ideas, approaches, technologies for the solution of a social problem at a certain level;
- resources – approved specification and schedule of resource use (finances, human resources, equipment, etc.);
- organizational – availability of a certain organizational structure depending on the project scale;

- social and informative – each social project should have a public relations element to inform about project measures and their effect on the change of the situation.

It should be emphasized that social projects take a special place in the system of social planning. The scale and the nature of social projects show the level of development of social responsibility of business and society. The participation in social projects can be initiated by: individual employees (personal initiative); specialized departments, which functions include generation of ideas; company managers and owners; business partners; bodies of government authorities that promote the participation of the company in the social life of society.

Summarizing the approaches (Bezpalko, 2010; Bondarenko, 2006; Suimenko, 2011; Surmin, Tulenkov, 2004), the structure of a social project will look as follows:

1) title page (mentioning the name and the author);
2) contents of the project;
3) introduction (relevancy of the development and implementation of the project, its objective and goal);
4) main body (project model):
    - reference information, statistics;
    - main stages of implementation;
    - beneficiaries, resources (funding method, budgetary and extra-budgetary funds, sources of funding);
    - measures implementation arrangement (key actors, institutional support, project methods and technologies; calendar plan);
    - state of completion, budget, expected results;
5) conclusions;
6) list of literature sources used.

The project charter consists of the following elements: full name of the project; authors, team of authors; project manager, project consultant; name, address, phone and fax numbers of the organization implementing the project; project type (classification), project objectives; expected result; time frame, project implementation stages; place of project implementation; total number of project stakeholders; short project report (project history); actions upon completion.

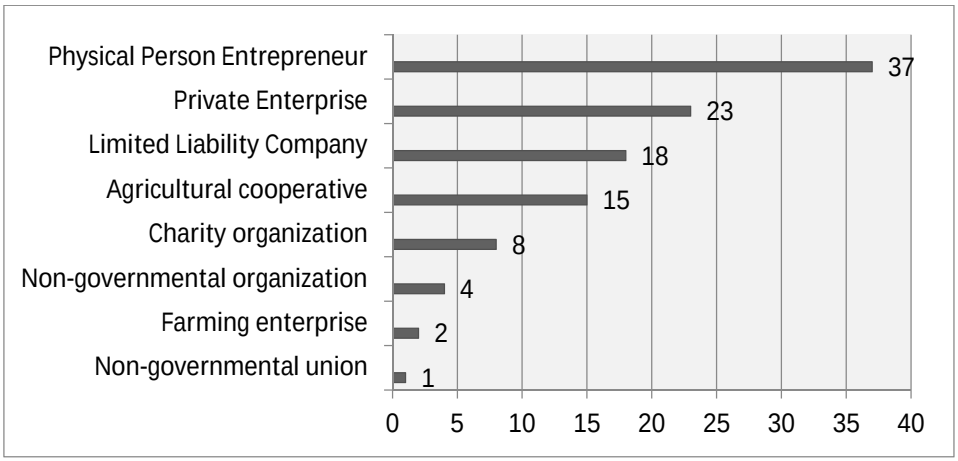
For a better understanding of the current stage of development of social design in Ukraine, it is practical to study existing practices of social design use at different levels. Respective analysis can be made by investigating activities of institutions, which implement socially significant social projects in Ukraine.

In this context, interesting and useful are details of the final report based on the results of the study “Social Companies of Ukraine”, provided by the non-governmental organization Youth Center for the Problems of Transformation of Social Sphere SOTSIUM – XXI (Katalog

socialnyh pidpryiemstv Ukrainy 2016-2017 rr., 2017). Among 150 of registered social business entities, most of them were organized as private entrepreneurs (37 entities), private enterprises (23 entities) and non-governmental organizations (Figure 2).

Figure 2

Forms of the legal organization of social business enteritis in Ukraine



Source: Directory of social enterprises of Ukraine 2016-2017 rr. (2017)

In addition, social companies were formed as farming enterprises, limited liability companies, agricultural cooperative, etc.

During the period of 2013-2015 the platform Best Social Projects of Ukraine hosted 3 international forums. The event was organized by the non-governmental organization Social Leadership Center under the sponsorship of the Ministry of Social Policy. During these forums presented were 198 social projects in the following areas: “Training, Raising, Education and Development of Children and Youth”, “Support and Development of Civic Activity”, “Health and Wellbeing”, “Support of Science and Culture”, “Social Entrepreneurship”, “Protection of Environment and Continuing Development”, “Charity” (Naikrashchi socialni proekty Ukrainy, 2015).

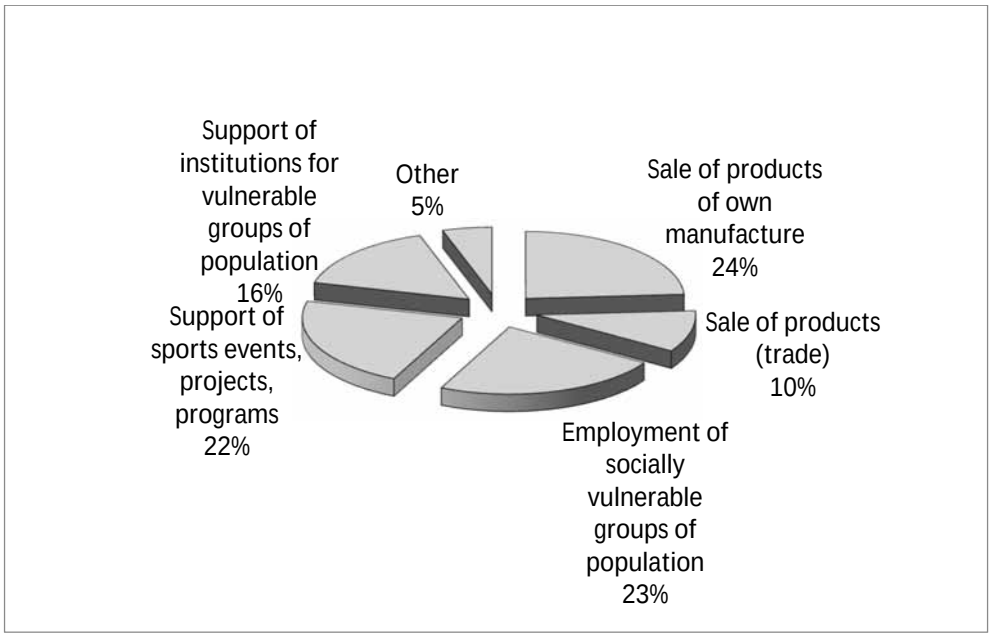
Social business and social projects in Ukraine are yet to get widespread in Ukraine. The rate of their growth is somewhat mediocre. Nevertheless, the areas and types of activities of social companies are expanding (Figure 3).

Thus, in 2017 most of the social projects were implemented in three areas: sale of goods of own manufacture; employment of socially disadvantaged groups of population; support of sports events, projects, programs.

Scaling-up and replication of social initiatives are in the interests of the state (budget receipts, creation of jobs and employment), project sponsors (development and use of innovative ways of addressing social problems, a better quality of services, profits), society (finding solutions to social problems), and citizens (self-fulfilment, profit-making).

Figure 3

Types of activities of social business entities in Ukraine



Source: The best social projects of Ukraine (2015)

However, today there are a great number of problems that hinder the growth of social entrepreneurship: insufficient quality and scientific backing of social projects; lack of legislation social entrepreneurship; insufficient functionality of social expertise; absence of systematic research in the field of social entrepreneurship and lack of information and publicity; insufficient practical importance of traditional social design methods, tools and technologies used, etc.

Let us consider and define in detail the stages of social design:

Stage 1 – preparation for work on the project. The purpose of this stage is to test the team's knowledge and skills needed to produce socially significant results, shaping the vision of the current state and prospects of a village, district, city, region. Discussion is held to update information on the structure of the bodies of state and local authorities, analyze the current situation in the given territory, consider the influence of the public, mass media on the policy of the administration. The work in this stage should result in clearly defined ideas of the members of the design group as to the functioning of different branches of power, scope of their responsibility, specifics of their work and powers of the legislative bodies, building up business communication skills, analysis of different types of materials (statistics, mass media, regulations, etc.).

Stage 2 – choice and substantiation of the social problem (social diagnostics). At this stage, members of the project group should get insight into a wide range of problems, which are

topical and need a solution in this territory. In order to align their vision of the topical problems of the specific territory, social layer or age group, the group can run a social survey among respondents. Why did these specific problems become of particular importance? What impact does it make on the surrounding social space? Why this problem, which is considered to be especially poignant, remains unresolved? The results of the work at this stage must include a clear understanding of the selected problem to be addressed by the project group. They form a general concept of work on the project, its stages, and the teams get respectively divided into micro-groups and arrange for some organizational matters.

Stage 3 – information collection and processing (social monitoring). The scope of this activity includes collection and analysis of a quite heterogeneous range of data on the selected problem:

- study of the legal framework;
- conducting social surveys among different categories of the population to learn their views on the given problem;
- collection and analysis of mass media reports;
- cooperation with competent experts to obtain objective analytical information on the state of things regarding this specific issue.

This work must result in comprehensive, easily accessible information on the problem, which will form the base of the next stage of work on the project.

Stage 4 – development of options to solve the problem. The main task of this stage is processing and systematization of collected materials and attributing them to respective sections of the project. This is a time-consuming stage of work because it not only needs formalization of the process of development of the project, but also the invention of ways of how to start moving ahead with the solution of the problem.

Stage 5 – shaping the action plan (planning). At this stage members of the project group try to implement their version of the solution in practice. For this purpose, they can take various actions (written requests to executive and legislative bodies, presenting their suggestions to the mass media, non-governmental organizations, engagement of resources of business and various funds in this work, etc.).

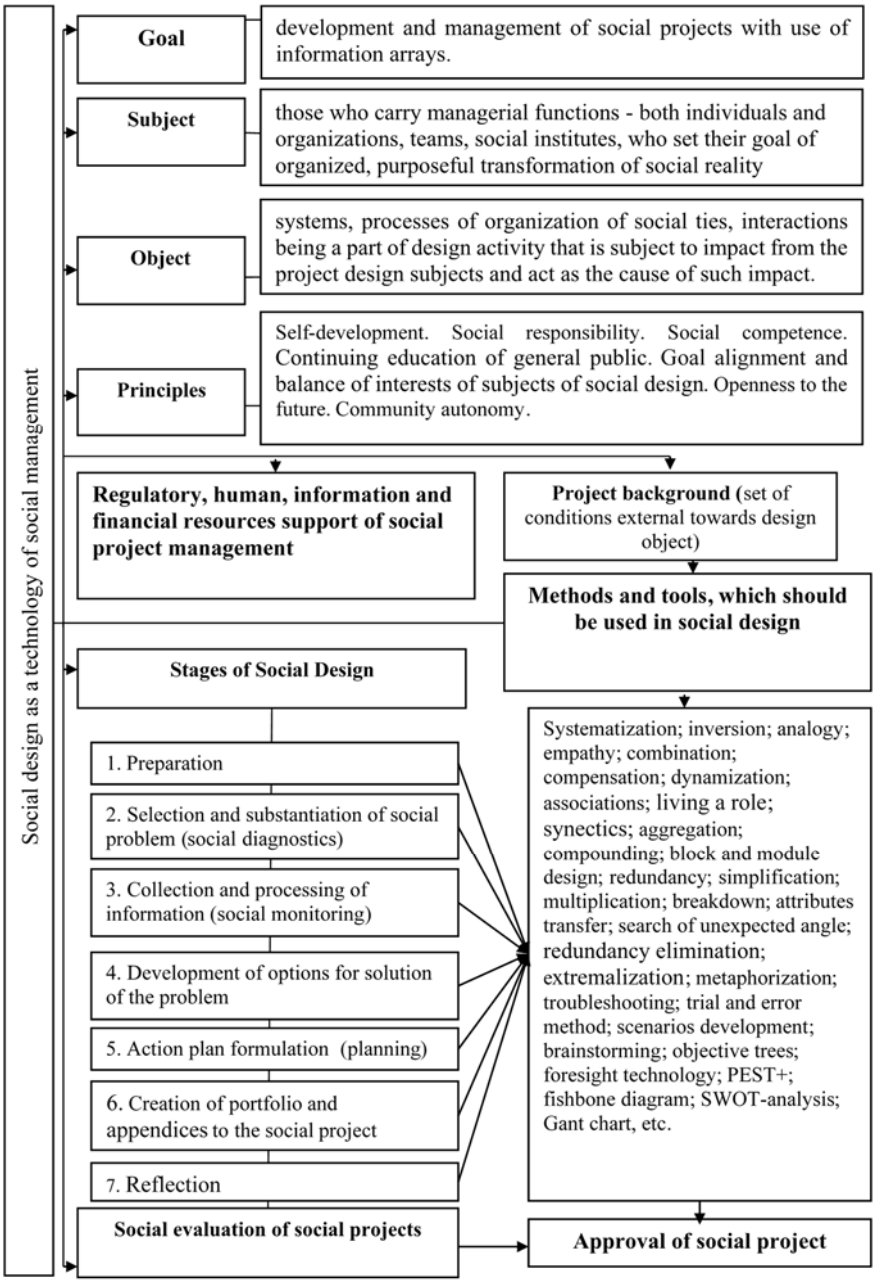
Stage 6 – creation of the social project portfolio and appendices, which consist of two parts: files with documents and presentations on electronic media. The file with documents includes legal documents, statistical data, charts, diagrams, photos, pictures, mass media reports, results of sociological surveys, other materials and reflects main stages of the work of the team on the problem arranged logically and chronologically.

These materials in a file and in the multimedia format are divided into 4 sections of the project:

1. Relevancy and importance of this problem for the town, city, district, region.
2. Collection and analysis of information on the problem.
3. Action plan proposed by the team.
4. Implementation of the team's action plan.

Figure 4

Functional bloc diagram of social design as a technology of social management



Source: authors research result.

When preparing a speech, the speaker uses materials from the portfolio and, when needed, photo and video materials. Then the presenter selects materials for the speech, does rehearsals or public speaking training, makes a script of the speech, prepares for the questions and answers session.

Stage 7 – reflection. The main goal of this stage is the analysis of the preparation stages of the project and its presentation by the project group members. Members review work performed, evaluate the contribution of micro-groups and individual members, identify project weaknesses, discuss ways of their elimination. Based on these results, members can complete a questionnaire aimed to find their opinion as to the organization and presentation of the project.

Figure 4 presents a generalized functional block diagram of social design as a technology of social management. Generally, management technology is understood to be a set of methods, tool and techniques used to perform management functions. In our opinion, the specifics of social design as a technology of social management, first of all, is that it is an action plan (deliberate impact on the social object) and can be replicated as well as used to solve similar social tasks and problems.

5. Discussion

An investigation into the existing approaches to the essence of social design (problem-oriented design, object-oriented design; problem and goal-oriented or forecasting design; subject-oriented design) and its modern role allows us to assert that social design is a technology of social management, which is based on the use of various methods and tools for managerial decision making. Proceeding from this assumption, its use must cover all stages of decision making in social management.

In this way, social design is a technology of social management that is connected with scientifically grounded determination of options for the development of new and upgraded social objects, processes and phenomena with a purposeful fundamental change of its social characteristics with the aim of promotion of social self-development of society with the use of respective social tools.

In turn, other types of project design, for example, architectural and construction design as well as engineering design, too, bring about social changes – new social relations, situations, but these changes are not designed, but are rather an effect or result of other projects.

It can be said that today social design is used:

1) when creating new objects, processes, phenomena, social networks;
2) when introducing band-new relations, procedures or components within existing structures, which badly need change (partial modernization);
3) when doing reconstruction, essential reorganization of existing social ties, which entails changes of the whole management and control structure that ensures achievement of the set goals (complete modernization).

6. Conclusion

Among the problems of social design activity in a society amid crisis, one can distinguish the following ones: lack of defined values, imitation of project activity, lack of successful experience, absence of legislative background, a great number of risks, lack technology, human and other recourses, absence of public support, resistance to project implementation, underdeveloped project culture of managers of all levels. Yet, the concept, where businesses must spend a part of their profits for the benefit of society, for example, for social projects, is getting more and more popular in the modern society. A company aiming to expand its business will sooner or later face an articulated call of the public for the realization of one or another kind of social projects. Hence, it is in the best interests of the company to foresee such a call. For this purpose, it should have information on the needs of social groups. And the company can shape a need of society which is in line with the company's purposes and which it can satisfy.

Scientific novelty of the study:

- it gives a more exact definition of the concept of social design as a technology of social management connected with scientifically based identification of options for the development of new and modernized social objects, processes and phenomena resulting in purposeful fundamental changes of their social characteristics with the purpose of activation of social self-development of society using special sets of social tools. The specifics of social design is primarily distinguished by the fact that it represents an algorithm of actions (focused impact on the social object) and can be replicated as well as used to solve similar social tasks and problems;
- it substantiates the evolution approach to social design. The comparative analysis of evolution approaches that describe social design resulted in the generalization of notions and terms, which led to the conclusion that social design covers both forecasting and modeling, planning and design. It proved that at the current historical stage social design is a design of social objects, social qualities, social processes with the help of the use of applicable technologies;
- it features improved functional block diagram of social design due to refinement of the goal, the object, the subject, the principles of social design as well as ranking and elaboration of the content of the stages of social design considering the project background, methods and tools to be used. The distinction of this model consists in generalization and logical combination of the elements of social design as a technology of social management.

The most important areas for improvement of social design are: development of social project consulting, expert community, project analytics, legislative and regulatory background for social project design activities; flexible financing of social projects; better quality of social projects (competence, social orientation, groups of interests, minimization of risks); introduction of social design and project management tools; development of scientific support of social projects.

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ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 30 (2), 2021

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BUYER BEHAVIOUR IN THE CASE OF ORGANIC AGRICULTURAL PRODUCTS

The aim of this research is to study the consumer's attitude and buyers' behaviour towards organic (bio) agricultural products as key factors to influence the market development and market potential, especially for supply to other regional markets in the particular country, and for export. Three regions have been studied, all of them with production and export potential for organic products. Two of them are in Central Asia – Altay region in the Russian Federation (Barnaul and the region) and Eastern Kazakhstan (Semey and the region). Bulgaria (Sofia and Varna) was included in the research, with the idea to contrast the findings from Siberia with those from Europe. The three regions, which are covered by this survey, have the production capacity to supply the local and foreign markets with organic agricultural products. The findings of this research lead to a better understanding of the consumers' specifics, as well as – the gender specifics, and by this, it provides the producers and sellers with ideas about optimisation of their marketing communication and pricing strategies.
JEL: M31; Q13; L66; F18

Introduction

The intensive development of organic farming (e.g. Jürgensen, 2019; Shahbandeh, 2019; Coppola, 2019; Wunsch, 2019; Ministry of agriculture of Bulgaria, 2019) in the last decade, and based on that – the significant increase of the production of agricultural organic (bio) products, have changed significantly the market of agricultural products. The customers are exposed now to a new category of organic agricultural products, with different characteristics in terms of buyers' health and quality considerations. At an individual level, this new category of products triggered changes in buyer behaviour. At a business level, it developed new markets, both local and international. Many farmers, and related intermediaries, went or planned to go international, to explore the new intensively developing market opportunities.

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On the other side, the development of the organic farming depends heavily on the consumers' attitude and buyer's behaviour, which change in favour of the organic products (e.g. Wunsch, 2019; Basha et al., 2016; Mervin, Velmurugan, 2013). Mervin and Velmuragan (2016) argue that the attitude towards the organic food is derived by the "interest to healthy and quality food with high nutritional value, environmental concern and food safety". This seems to be a universal set of considerations, as these factors are valued all around the world. We share this view as well. Therefore, we decided to study the factors that influence the consumers' attitude and buyer behaviour in three regions, which have the potential to develop very intensively as organic farming regions.

Goal

The goal of this research is to study the consumer's attitude and buyers' behaviour towards organic (bio) agricultural products of the customers in three different regions. These are:

- Barnaul area in Central Siberia;
- Semey area in East Kazakhstan;
- Sofia and Varna regions in Bulgaria.

The focus on the consumer attitude and buyer behaviour towards organic agricultural products is based on the understanding, that the development of such farming and sales is limited to a large extent to the attitude of the customers, which frames the market potential for the sales of these products. The above stated basic interest of the consumers towards healthy and quality food with high nutritional value, obviously characterises not the entire market, but rather a few market segments. The market segmentation could be made based on different segmentation variables, including health concerns, disposable income, style, demographic factors, such as age and gender, etc., parts of these segments overlap, as it is clear that there are customers, who are health-cautious, have good disposable income, and who are well educated as well. It is clear that the customers belonging the each of these segments have a different attitude and buyers' behaviour towards the bio-products. This research aims to clear on a comparative basis whether the customers in the three analysed regions have a similar attitude, especially gender-based. Any specifics of the customers' attitude and buyers' behaviour by regions and by gender could be used in the development of relevant and successful marketing strategies to develop and maintain sustainable organic farming business.

The two neighbour agricultural areas with export potential, Altay and Eastern Kazakhstan, are of significant interest from the point of view of the development of the regional economics. They have the farming/production potential for bio farming, as well as export potential – to the other regions of the Russian Federation and Kazakhstan.

Bulgaria has been selected for this research as a European version of the same – country with production and export potential for organic products.

Method

Research approach

There is not much research done of this topic, considering the orientation to critically analyse the consumers' attitude and buyers' behaviour in three different geographic and cultural regions, and in addition – to study the gender differences in them. Because of that, the inductive approach has been selected (Bryman, Bell, 2015; Kothari, 2005; Eriksson, Kovalainen, 2008), which relies on gathering and analysis of quantitative data, which should provide statistical validity to the results.

Data collection

The data collection included both primary and secondary research (Saunders, Lewis, Thornhill, 2016; Briman, Bell, 2015; Bryman, 2008). The secondary research was applied mostly for the literature review. The primary research was used for collecting data for the analysis directly from the respondents.

Research method for the primary research

The survey has been selected as a research method. We used Google Drive platform for disseminating the special questionnaire to the target people, all of them belonging to the research population (Cooper, Schindler, 2014; Wilson, 2014) – all people above the age of 18, both men and women, living in the studied regions. The sampling frame included academics, students and alumni of Altay State University (ASU), Barnaul, The Russian federation, Kazakh Humanitarian Law Innovative University (KazHLIU), Semey, The Republic of Kazakhstan and Varna University of Management (VUM), Bulgaria.

Sampling method

A convenience non-probability sampling method was applied (Saunders, Lewis, Thornhill, 2016). The size of the three samples is as following: Altay region – 125, Eastern Kazakhstan – 112, and Bulgaria – 119 respondents.

Research validity and reliability

The research validity depends upon the quality of the sample and the sample size. All respondents belong to the research population, because the link to the questionnaire in Google Drive has been emailed directly to the people from the sampling frame. No other participants were allowed to participate. The sample size of the three samples exceed the minimal size for valid results, and the samples from three regions are enough good to meet the statistical requirements.

The reliability of this research depends upon whether the results of it can be replicated in another similar research in the studied regions (Heale, Twycross, 2015). It is believed that the use of the sampling method guarantees the reliability. We have unbiased and statistically representative samples. Therefore, we believe that the results of this research can be replicated in other surveys in the studied regions.

Organic Farming and Organic Products

According to the regulations of the EU (Council regulation 834/2007) the organic production process is based on number of principles, including:

- prohibition of the use of GMOs;
- forbidding the use of ionising radiation;
- limiting the use of artificial fertilisers, herbicides and pesticides;
- prohibiting the use of hormones and restrict the use of antibiotics and only when necessary for animal health;

In addition, the organic farmers must apply the necessary techniques and approaches to guarantee soil fertility and plant health including:

- crop-rotation;
- cultivation of nitrogen-fixing plants and other green manure crops to restore the fertility of the soil;
- prohibition of the use of mineral nitrogen fertilisers;
- to reduce the impact of weeds and pests, organic farmers choose resistant varieties and breeds and techniques encouraging natural pest control;

The specific provisions for processing organic food and feed include;

- the separation of processed organic products in time and space from non-organic ones;
- a minimum organic content of 95% of organic agricultural ingredients and strict conditions for the remaining 5%;
- clear rules on labelling and on which products can and cannot use the organic logo;
- specific limits to the substances and processing aids to be used in organic production;

The EU regulations also cover animal farming/production, which we will not consider in this research, which is limited to the organic (bio) plants and products.

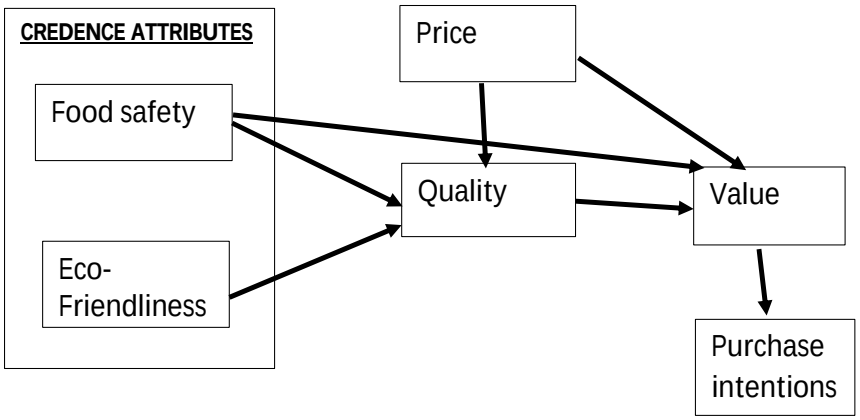
Consumer Perceptions, Attitude and Buyer Behaviour

It is clear, that the buyer behaviour, including in the case of organic agricultural products, is always based upon the consumer perceptions and attitude towards the particular product or service. Many authors agree that ***the perception*** is "the process by which people select, organise and interpret the information to form a meaningful picture of the world" (e.g. Kotler, Armstrong, Harris, Piercy, 2017, p. 153; Solomon, Marshall, Stuart, 2018, p. 190; Blagoev, 2003, p. 91). Among the factors, which influence the formation of the perception about organic agricultural products as well, the three most important seem to be the consumer perceptions of price, quality, and value (Zeithaml, 1988; Blagoev, 2003). According to

Zeithaml (1988), and many other scholars, the consumers use the visible product attributes, e.g. design, colour, price, brand name, etc., as cues to judge the product quality. It is clear, that the quality perception, which is developed by assessing key product attributes, is essential to product choice decisions (Olson, Jacoby, 1972). Darby and Karni (1973) argue that the attributes could be classified as search, experience and credence attributes. The price and colour, for example, belong to the search category, because the buyer can see and evaluate them directly. There are attributes, such as the taste, which cannot be evaluated before having a direct personal experience. The third category – credence attributes, are those which the customers cannot assess even after the purchase and consumption. Fernqvist and Ekelund (2014), Lee and Yun (2015), Moser et al. (2011), and Lee and Hwang (2016) for example, claim that the organic products fall in credence category, as the consumer cannot control, analyse and assess such key attributes of the organic agricultural products such as the production process, non-genetically modified seeds, industrial and other pollution on the side, etc. Lee and Hwang (2016, p. 144) model of credence attributes in organic food consumption describes quite well the role of the credence attributes in the consumer buyer decision-making process (Figure 1) in the organic food consumption.

Figure 1

Lee & Hwang model of credence attributes in organic food consumption



Source: Lee & Hwang, 2016, p.144.

The previous research shows that such product attributes as the nutrition value and non-chemical residues (Tsakiridou, 2008; Lee, Yun, 2015), health safety and quality, which are obviously credence attributes, form the perception, although the buyers/consumers have no other chances to assess them, but based on the provided marketing information. Considering this, we included in the questionnaire, used in the survey, questions which give an understanding about the level of knowledge of the consumers in Barnaul and Altay region, Semey and Eastern Kazakhstan, and Sofia and Varna regions in Bulgaria, to see to what extent that knowledge forms their perceptions.

The next step in the consumer/buyer behaviour is the formation of attitude towards the organic products. According to Solomon et al. (2018, p. 195), attitude is "a learned predisposition to respond favourably or unfavourably to stimuli. Based on relatively enduring evaluations of … objects and issues." This research is focussing on the attitude of the customers in the studied regions towards the organic agricultural products, based on their perceptions and the influence of the marketing and other, e.g. health-related, stimuli. Altogether, they form the buyer behaviour, which is the final point of the decision-making process to buy, or not to buy the bio-product in case of cheaper non-bio alternatives. There is plenty of research of this in different countries, for example in Sweden (Magnusson et al., 2001), Finland (Tarkiainen, Sundqvist, 2005), and USA (Lee, Hwang, 2016). When the consumers associate the organic products with the natural process and non-use of pesticides (Shafi, Rennie, 2012), they chose the bio-products even when the price levels are quite different. As discussed above, such an attitude would be formed on the basis of positive perception about the credence attributes and positive acceptance and interpretation of the marketing and other stimuli. We included in the questionnaire questions, which should give us a better understanding of the consumer attitude in the studied regions.

It is very important for this research, to analyse the respondents' buyer behaviour vs their stated perceptions and attitude towards the bio-products. Based on our previous experience, we expect discrepancy between the declared perceptions and attitude, and the buyer's behaviour at the time of purchase. Considering that, we asked directly if the respondent would buy an organic product in case of a cheaper non-bio alternative? Michaelidou and Hassan (2008), for example, found that food safety is the most important predictor of attitude, "while health consciousness appears to be the least important motive…". Magnusson et al. (2001) found that the most important purchase criterion was the good taste (egocentric orientation), while the least important was "organically produces". Even in such a wealthy country as Sweden, the premium prices were considered to be the major obstacle for buying bio-products if there are tasty cheaper alternatives. The situation has not changed with respect to the disposable income since 2001. Some sources (e.g. Huddleston, 2019) show that even in the USA the price considerations now might be very strong stop-factor for the sales of organic products.

Zagata (2012, p. 86) found that the behavioural beliefs of the Czech consumers "are related to health aspects and taste". Obviously, these different findings raise the question which market segments, and to what extent would go for the organic products, if the health consciousness is not the driving force? Our aim in this research is to contrast the responses to the health-consciousness question to that of buyer behaviour in case of cheaper non-bio alternative. If health-conscious motives, which in many cases (except for the people with health problems) are based on credence attributes, lead to the purchase of organic products, then there is a great potential for strong, intensive development of the regional organic agrobusiness, and respectively – for export. In case that health consciousness is not a strong driving force, the potential for intensive development of the bio agrobusiness will be quite limited.

Gender Effect

The personal factors are obviously very important in the case of buying food products, and especially food products of a new category, such as the organic products. The gender and age play special roles here, as they are related for example to different biology (men and women), and health issues (young vs old people), which of course lead to different needs, motivation, perceptions and attitude (Treleaven, 2015; Schiffman, Kanuk, Hansen, 2012; Svatošová, 2013; Blagoev, 2010). For example, Brownell (2011) claims, that the women usually express a higher level of security consciousness, which leads to relevantly manifested needs and motivation for secure products.

Although this has changed in the last decades as a result of the socio-economic changes in the society (Galinsky, Aumann, Bond, 2011), but still deep in their minds many women regard themselves as home and family-carers, which influences their consumer behaviour subconsciously (e.g. Otnes, Zayer, 2012; Alexandrova, 2018; Belk, Scott, Askegaard, 2012). At least some of the differences in the consumer behaviour manifest the effect of gender roles in which the males and females feel more comfortable in the habitual processes. Because of that, this research addresses specially the way the respondents address the studied issues based on their gender.

The study on the differences between men and women is the case of organic agricultural products is of interest from one more point of view – the decision making process as part of the consumer/buyer behaviour. Siddiqui (2016) for example, claims that "men usually see a problem as an opportunity to present their own competences", while for the women "there is also an emotional aspect of resolving the issue". The women show much higher emotional involvement in the buying process than men (Dittmar, Long, Meek, 2004).

Working Hypotheses

Considering all said above, two working hypotheses are postulated:

Hypothesis 1: *In spite of globalisation, the people in the studied regions have different knowledge and interpretation of what bio (organic) agricultural product means*

Hypothesis 2: *The price and perceived quality of organic products are positively related.*

The analysis of the answers of the respondents to the particular questions will confirm or reject the particular hypothesis. Whatever will be the result, this research will lead to a better understanding of the consumers' specifics, as well as – the gender specifics and will provide the practice with ideas about optimisation of the marketing communication strategies.

Findings and Discussion

The survey was carried out simultaneously in the three regions: Altay region of the Russian Federation (Barnaul); Eastern Kazakhstan (Semey), and Bulgaria (Sofia and Varna). The three samples included as following: Altay region – 125 respondents, Eastern Kazakhstan –

112 and Bulgaria – 119 respondents.[4] The findings of the research in relation to the defined hypotheses show very interesting results. We will discuss them here one by one.

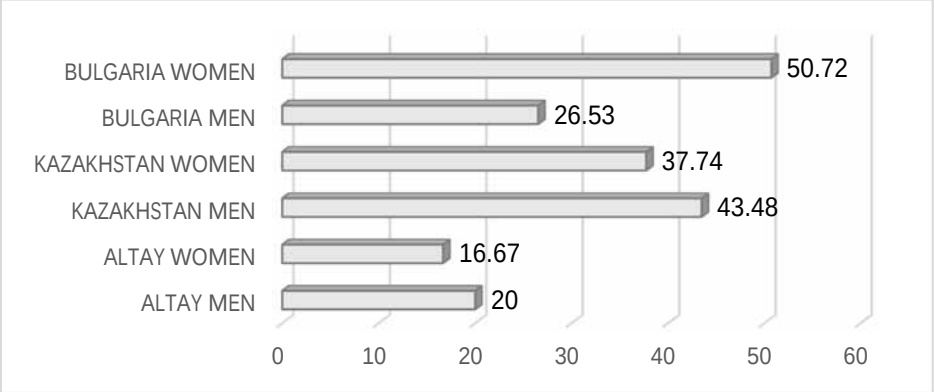
Results on Hypothesis 1

In spite of globalisation, the people in the studied regions have different knowledge and interpretation of what bio (organic) agricultural product means.

As discussed above, the organic (bio) agricultural products are characterised with credence attributes (e.g. Fernqvist, Ekelund, 2014; Lee, Yun, 2015; Moser et al., 2011; and Lee, Hwang, 2016), as the consumers cannot control, analyse and assess such key attributes of the organic agricultural products such as the production process, non-genetically modified seeds, industrial and other pollution on the side, etc. Therefore, the consumers would hardly have a similar understanding and interpretation of what really the bio-product is. Figure 2 shows the results of asking the respondents do they know what bio-product is and how it differs from other agricultural products on the market. It is quite interesting that there is a significant difference between the level of information/interpretation of the respondents both by regions and by gender. For example, the level of knowledge (based on their personal judgment) of the female respondents differs from 50.7% in Bulgaria, to 37.3% in Eastern Kazakhstan and 16.7% in Altay region of Russia. There is 3 times the difference between the highest and lowest levels of presumed knowledge of the female respondents (Figure 2). The results are quite different for men as well: from 43.5% in Eastern Kazakhstan, who know what bio-product is, to 26.5% in Bulgaria, and 20% of men in Altay region, Russia.

Figure 2

I know what Bio-product means and how it differs from other



[4] For shortness and simplicity, in the charts Altay and Kazakhstan will be used instead of Altay region, and Eastern Kazakhstan.

These results confirm Hypothesis 1. It is clear that the people have a different understanding about this category of products, and obviously, this would lead to different perceptions and attitude towards them in their buyer behaviour.

Results on Hypothesis 2

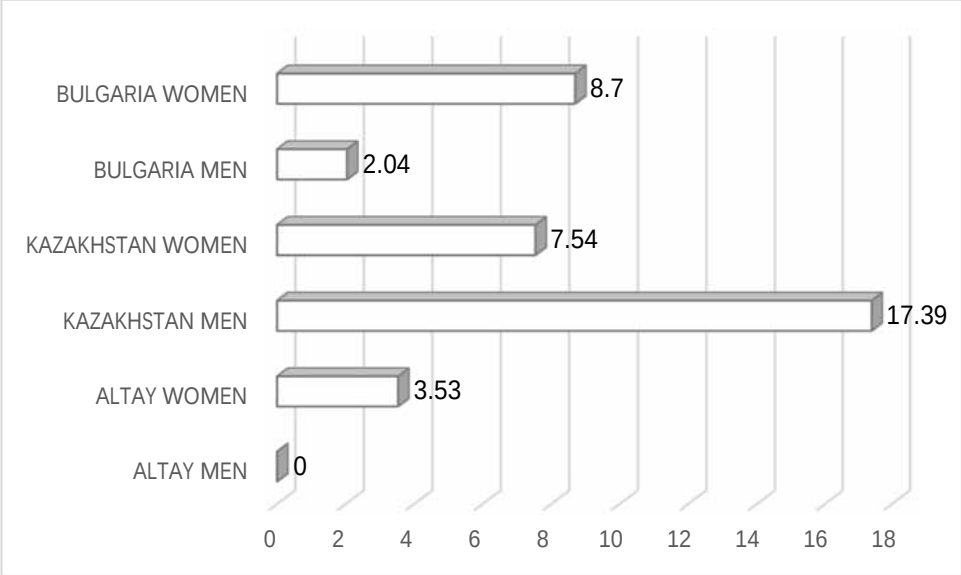
The price and perceived quality are positively related for the organic products.

As discussed above, Magnusson et al. (2001) and other researchers have found that the premium price of the organic products affects their sales negatively even in wealthy countries, such as Sweden. This is a serious issue as it affects the buyer behaviour, which is influenced by the health considerations, sometimes concerns, and the price as an economic factor in the decision-making process. The results of the survey on what the respondents would buy – the more expensive bio-product, or the cheaper non-bio-product by country and gender are shown on Figure 3 and Figure 4.

- ***I will always buy bio-product, although more expensive*:** They differ significantly: from 17.4% for Eastern Kazakhstani men, to 2% for the Bulgarian men, and zero % for the men in Altay, and from 8.7% of the Bulgarian women, to 7.5% of the Kazakhstani ladies, to 3.5% for women in Altay (Figure 3).

Figure 3

I would always buy a Bio-product at a higher price, and not the cheaper non-bio-product

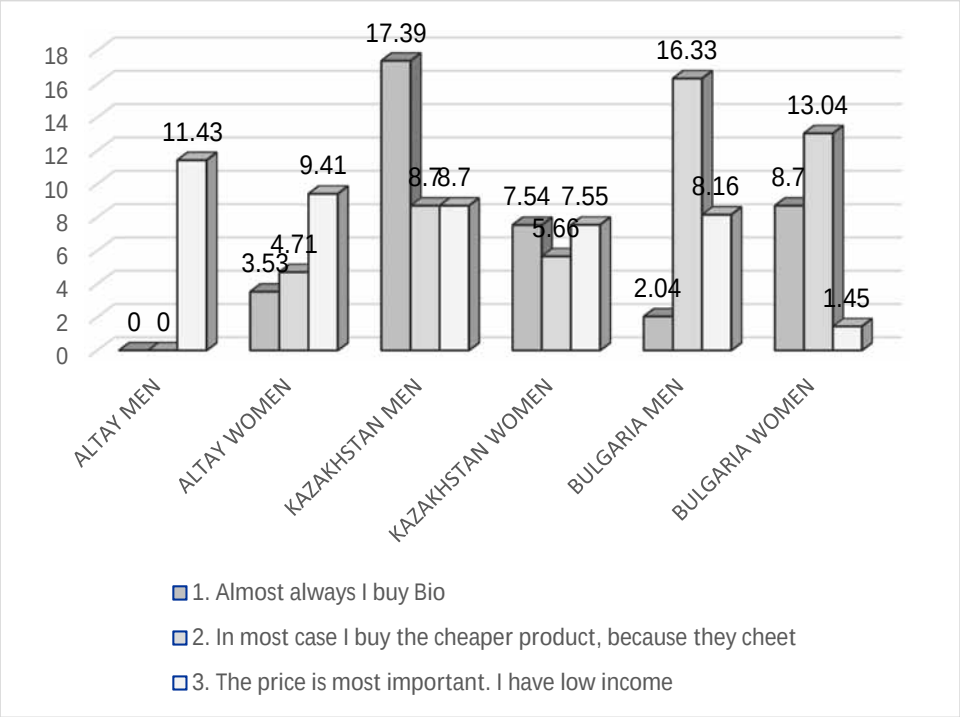


- ***I would not buy bio-product because they do not trust the information of the producers/sellers*:** 16.3% of Bulgarian men, and 8.7% on Kazakhstani men would not

buy bio-products "because they cheat" (Figure 4). Interestingly, no one of the Altay respondents expressed such concerns.

Figure 4

Would you buy a Bio-product at a higher price, or you would but the cheaper non-bio-product?



The responses of the female respondents differ in a similar way: 13% of Bulgarian ladies, 5.7% of Kazakhstani and 4.7% of Altay ladies would not buy bio for the lack of trust. Interestingly, the highest percentage of lack of trust is shown by the Bulgarian respondents, who would be expected to be trustful, as they live in a member-state of the EU, where the rules and regulations on the organic production and products are expected to be well set up, and implemented. As seen, the results from the survey do not confirm our expectations for some low percent of respondents, but the vast majority do not share such concerns.

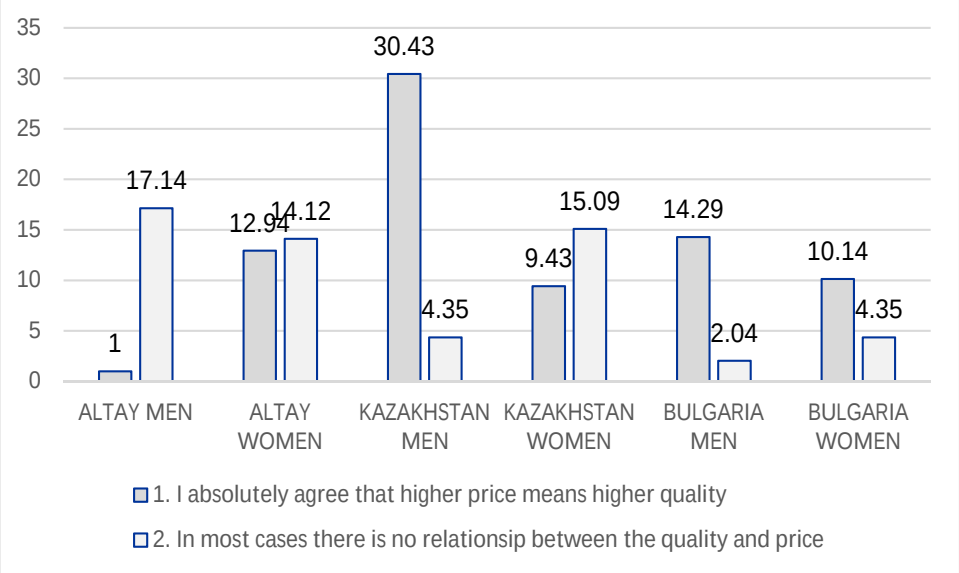
- ***The price is the most important factor as I have low income*:** the results are similar for the male respondents who would not buy because of the low income (11.4% for Altay, to 8.7% for Eastern Kazakhstan, and 8.2% for Bulgaria). For the female respondents, 9.4% of Altay ladies, 7.6% from Eastern Kazakhstan and 1.5% from Bulgaria will not buy for low income. We can guess if the (relatively) higher percent of Bulgarian ladies, who will always buy bio in spite of the premium price, and the low percent of declaring they would not buy for low income, is a result of good information about the effect of bio-products on health, or it is just a coincidence.

The answers to the question: "Do you agree that the more expensive products are of higher quality?" address directly Hypothesis 2 (Figure 4). There is a big difference between the perceptions of the respondents – both by country/region, and by gender.

- ***Higher price means higher quality:*** the results from the male respondents differ from 30.4% for Kazakhstani men, to 14.3% for the Bulgarians, and to 1% for Altay men, who agree that price equals quality. The ladies have a more consolidated opinion: 13% for Altay ladies, 10.1% from the Bulgarians, and 9.4% form Kazakhstani ladies agree that price means quality.
- To the control question "In most cases, there is no relationship between the quality and price" 17.1% of Altay men, 15.1% of Kazakhstani women and 14.1% of Altay women agree with this statement (Figure 5). About 4.4% of Kazakhstani men, 4.4% of Bulgarian women, and only 2% of Bulgarian men disagree with it.

Figure 5

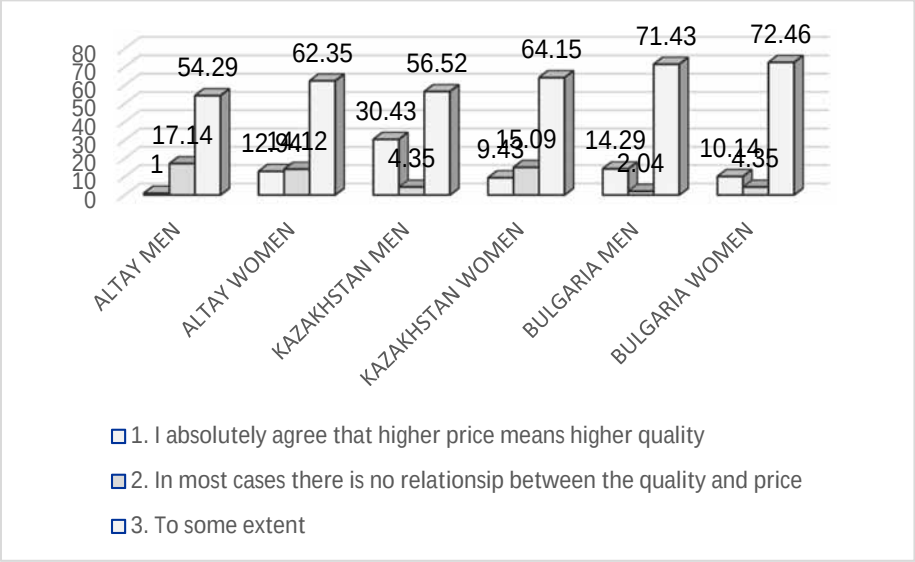
Do you agree that the more expensive products are of higher quality?



Altogether, an average of 63.5% of all respondents agree that the price and quality are related to some extent (Figure 6). Obviously, "to some extent" is a highly subjective feeling, yet altogether with the percent of those who absolutely agree, we can consider Hypothesis 2 confirmed.

Figure 6

Do you agree that the more expensive products are of higher quality?



Conclusions

As discussed in the previous sections, many researchers found out that in general, we should presume some differences in the needs, motivation, perceptions and attitude of the female and male buyer (e.g. Treleaven, 2015; Schiffman, Kanuk, Hansen, 2012). The findings of this research also show significant differences between the opinion of the respondents (Figures 2, 3, 4 and 5). These differences should be considered as they lead to differences in the interpretation and of the effect of the marketing stimuli and the marketing mix in whole. The three regions, which are covered by this survey, have a production capacity to supply the local and foreign markets with organic agricultural products. Our aim was to study the consumer's attitude and buyers' behaviour towards organic (bio) agricultural products as key factors to influence the market development and market potential, especially for supply to other regional markets in the particular country, and for export. Thus, this research leads to a better understanding of the consumers' specifics, as well as – the gender specifics, and by this, it provides the producers and sellers with ideas about optimisation of their marketing communication and pricing strategies.

Two working hypotheses were postulated and tested in the research:

Hypothesis 1: *In spite of globalisation, the people in the studied regions have different knowledge and interpretation of what bio (organic) agricultural product means.*

Many researchers are interested to find out to what extent the globalisation has changed the consumer attitude and buyer behaviour, especially for the products with high local content,

e.g. agricultural products. While it is clear that the people have a different understanding about this category of products, and obviously it would lead to different perceptions and attitude towards them in their buyer behaviour, it is not clear to what extent the global vision about the health value of the organic products has gone across the borders to form a similar perception. A similar level of liking bio-products as findings from the research would mean a universal perception and similar level of production and export potential, and such a result would reject Hypothesis 1. If significant differences would be found, it would mean the markets are at a different level of development – as local suppliers and exporters, and this would confirm Hypothesis 1.

A significant difference was found between the level of information/interpretation of the respondents both by regions and by gender (Fig. 2). For example, the level of knowledge (based on their personal judgment) of the female respondents differs from 50.7% in Bulgaria, to 37.3% in Eastern Kazakhstan and 16.7% in Altay region of Russia, which is 3 times difference between the highest and lowest levels of presumed knowledge of the female respondents. The results for the male respondents are different as well: from 43.5% in Eastern Kazakhstan, who know what bio-product is, to 26.5% in Bulgaria, and 20% of men in Altay region, Russia. Thus, the results confirm Hypothesis 1.

Hypothesis 2: *The price and perceived quality of organic products are positively related.*

We asked the respondents to agree or disagree with the statement *"Higher price means higher quality"*. The results from the male respondents differ from 30.4% for Kazakhstani men, to 14.3% for the Bulgarians, and to 1% for Altay men, who agree that price equals quality. The ladies have a more consolidated opinion: 13% for Altay ladies, 10.1% from the Bulgarians, and 9.4% form Kazakhstani ladies agree that price means quality. Most of the respondents claim that "from time to time" there is some relationship between the quality and price.

Our research also found, that 16.3% of Bulgarian men, and 8.7% on Kazakhstani men would not buy bio-products "because they (the producers and sellers) cheat" (Figure 4).

However, an average of 63.5% of all respondents agree that the price and quality are related to some extent (Figure 5). Together with the percent of those who absolutely agree, we can consider Hypothesis 2 confirmed.

An important finding of this research is, that 16.3% of Bulgarian men, and 8.7% on Kazakhstani men would not buy bio-products "because they (producers, sellers) cheat" (Fig.4). Interestingly, no one of the Altay respondents expressed such concerns. This finding suggests, that the farmers and sellers, as well as the state as a whole, have to take special measures to assure the consumers, that the concept of healthy food, in this case – agricultural bio-products, are produced following all the regulations and set quality standards at all stages of the process – seeds, production, storage before and in the market, etc. This is important because any increase of the lack of trust may transform into social and market problems.

Gender Effect

This research shows very significant differences between the opinion of the male and female respondents. As seen on Figures 2-5 the findings show differences in the opinion of male vs

female respondents from 50% to several times (for example Figure 4). Such differences raise questions about the effectiveness of the marketing information and marketing stimuli to male or female consumers/buyers, when the advertisements are focussing on one of the genders only. Our suggestion is to consider very seriously the gender of the target customers when planning and developing the specific marketing communication campaigns.

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ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 30 (2), 2021

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USE OF STATE SUPPORT LEVERS FOR SMALL AND MEDIUM-SIZED ENTERPRISES WITHIN THE DYNAMIC ENVIRONMENT

The evolution of theoretical approaches to the definition of the "entrepreneur" and "entrepreneurship" concepts essence was studied. It was established that various risks inherent in entrepreneurship are characterised by the complexity of distinguishing the signs of economy and investment within a turbulent dynamic environment of uncertainty, limited liquidity in a small and medium-sized business. It was determined that in many countries of the world small and medium-sized enterprises enjoy state support through their taxation systems, which necessitates the determination of a fair tax burden and appropriate fair tax bases. The role of small and medium-sized enterprises in ensuring technological progress, eliminating regional imbalances in economic development, achieving socio-political stability in society and strengthening national security was highlighted. The Recommendations of the European Commission on the SME definition in different countries of the world were characterised. The method of SME classifying into independent and dependent was suggested, which will further allow guiding the SME sector activities to ensure stability in society and simultaneously comply with their obligations to manage public finance at all levels.
JEL: G38

Problem Statement

In recent years, most countries have been developing against the background of new economic reality formation associated with occurrences of instability, which requires authorities to make adequate management decisions in public finance and social policy. One

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of the priority areas to overcome the negative trends is to expand operations of small and medium-sized enterprises (SMEs) in all forms and types. Companies flexible in structure and small in size react to market changes faster, using consumer and other advantages. They have greater flexibility in manufacturing competitive goods and providing services based on innovation and modern technology.

Results

Given national characteristics of economic systems, in the framework of anti-crisis measures, the governments of the leading countries of the world pay significant attention to supporting SMEs by introducing various regulatory instruments, including taxation (Draft resolution submitted by the President of the General Assembly, 2015; UNCTAD, 2015; Klimenko, 2015). Business activity has a diverse impact on national socio-economic systems (SES). In the past and at present, a lot of theorists, starting with the classical school of political economy, have considered the problems of entrepreneurship in SES. Encouragement of sustainable (stable) development through public administration mechanisms is currently in the focus of scientists and practitioners. Promotion of private initiatives in our country should be accompanied by theoretical and applied research into the aspects of business relations, development and implementation of new approaches to taxation as a lever of economic management, analysis of foreign experience in the fiscal regulation of the SME sector.

Economic activity, starting with its simplest development stages and ending with the world globalisation, has peculiar features at each stage of mankind evolution. The evolvement of the theoretical views on defining the “entrepreneur” and “entrepreneurship” concepts essence is given in Table 1.

The scientific analysis results of the essence of activity, which aims to gain profits in a competitive socio-economic environment, have given rise to the theoretical approaches to the SME taxation in the dynamics of its evolution.

The literature review shows that entrepreneurship carries special features based on various risks that can increase in a turbulent dynamic (Shumpeter, 2011) environment of uncertainty (Knight, 1921), limited liquidity (Holtz-Eakin, 1994), etc. The complexity of distinguishing the signs of economy and investment (Gentry, 2004) in small and medium-sized businesses represents a separate problem.

Guided by its European integration aspirations, Ukraine is experiencing the processes of economy transformation and increasing the SME role. Entrepreneurship is the force that accelerates the pace of the economy by increasing its efficiency, rationalising management processes and regularly introducing technological innovations.

The economic processes dynamism and need to respond to global challenges (such as poverty, education, gender equality) promoted an increase in the role and place of SMEs in the development of socio-economic systems, which was manifested in their inherent functions defined by prominent experts and scientists (Draft resolution submitted by the President of the General Assembly, 2015). These functions involve contribution to the processes of economy demonopolization and competition development, new jobs creation

and income increase. In addition, the international community has come to the conclusion that SMEs are able to fast respond to changes in market conditions, contribute to flexibility of the economy, participate in business activity encouragement and increase in goods and services production in national economies (Gentry, 2004).

Table 1

Evolvement of the theoretical understanding of entrepreneurship

Academic economists	Theoretical views on entrepreneurship
R. Cantillon (Kantil`on, 2004) (XVII – XVIII centuries)	Richard Cantillon appears to be the first to have introduced the concept of "entrepreneur" into the economic theory: the entrepreneur is a person who deliberately takes on risk in return for uncertain profits, with the risk being the main feature of entrepreneur's activity and adjusting supply in accordance with the demand in different markets being the main function of his activity (Avtonomov, 1993).
J.-B. Say (Say, 1971) (XVIII – XIX centuries)	Jean-Baptiste Say believed that – "entrepreneur is a person who organises other people within a production unit, produces a certain product/service"; – entrepreneurs are the centre of the production process and distribution theory.
F. Knight (Knight, 1921) (XIX–XXV centuries)	Frank Knight elaborated on the concepts of risk and uncertainty and emphasised the difference between them.
J. Schumpeter (Shumpeter, 2011) (XX century)	According to Joseph Schumpeter, dynamics of economy is associated with entrepreneurial activity and implementation of such "new combinations" as the manufacture of new goods and commercial use of the existing ones, use of innovative production methods with changes in the degree of monopolisation in industry structures, development of alternative sources of raw materials and sales markets.
P. Drucker (Drucker, 1985) (XX century)	Peter Drucker described the entrepreneur as an innovator and revolutionary, and innovation as the entrepreneur's unique tool
F. M. Scherer (Scherer, 1990), I. M. Kirzner (Kircner, 2001), J. M. Tirole (Tirole, 1983), F. A. Hayek (Hayek, 2007), (XX century)	These scholars' works are focused on the investigation of industrial markets, analysis of entrepreneurs' rational and irrational behaviour according to the theory of incentives. In particular, Israel Kirzner researched the influence of entrepreneurship on market equilibrium and assumed that the existence of non-equilibrium situations provides the entrepreneur with an opportunity to receive additional profits. According to Friedrich Hayek, the role of the entrepreneur is to optimally equilibrate supply and demand in order to prevent overproduction (Hayek, 2007).
M. Casson (Casson, 1982) (XXI century)	Mark Casson defines the entrepreneur as someone who uses judgment to deal with the problem of limited resources distribution and considers all his activities in terms of management.

Source: Holtz-Eakin, 1994.

The proportion of small, medium and large firms in the business environment is formed affected by strategic decisions of large firms based on their innovative capabilities: research

and scientific experiments with subsequent commercialisation of innovations. However, the economy of development differs from the expected effects of stable sales rise in a well-established range of goods and services. The dialectics of the firm's life cycle is related to the fact that at the stage of entering the sales market, its advantages are built on the basis of technological, marketing, organisational and managerial innovations. As small firms evolve into medium-sized ones and later into large enterprises, a method to strengthen business sustainability should be chosen, given the contradictions of increasing productivity through development and size as well as the potential for creating unique combinations of production factors with space and time. Among other things, in this way, we can analyse the potential of small and medium-sized firms in terms of their presence in certain market niches accompanying a rapid development of multinational companies, when the promotion of high-tech products should be supported by an ability of small businesses to quickly adapt to global value-added chains in partnership regimes.

In general, SMEs have some distinct competitive advantages over large businesses. Owing to their mobility, SMEs respond fast to changes in the market situation, have the potential for rapid return on investment with low capital intensity and limited overhead costs due to high motivation, rational organisation of managerial decision-making and its proximity to the manufacturing process. In the framework of the horizontal management system, direct and personal contacts of employees with partners and managers, new products are rapidly developed and production volumes increase due to technological flexibility of production processes and own potential of small scale production.

In addition, SMEs have advantages over other public institutions in terms of middle-class formation and public life democratisation, possibilities for realising peoples' capacity for initiatives, improving entrepreneurial qualities and skills. According to the researchers, advantages of small enterprises also involve independence, autonomy, freedom and possibility to start a business with a relatively small start-up capital, rapid adaptation to regional characteristics, direct communication with consumers, narrow specialisation in a certain segment of the consumer market (Jefymenko, 2011; Varnalij, 2005).

In many countries, SMEs enjoy state support. Its component is taxation, that is the process of state intervention in the market mechanism for economy self-regulation, when one party represented by the state makes another party – the taxpayer – to pay part of its income. This necessitates a determination of an equitable tax burden and, in order to respect the principle of equality with regard to small enterprises in national economies, determination of appropriate fair tax bases.

The advantages formed in the SME field affect the fiscal space significantly due to the stated above advantages associated with a strong potential for creating new jobs, competitiveness and ability to change.

Some scholars (Jefymenko, 2011; Rising, 2014; Vishnevskij, 2010; Kozačenko, 2003) highlight a specific role of small business in ensuring technological progress, eliminating regional imbalances in economic development, achieving social and political stability in society and strengthening national security. However, the peculiar features form within the framework of the existing system of state support in the country, which affects the main

parameters of entrepreneurial initiative. Such systems are established according to national, mental, ethnic, cultural, economic and other characteristics.

The tools to encourage and support SMEs available in developed market economies tend to be difficult to implement in developing countries. After all, financial capacities are different. Unlike developed countries, public and financial institutions in developing countries are weak and cannot create an enabling environment.

Accordingly, there is a need to prioritise the functions that the state expects SMEs to perform. In developed countries, the purpose of encouraging SMEs is employment and well-being creation, innovation introduction, increased competitiveness and development of entrepreneurial initiative (Jefymenko, 2006; Commission of the European Communities, 2008). In developing countries and the least developed countries, the objective of SMEs development is primarily related to the economic component, namely the creation of opportunities for income generation and poverty alleviation. It should be noted that creation of employment and self-employment, which is important in terms of overcoming poverty, also contribute to a reduction of the criminal environment in the country and development of human capital through educational programs (European Commission, 2015).

According to the statistics data, 1/2 (50%) of jobs are created by small enterprises annually (Usman, 2015). Their role is particularly important in crisis years as well as in depressed areas. Traditionally, small firms have an atmosphere of creativity, interest and activity. Success built with own hands, a need to take responsibility for own life and destinies of the nearest and dearest change the attitude to work and business radically. Permanently struggling for survival, SMEs are forced to be constantly developing, quickly respond to changes in market conditions, and be the best in order to succeed. Due to their relatively small size, SMEs respond faster to accelerated changes in the markets and more easily penetrate unfilled niches. In general, the activity of small firms is often a segmental business, whose advantages are mainly manifested within crisis times. The bankruptcy of small businesses is not accompanied by significant risks, since market niches generally have sufficient space for activities of many partners and competitors.

The existence of large firms requires a constant study of demand and the presence of competitive advantages based on the factors of marketing, technology, productivity. SMEs are able to produce goods in small volumes focusing on the consumer paying capacity, meet the needs for scarce services and manufacture piece products according to customer requirements. Small firms, often family-owned, are the only ones able to maintain a high level of diversification of offers, providing customers with special types of products and services. This happens, among other things, due to their direct communication with the customer. At the same time, SMEs are vulnerable to negative external and internal uncertainties, threats and risks.

The use of public support for SMEs depends on the objectives set by governments. Thus, for countries, which see the purpose of SMEs development in economic growth, investment activity and innovation (Usman, 2015; European Commission, 2015) (for example, the EU countries), the basis for encouragement is non-tax levers based on the development of human capital. Tax levers are used within the framework of the general taxation system and aimed at encouraging investment and promoting innovation. For developing countries and countries

with transition economies, the priority of SMEs development consists in employment creation and poverty alleviation.

This trend is consistent with the United Nations Millennium Declaration (Draft resolution submitted by the President of the General Assembly, 2015) adopted in 2000 on the basis of the materials of the UN World Conferences. The Declaration, adopted by 147 heads of state and 189 states, contains provisions known as the Eight Millennium Development Goals and 18 targets (UNCTAD, 2015; Klimenko, 2015) with the time frame. The set Millennium Development Goals (MDGs) and targets are of global priority to ensure that the countries of the world can achieve sustainable growth based on the relevant goals, including decent work for all, well-being, poverty eradication, technological advantages, human capital development, and improvement of living standards. Thus, the SME encouragement coincides with the Millennium Development Goals, regardless of whether the country is developed or developing.

Small and medium-sized enterprises are the economic basis of the EU countries' economies, as they constitute an overwhelming majority of business entities and play a key role in employment, affecting the level of economic growth in most industries and sectors; they are characterised by their propensity to innovation and development. At the same time, the operating environment of small business is quite complex, its activities are associated with a range of problems: access to financing, high tax rates, administrative complexity, corruption, rules regulating the labour market and trade, etc.

Aware of the importance of SMEs for prosperity and social well-being, governments in both developed and developing countries are working out public support measures. The purpose of this paragraph is to reveal the role and importance of SMEs in the EU member state economies and the main areas of state support for SMEs in these countries.

The role and importance of small, medium and micro-enterprises in the country's economy are viewed in the light of their contribution to employment, value-added and exports. In fiscal terms, their share in the total taxable income of enterprises and average taxable income at the business entity level, including the amount of the enterprises' taxable incomes from entities of different sizes and depending on the types of taxes they must pay, is representative.

In a broad sense, SMEs are primarily independent entities, which are not in control of a large or medium-sized enterprise. According to the definition provided by the relevant European Commission Recommendations (The Lisbon European Council, 2000), SMEs are "enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million". Small enterprises are defined as those, which employ fewer than 50 persons and have an annual turnover and/or annual balance sheet total of less than EUR 10 million; microenterprises are firms which employ fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 2 million (see Table 2).

Table 2

Criteria for the SME Definition in the EU countries and Ukraine

Company category	Staff headcount (annual)	and	Annual turnover	or	Balance sheet total
EU countries					
Micro	< 10	and	=/< EUR 2 million	or	=/< EUR 2 million
Small	< 50	and	=/< EUR 10 million	or	=/<EUR 10 million
Mediume	< 250	and	=/< EUR 50 million	or	=/<EUR 43 million

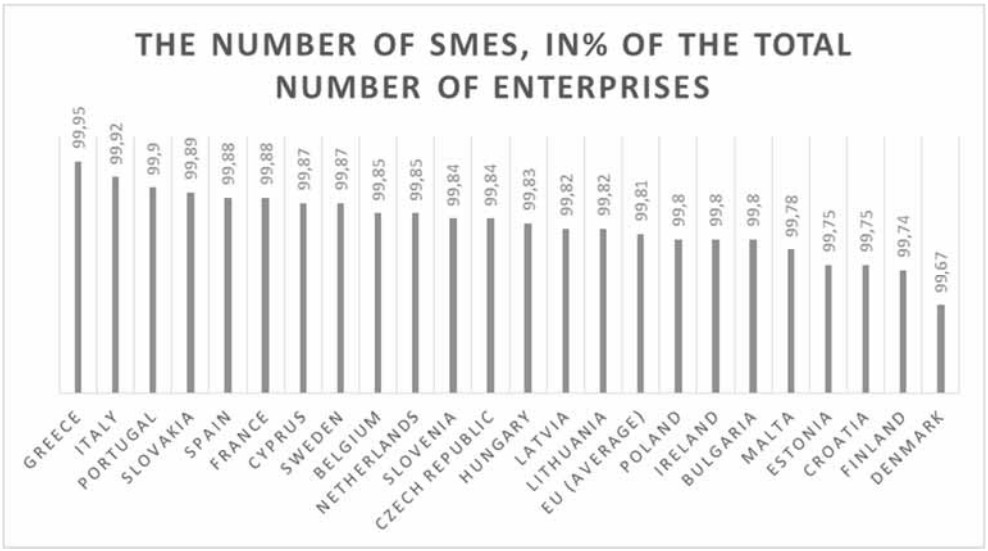
* net income from sales of products (goods, works, services)
Source: The Lisbon European Council, 2000.

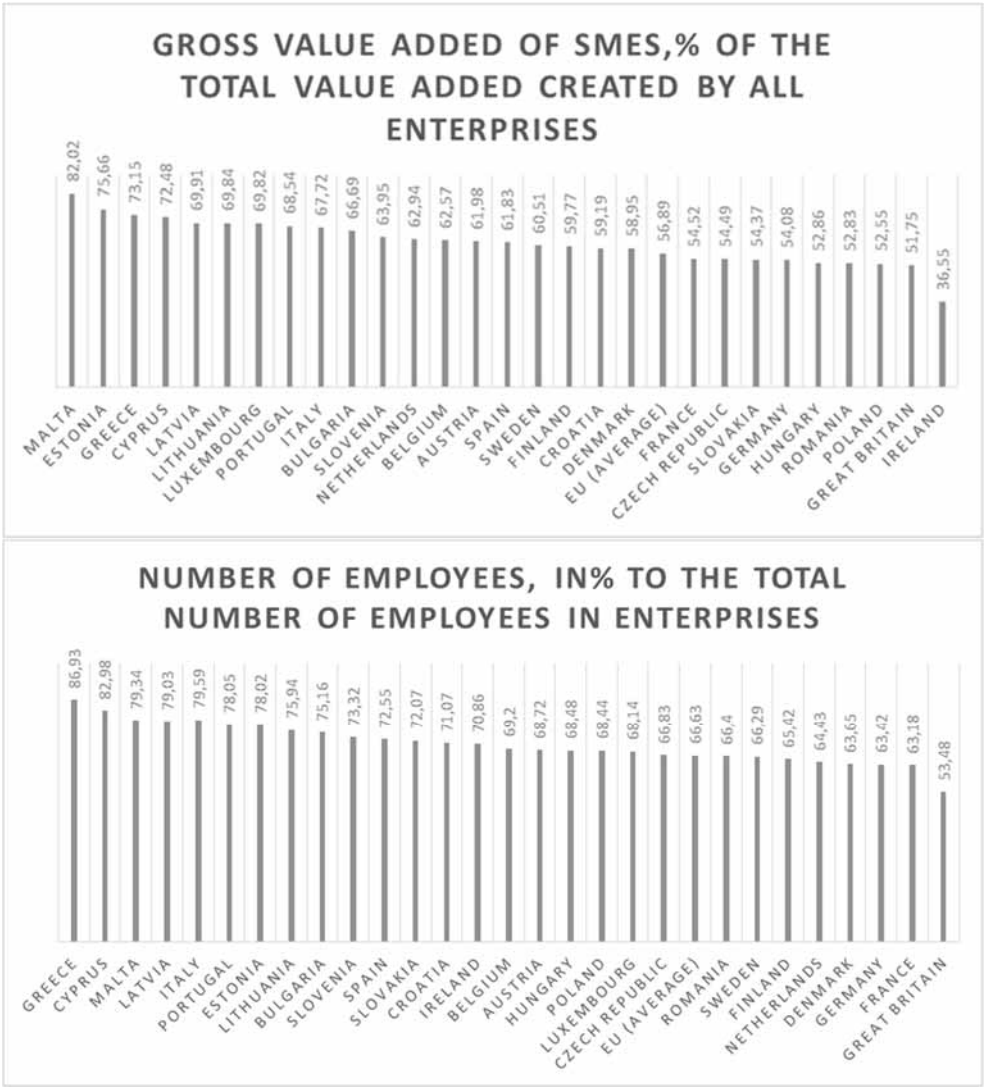
Consequently, the status of SMEs is determined on the basis of simple factors, such as staff headcount, annual turnover and annual balance sheet total (net assets). The Recommendations of the European Commission concerning the SME definition are generally recognised and used not only within the EU.

Small and medium-sized enterprises are a large group of business entities, involving enterprises with different organisational structure, different number of employees and level of economic activity. The European Commission considers them to be a key factor for economic growth, innovation, job creation and social integration in the EU. Small and medium-sized enterprises, that is those employing fewer than 250 persons, are a very important part of the economy. According to Eurostat (Commission Recommendation, 2003), they account for approximately 99% of all the companies while providing about two-thirds of the total employment in the EU (from 53% in the UK to 87% in Greece) and generate about 56% of the total turnover in the EU (see Figure 1).

Figure 1

Activities of small and medium-sized enterprises in the EU countries, 2016





Source: European Commission, 2018.

In all the EU countries, microenterprises are the most common form of entrepreneurship (the main criterion is employing fewer than 10 persons): they make up 96% of all enterprises in Denmark, the Netherlands, Spain and Sweden. According to Entrepreneurship at a Glance, the latest report on SMEs' activities in the OECD countries (European Commission, 2018), their performance indicators have enjoyed a stable positive trend, showing a recovery from the financial crisis. There has been a general strengthening of small businesses' position in all economy sectors due to expansion of all final demand categories (household consumption, public consumption, exports of goods and services, investment by households, governments

and enterprises), while in the previous years exports was the main factor in the SMEs' recovery.

In almost every EU-28 country there was an increase in SME employment, although the dynamics of this indicator was heterogeneous (significantly different) by economy sectors: from 0.9% in construction to 2.8% in the business services sector (European Commission, 2018). Employment recovery in SMEs was the most dynamic in the service sector. The wholesale and retail, accommodation and food supply as well as business services sectors saw a growth of approximately 1.7%, 1.8% and 2.8% respectively, while in the manufacturing sector it was not so rapid, at 1.1% in 2016.

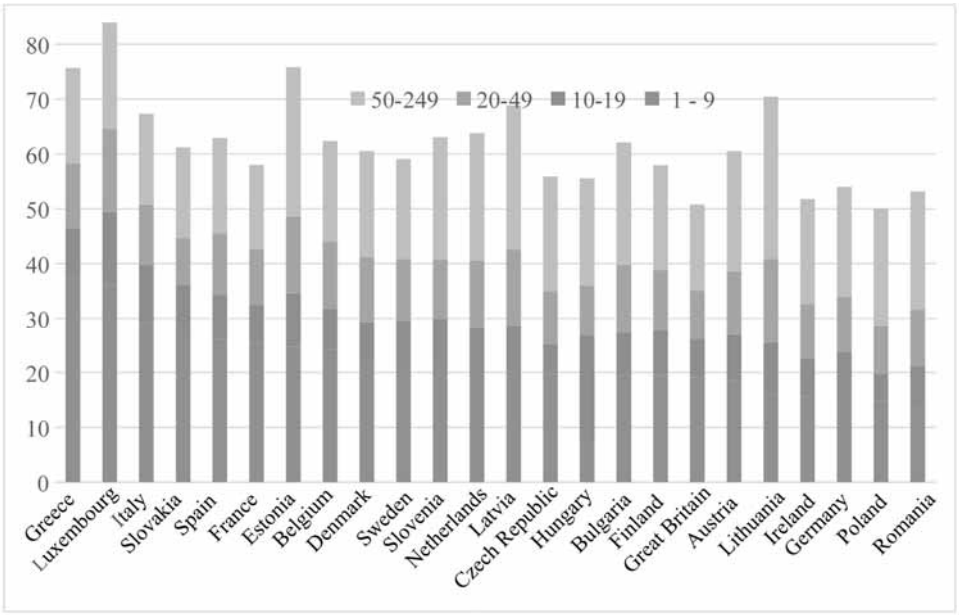
High-tech industries have played a significant role in the growth of small and medium-sized businesses. In particular, the provision of information processing services and high-tech services is associated with the highest increase in the SME employment in the EU-28.

According to the recent data (2012-2014), a significant part of new enterprises in the EU-28 were created in the sectors outside the ICT sector. In particular, enterprises involved in the production of information and communication technologies, provision of relevant services or wholesale and retail trade in ICT only accounted for 7.9% of all EU-28 enterprises created within this period European Commission, 2015).

Among small and medium-sized enterprises, approximately 31 million persons in the EU-28, who are self-employed, make up a separate group. After all, being full participants in the labour market, they do not receive traditional wages. This is a characteristic feature of this group. Here enterprises may represent different legal forms (such as sole trader, incorporated business, partnership, etc.). 31 million of self-employed persons together make up 14% of the total employment in the EU-28. New information technologies have resulted in new modes of production and opportunities for self-employment. The emergence of so-called "platforms" or gig-economy, that is, an economy characterised by the availability of numerous online platforms to help people who are willing to offer specific services to find those seeking these services, has had a significant effect on the self-employment level in the EU. At the same time, this phenomenon requires new approaches to labour market regulation and taxation of self-employed persons.

The contribution of SMEs to value-added and exports. In most economies, SMEs generate a significant share of value-added, although this share is lower per number of employees. This difference is due to the lower productivity of small enterprises compared to large firms. However, the share of value-added generated by SMEs can vary considerably across countries and across sectors. In the transport, storage, gas, production and air conditioning sectors, some SMEs are able to generate more value-added than large enterprises (Organisation for Economic Co-operation and Development, 2017, p. 22). The share of the value-added generated by SMEs in the EU ranges from a little over 80% in Luxembourg to 50% in Poland, Great Britain and Ireland. On average, in most countries, SMEs generate between 55% and 75% of value-added. A significant part of it is generated by microenterprises due to their number (Organisation for Economic Co-operation and Development, 2015, p. 35). Microenterprises provide approximately 10-25% of value-added in most countries, except for Greece and Luxembourg, where this figure exceeds 35% (see Figure 2).

Figure 2
Gross value added by enterprise size (depending on the enterprise staff headcount) in some EU Member States, 2015 (or the latest available)



Source: generated based on Organisation for Economic Co-operation and Development, 2015.

The share of small enterprises' direct exports differs significantly across countries: from 16% (Germany) to more than 54% (Estonia, Ireland, Latvia). Small and medium-sized enterprises create less than half of the total export flow in virtually all the countries, for which data are available (except three). The greatest contribution to export activity in each country under consideration was made predominantly by medium-sized enterprises (enterprises, which employ from 50 to 250 persons) rather than by micro- and small enterprises (with the exception of Ireland) (see Figure 3). It is worth mentioning that in Figure 3, the data on the SMEs' direct contribution to exports formation are only presented.

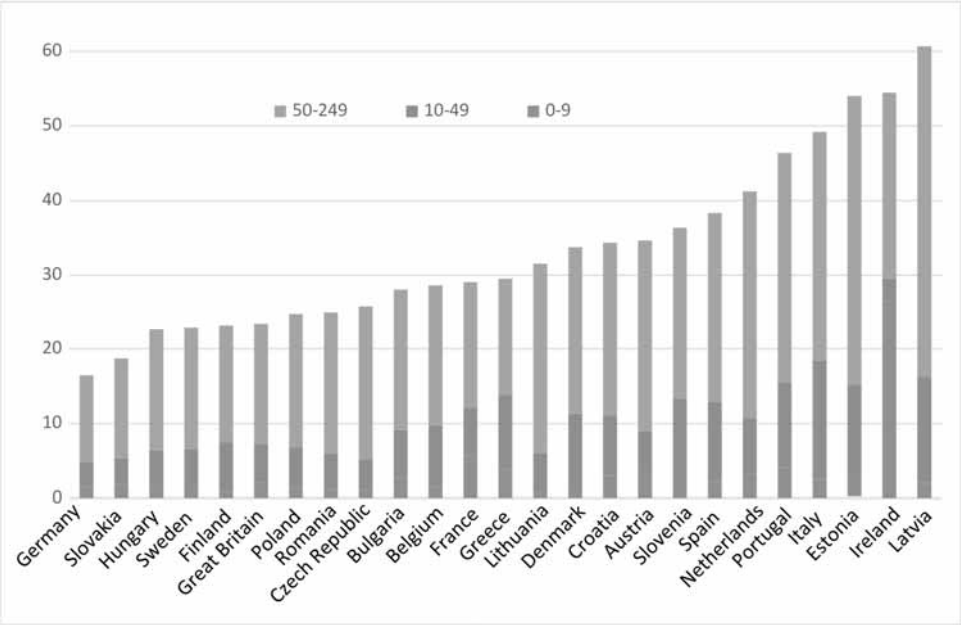
However, SMEs can also contribute to exports indirectly – as suppliers to large exporting enterprises. The preliminary assessment of this effect shows that it may significantly exceed the direct effect (Organisation for Economic Co-operation and Development, 2015).

It should be borne in mind that for a more accurate statistical display, which would be consistent with the European Union's SME Definition, the data at the micro-level, which enables obtaining more detailed information on SMEs' economic behaviour, should be taken into account. In official statistics, SMEs are most often identified by staff headcount. That is, the statistics include all enterprises, regardless of their organisational structure, where the staff headcount does not exceed 250 persons. When collecting data, the enterprise's participation in various associations is not generally considered. However, this nuance is

important as enterprises belonging to a national or international group of companies may have advantages over independent enterprises: for instance, in terms of access to financing, terms of trade, access to foreign markets and other aspects of doing business.

Figure 3

Exports by enterprise size (depending on the enterprise staff headcount), %



Source: generated based on the Organisation for Economic Co-operation and Development, 2015.

In fact, according to the additional surveys of small enterprises' performance (Organisation for Economic Co-operation and Development, 2015), the majority of enterprises, which employ fewer than 250 persons (small enterprises), are independent (autonomous) (93.6%). Only about 500 thousand (6.4%) of enterprises employing fewer than 250 persons are dependent (that is, they belong to a domestic or international group of companies). At the same time, these dependent enterprises make a disproportionate contribution to trade and employment: they generate more than half of the total turnover (52.4%) and create about a quarter of the labour force (see Table 3).

In surveys, the term "enterprise, which employs fewer than 250 persons" is used instead of SMEs, as there is no data on whether they meet other criteria for being defined as SMEs. The data on the number, turnover and employees are detailed by categories of belonging to national or international groups, on the basis of which small and medium-sized enterprises are further divided into dependent and independent.

Table 3

Enterprises, where the staff headcount does not exceed 250 persons*, 2015

Company category	Number of enterprises, % of the total enterprises	Turnover, % of the total turnover	Employees, % of the total persons employed
Independent	93.6	47.6	74.9
Dependent, including:	6.4	52.4	25.1
in the group < 250 employees	4.3	15.3	10.6
in the group ≥ 250 employees	0.4	13.4	4.8
in the international group	1.6	23.6	9.7

* By the data presented by 12 EU countries, which participated in the Micro data linking project.[5]
Source: Organisation for Economic Co-operation and Development, 2015.

However, in this context, the independent enterprise is an enterprise which, according to the business register (BR), is not controlled by another enterprise (neither domestic nor foreign) and at the same time does not control another enterprise (neither in the country of residence nor abroad). Dependent enterprises belong to a group of enterprises and are controlled by other enterprises (domestic or foreign) and/or control another enterprise (in their own country or abroad).

In addition, a separate column of the dependent enterprises category contains the detailed data on the companies, which belong to the group, where the total staff headcount exceeds 250 persons (as, according to the SME definition, such a dependent enterprise should be viewed as a large enterprise). This enabled us to conclude that the majority of dependent enterprises in the sample group (approximately 335 thousand, or 4.3% of the total) refer to the groups, which employ fewer than 250 persons – that is, these enterprises can still be considered as SMEs based on the employment criterion.

About 34 thousand dependent enterprises in the sample group (0.4% of the total) belong to the groups employing over 250 persons. Therefore, they are actually large enterprises; such enterprises generate 13.4% of the total turnover and create nearly 5% of the total employment.

A separate group also includes dependent enterprises, which belong to international groups (there are about 129 thousand of such enterprises or 1.6% of the total). Since the data on the size of the group's foreign part is not always available, we cannot distinguish the enterprises, which belong to the group with the total staff headcount of over 250 persons, among those belonging to international groups. We can only assume that many of them are actually large enterprises. According to Table 3, enterprises employing fewer than 250 persons and belonging to international groups generate about 23.6% of the total turnover and create 9.7% of the total employment.

[5] Statistical survey of the Micro data linking project (MDL project), which included 12 countries (Bulgaria, Croatia, Denmark, Estonia, Finland, Italy, Latvia, Netherlands, Portugal, Romania, Sweden and Norway).

The data presented highlight the importance of enterprises belonging to international groups and the fact that the control criterion (independent/dependent enterprise) should be taken into account when analysing the data of small and medium-sized enterprises and categorising them based on the staff headcount, as dependent enterprises behave in a different way compared to independent ones.

As far as micro-enterprises (with the staff headcount from 0 to 9 persons) are concerned, 96.6% of them are independent, 2.9% belong to the national group, and only 0.6% of them belong to the group of enterprises employing more than 250 persons. Only 0.5% of micro-enterprises in the countries, which participated in the survey, belong to the international group[6] (Table 4).

Table 4

Categorisation of enterprises with the staff headcount of fewer than 250 persons*, 2013

Enterprise category by staff headcount	Independent	Belonging to the national group			Belonging to the international group
		Total	Including		
			total staff headcount < 250	total staff headcount ≥ 250	
Categorisation of the enterprises total number, %					
from 0 to 9 employees	96.6	2.9	1.8	0.5	0.5
from 10 to 49 employees	81.3	15.4	9.1	2.3	3.3
from 50 to 249 employees	54.3	32.7	13.5	7.1	13.0
from 0 to 249 employees	95.1	4.1	2.4	0.8	0.9
Categorisation of the enterprise employees, %					
from 0 to 9 employees	95.7	3.6	2.3	0.3	0.7
from 10 to 49 employees	77.5	18.3	10.6	2.7	4.1
from 50 to 249 employees	49.9	35.0	13.6	8.2	15.1
from 0 to 249 employees	78.3	16.3	7.8	3.2	5.5

* Data from 18 EU countries, which participated in the collection of data on SME activities
Source: Organisation for Economic Co-operation and Development, 2015.

More than half (54.3%) of enterprises, which employ from 50 to 249 persons, are independent; 7% of enterprises are actually large, as they belong to the group with the staff headcount of 250 or more persons (Organisation for Economic Co-operation and Development, 2015). The data from individual countries are within the general trend: while the share of dependent enterprises is relatively low in most countries, their contribution to turnover and employment is significant. In particular, the share of dependent enterprises belonging to international groups is very low (from 0.5% in Croatia to 5.9% in Romania).

However, the contribution of this group of enterprises in terms of turnover and employment is much more considerable, usually, it is more than 10%. The only exceptions are the

[6] Voluntary data collection programme involving 18 European countries (Belgium, Bulgaria, Croatia, Finland, France, Germany, Italy, Latvia, Lithuania, Hungary, Netherlands, Poland, Portugal, Romania, Slovenia, Spain, Sweden and the United Kingdom).

following countries: Croatia (3% of the total turnover and 1.6% of employment), Bulgaria, Finland and Italy (about 5.5%, 5.2% and 8.3% respectively, in terms of employment in companies with the staff headcount of fewer than 250 persons belonging to international groups).

Denmark, Norway and Sweden have the biggest number of dependent enterprises, which employ fewer than 250 persons; their share accounts for 25.7%, 22.8%, 16% respectively. These companies are the most significant contributors to the total turnover in Norway (73.7%), Sweden (71.5%) and Denmark (69.2%); the same countries are the leaders in terms of job creation (Norway – 55.9%, Sweden – 54.8%, Denmark – 57.7%).

The contribution of independent enterprises to job creation and turnover generation is naturally high. In seven of the twelve countries, at least 90% of enterprises with the staff headcount of fewer than 250 persons are independent. In Denmark, Norway, Sweden, Estonia and Latvia, the share of independent enterprises was less than 90%, but more than 70%. The Netherlands (97.9 %) and Portugal (97.4 %) have the highest proportions of independent enterprises with the staff headcount of fewer than 250 persons.

In terms of employment generation, the share of independent enterprises ranges from 42.3% in Denmark to 83.5% in Portugal. In most countries, the staff headcount of independent enterprises employing fewer than 250 persons made up about 70-80% of the total staff headcount in this enterprise category. The lowest rates are seen in Denmark, Norway and Sweden (about 40-45%).

As far as trade (turnover) is concerned, independent enterprises employing fewer than 250 persons generate about 25-30% of the total turnover among all the enterprises in the sample group in Denmark, Norway and Sweden. In Estonia, Latvia and Finland, the contribution of independent enterprises to the total turnover ranges from 40% to 45%. Bulgaria (61%), Croatia (60%) and Romania (58%) have the highest share of the turnover in the category of independent enterprises employing fewer than 250 persons.

In general, despite the fact that the share of independent enterprises in the sample group is high (70-90%), in terms of turnover, both dependent and independent enterprises contribute almost equally.

In some countries, enterprises belonging to the international group contribute to employment generation considerably, especially in the Netherlands (18.7%) and Estonia (22.5%); to a lesser extent, it is seen in Latvia, Romania, Portugal, Denmark, Sweden and Norway (from 10% to 15% in each country). The contribution to employment generation of the enterprises belonging to the groups with the staff headcount of 250 or more persons is more considerable in Sweden (13.3%), Finland (11%) and Norway (10%).

In terms of turnover, the contribution of enterprises with the staff headcount of up to 250 persons belonging to international groups is even more distinct than their contribution to employment generation. The largest share of these enterprises' turnover was observed in the Netherlands (44.8%), Estonia (40.3%), Portugal (35.9%), Latvia (35.7%) and Romania (34.2%). However, enterprises belonging to the group, which employs no more than 250 persons, have no more than 10%-20% of the total turnover.

In one way or another, dependent and independent SMEs participate in global target chains as partners, suppliers and distributors for large and multinational companies. This creates a number of additional opportunities for them, including the benefits of entering new, global and niche markets to supply specialised goods and services, expand cooperation chances (Papadopoulos, 2018). Enterprises able to respond quickly to innovations have better opportunities to participate in these global target chains (Organisation for Economic Co-operation and Development, 2008). Tax measures, which promote growth and provide support for SME financing and innovations, are part of a wide range of national government initiatives needed to facilitate the involvement of SMEs in the global value chain.

A distinctive feature of small enterprises is a high level of adaptability to changing conditions of the global economic environment, the propensity to innovation and a high potential for growth. Some SMEs are new firms with high growth and development rates, but most of them do not evolve into larger firms. Among the entire enterprise population (2014), those, which can be referred to as fast-growing companies (enterprises with more than 20% of the average annual growth of staff within three years or more, which had fewer than 10 employees when created), make up from 2% to 6% of the total enterprises, with 1% being the so-called "Gazelle" enterprises, which make swift progress within the first five years of their operation (Organisation for Economic Co-operation and Development, 2015).

In fact, fast-growing firms play a significant role in employment generation, the so-called start-ups[7] and scale-ups[8] are important drivers of economic growth. According to the latest data, on an average 9.2% of micro-enterprises were referred to fast-growing enterprises in the EU-28. The largest share of fast-growing enterprises – approximately 12% – was recorded in Malta, the United Kingdom, Sweden, Latvia, Hungary and Ireland, while the smallest share (below 3%) was seen in Cyprus and Romania. On average, the EU-28 enjoyed the largest numbers of fast-growing enterprises in the information and communication technology sector, administrative services and support (15% and 12.7% respectively). A large number of fast-growing firms were observed in the transport services sector and in the field of professional, scientific and technical activities – 11% each (Organisation for Economic Co-operation and Development, 2015). At the same time, as it was stated above, more than 90% of new firms are created in the traditional, i.e. non-ICT sectors.

To sum it up, it is worth emphasising on the following. In 2016, with the exception of 0.2%, all the enterprises of the non-financial sector in the EU-28 were SME entities. They provided employment to 93 million people, which accounts for 67% of the total employment, and generated 57% of the EU-28 added value. The vast majority (93%) of small and medium-sized enterprises are micro-enterprises employing fewer than 10 people. They are the basis of the EU economies. Among small and medium-sized enterprises in the EU-28, there are approximately 31 million of self-employed persons, which accounts for 14% of the total employment. The use of information technology has created new opportunities for self-employment. This phenomenon requires new approaches to labour market regulation, financial accounting and taxation of self-employed persons.

[7] Start-ups – new companies, which tend to grow fast.

[8] Scale-ups – companies already existing in the market, which occupy a certain niche and show significant (above average) growth rates.

Conclusions

The role and functions of SMEs are extremely important in the national dimension in the context of relations between the state and entrepreneurs. According to the European Charter for Small Enterprises (Financial Web (n. d.), the ability of small enterprises to adapt to social and regional development as well as their dynamic ability to adequately respond to the updated needs of the market, in particular in providing jobs, is generally recognised. SMEs are the most sensitive to changes in the business environment, the first to suffer from excessive burdensome bureaucratic procedures. At the same time, such enterprises are flexible to consumer demands and require lighter administrative regulation. It should be noted that SMEs' advantages set out in the Charter were analysed in detail in the previous paragraph.

This is also confirmed by the implementation of the Lisbon Strategy, according to which the EU is considered the most competitive and dynamic economy in the world, based on knowledge and capable of sustainable economic growth. In this context, a special role is assigned to SMEs as innovators creating more jobs and centres for social cohesion. In the EU, small enterprises are seen as potential leaders of innovation, employment and economic integration within the community.

In the institutional context, the balance in the conditions of doing business is provided by the balance in the legislation and regulation, which is implemented in the organisational structures, rules and stereotypes of entrepreneurs' formal and informal behaviour. Articles of laws concerning private initiative should be harmonised to regulate SMEs activities, given territorial characteristics and social relations, which developed in the course of time.

The realisation of SMEs potential along with the public space takes place within the framework of economic relations established in the process of distribution and consumption of economic benefits, which give rise to a certain range of interests. It is obvious that each group of entities has its own range of interests. Thus, at the state level, the priority is to meet the interests in social and fiscal areas, while business environment and the public sector are focused on obtaining the benefits provided for by laws, including constitutional provisions.

As it was mentioned above, the state guides the SME sector activities in order to ensure stability and at the same time comply with the obligations to manage the public finance at all levels.

Within the framework of the SES functioning, entrepreneurs' activities are performed alongside with fulfilment of the following major functions:

- economic, where market and production objectives are the basis,
- meeting domestic and foreign markets' needs in goods and services, consumption and commercialisation of innovations, formation of a competitive business environment, etc.;
- social, by solving the problems of employment, creating jobs, providing individuals with a possibility to exercise their professional skills, assisting in poverty alleviation, ensuring well-being;
- fiscal, by ensuring the balance of financial resources.

Small and medium-sized businesses contribute to solving a number of socio-economic problems of society and the public sector, which corresponds to the principles of the theory and practice of inclusive development. This is proved by the experience of successful implementation of modern strategies in the EU and other developed countries. It is worth emphasising that one of the most crucial problems still not completely resolved in any country is unemployment. However, many strategic international and national programs have recognised the appropriateness of the theoretical conclusions as to the SME sector potential for increasing employment.

Competition between businesses fosters a constant search for innovative solutions in management and technology in the framework of international and national relations with other economic agents. The current trends in implementation of economic development objectives differ from the established forms of business activity since nowadays not only management strategies aim to meet the needs of consumers but also they sometimes affect in an aggressive way the creation of demand for related goods or services required for the buyer's economic activity.

The SMEs' social function is not limited to employment generation, but affects social infrastructure formation, charitable activities, creation of incentives for human capital development, poverty reduction, etc.

These functions and their scope are inherent in any initiative. Given this, the system of relations between the state (including tax relations) and business entities should be based on partnership. Economic agents perform their functions: based on social responsibility, business generates added value; the state renders services provided for by the Constitution thus creating an adequate institutional environment, supervises observance of the established rules by all business entities.

In terms of social equilibrium, the combination of business entities' capabilities of ensuring achievement of their own goals while meeting the interests of the state is optimal. Financial support of operating expenses and investment in economic activity represent the conditions of stability.

The existence of sophisticated institutions encourages business environment to develop and grow further within the economic system, and their quality determines the incentives for the performance of the functions within SES. It is the state that is the entity to develop the institutional incentives and economic instruments, which should help to harmonise interests and ensure sustainable growth of the national economy.

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ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 30 (2), 2021

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DEPENDENCE OF THE COMPANY'S REPUTATION AND THE QUALITY OF CUSTOMER RELATIONS

The article is investigating the improving of the company's reputation through quality customer relations. Hence, customer satisfaction is essential for company reputation and loyalty because of a company brand whole dependency on customer satisfaction in turbulence market. Therefore, the current study conducted in Pakistani context to check the customer believes regarding company brand and its reputation, because nowadays the Pakistani market is very flexible, and no one can go smoothly inter in this turbulence market. The underline study finding suggests many recommendations for policymakers and practitioners, that build a cluster of trust among company's staff because it will support the customer reputation, and different steps (advertising, public relations and marketing campaigns) are very pivotal tools, can change customer's behaviours.
JEL: M30

Introduction

Customer loyalty has become a prominent predictor in the business world because of its crucial role in the organisation success. However, customer loyalty does not come directly; it requires great struggle, resources and time. Considering the worth of loyalty in profitability, business firms have strongly emphasised the improvement of loyalty and thus, investment lots of resources in human resources management. Still, many organisations fail to gain the loyalty of customers due to the lack of strategies and deficiency of resources. Many studies have been attempted to unleash the influence of a variety of factors on customer loyalty and other perceived factors etc. Despite all the efforts, studies on customer satisfaction which supports the relationship between Customer Relationship Management, company reputation and loyalty has been received neglected attention. Hence, the present

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study is trying to test customer satisfaction as support on the relationship between CRM and loyalty as well as between company reputation and loyalty in the tourism sector.

CRM is very crucial for building loyalty in service sector organisations because many tourists prefer to hear and know the service quality and place in advance as well as they follow up. Through CRM, many organisations retain their customer loyalty because they provide their desired services and products on time. Such database enables organisations to quickly understand the customers' demands and choices that result in low cost and maximum benefits. Hence, customers often feel satisfied when they received positive feedback from organisations and satisfaction, in turn, spurs loyalty.

Another crucial dimension of loyalty is company reputation because customers/visitors often visit well-known places. However, reputation does not directly configure loyalty, but at first, tries to enhance satisfaction that results in loyalty. Hence, organisations must focus on reputation to gain a high appreciation for high performance. Reputation is the fragrance that catches customers very quickly with a low cost. Therefore, small companies often rely on reputation to retain customers satisfy and loyal. Nevertheless, in summary, we argue that CRM and reputation first build customers satisfaction that in turn, enhances loyalty. However, studies have missed this zone of research that is discussed in the present study.

Out of several challenges that are faced by business and non-business organisations in the current era, retaining customer loyalty has become the need of the day, mainly in business organisations. However, many business organisations fail to maintain loyalty due to poor policies and strategies, poor reputation and lack of structure and technology. Organisations do not adequately judge customers desires, choices, demands, attitudes, needs and trends due to absence of CRM. In results, many organisations lost their old customers as well as fail to increase and attract new customers. Therefore, the objectives of attracting new customers and retaining existing customers can be achieved through CRM. However, only CRM does not help to satisfy customers and maintain them loyal. Company reputation must be fabricated in the current era to sustain satisfaction and loyalty. However, studies have given rare attention to this epoch in emerging economies. In this study, we check the importance of CRM and company reputation in tourists' loyalty with a mediating role of customers' satisfaction. This study helps organisations to enhance profitability by improving comfort and loyalty of tourists.

Testing the relationship between CRM, company reputation and tourist's loyalty is not new efforts of researchers, but numerous studies can be found in developed and emerging markets. However, despite all the efforts, the mediating role of customer's satisfaction between CRM and loyalty as well as between company reputation and loyalty has been received minor attention from the academic world. Another strong evidence and reason behind testing the model is the suggestion of recent studies, which suggested that to check the mediating role of relevant factors. For instance (Rather et al., 2019), indicated that brand-related elements do not directly retain the loyalty of tourists unless they feel trust and commitment. They further signalled mediating factors related to satisfaction in their tested model.

Authors (Cakici et al., 2019; Saienko, 2019) also claimed that satisfaction and loyalty could be gained through investment in the relationship and satisfactory factors. Following the

evidence of the recent work, we believed that customer satisfaction is a suitable mediator to be tested between CRM and loyalty as well as between company reputation and loyalty.

Customer Relationship Management to Loyalty. A good company reputation is the success of the organisation; it depends on a productive to the company and leads to the final customer. Therefore, the successful applying of CRM features in the organisation is very crucial for gaining CL, the company reputation importance is dependent on customer loyalty. Authors (Parvatiyar, Sheth, 2001, p. 5) has been defined as CRM.

An inclusive process of procuring, recollecting, and cooperating with discriminating suppliers, to create a valuable position for both (organisation and customer). It involves the incorporation of marketing, customer service and the supply-chain functions of the organisation to deliver practical and valuable customer value.

Hence, CRM is a very pivotal factor in creating a symbiotic relationship of a company with customers; this tie helps the organisation to gain a company reputation from suppliers and enhance customer trust. Moreover, CRM relies on loyal customers, which recommended more helpful over a non-loyal customer in current business clustered. The essential fundamental of customer relationship is a contract sign between organisation and customers, which includes various elements such as keeping contacts, effective communication techniques and active procedural process (Gronroos, 2007). Attracting customers, building their strong relationship with the organisation and retain their interest for a long time is the essential role of CRM (Berry,1995); providing useful customer segmentation is a helpful way of communicating the process to target customers at the right time and in a proper way (Swift, 2001). The CRM affects significantly increase the CL and boosting up the chance of profitability for a company (Long et al., 2013). The investment by a firm toward CRM is a leading force by connecting the customers with the organisation for the long run.

Implementation of the CRM strategies is a complex task, which requires combined efforts of the whole organisation. Every organisation that is in the struggle for increasing relationship with costumers for long term needed the full attention of the customer's satisfaction (Britchenko & Saienko, 2017). However, maintaining a link for a long time among customers, the organisation need a massive business strategy in an organisation for obtaining their goal. A company will not compete for the market customers' demands without a brand, customers not know their expectation, while suppliers have vanished in terms of what to provide to the customer's familiarity with the business (Radcliffe, 2001).

Hence, loyalty is essential for an organisation because it plays a crucial role to improve the profit, which increases the attention of the customer must buy more items. It is observed that holding the total cost of one customer's is five times more than the attraction of new customer's (Saleh, Saheli, 2018). As a result, the increasing number of customers highly significantly affected the profitability ratio of the business. While following the different CRM strategies improve not only the rates of retention but also adjust spending. Thus, the probability for developing reasonable relationship become more fabulous than when effective methods were used to capitalise on customer's preference and their needs. Therefore, on the base of the previous literature, we suggest that (CRM) strategies significantly enhance on (CL).

H_1: Customers relationship management has a significant effect on the customer's loyalty.

Company Reputation for Customer Loyalty. The concept of reputation is an essential part in the literature of marketing since last four decades, and many marketing researchers agreed that brand identification has many benefits such as reducing marking cost, increase in profit (Kabiraj & Shanmugan, 2011), raising market share and helpful in computation with another competitor in the market. The fruitful results of the company reputation directly dependent on the above mention heading, which clarifies the effect of status over customer loyalty. Authors (Khan, Mahmood, 2012, p. 33) postulate that "customers unconditional guarantee and relationship with the new commodities which is not likely to influence under normal condition" most researcher and marketing expert we're agreed on the same point that brand loyalty could either be meaningful or unauthentic.

Customer trust is carried out by conditional situations when the situation was favourable such as price and availabilities of commodities in the market, but real loyalty is dependent over previous physiological and affective attachment with the specialities. Commitment has a positive relationship with a brand reputation in different fields. Therefore, we expected that car branded company reputation would enhance car brand customer's loyalty: author (Grund, 1996) suggested that a company reputation in such a way "when a company represent past and prospects that explain the firm's demands and its critical components by comparing with another leading competitor. It ensures that those liable for making the open persona carry into line with the principle notoriety targets (Quarter, 2000). The achievement of the Body Shop in promoting itself as a socially dependable organisation is one case of the impact corporate notoriety can have on by and performance (Arli et al., 2017; McIntosh, 2015). Hence, we postulate on the base of past literature that customer reputation significantly effects on customer loyalty.

H_2: Customers reputation significantly enhances customer's loyalty.

Customer Relationship Management to CS. CRM has a substantial impact on customer loyalty (Ngai, 2005), so, Ngai suggested that improvement in customer relationship able the organisation to retain its customers for a more extended period. Studies from the previous review, it is assumed that CRM significantly enhances customer satisfaction, which helps the bank in term of dividing the market and customers target and develop the products to fulfil the customers expecting demands. While CRM also helps in active communication with customers and decreasing customer's service charge tax costs significantly. CRM significantly affected customer relationship, there satisfaction, qualities of the customer communication process and electronic services and confidential word-of-mouth. The features of CRM gave in a different way of customer's satisfaction, their connection to the cycle of exchanges and the existence cycle of clients, however, it is beyond the realm of imagination to expect to take out these components, due to their significance, which included almost in all research studies. The satisfaction of a customer is probably more important in case of electronically generated services for attaining the attention of the loyal customer by (Aldaihani, Ali, 2018) therefore from the above literature review it is cleared customer relation management significantly enhance the customer satisfaction.

H_3: CRM significantly influence on customer satisfaction.

Company Reputation for CS. As company reputation has been recognised that it is a crucial factor for customer relationship, many researchers have been observed combining of both variables are very small. In addition, most authors reveal that customer with a high level of understanding has more possibility to be gratified with the firm (He, Li, 2010). The reputation of a company during a hospitality setting maximises with organisational reputation behaviour relation and more indulged with an organisation through their psychological association to the Organisational brand. On the base of the previous researcher finding, we concluded that for customer satisfaction, CBI is a more critical factor.

In marketing, side researcher expressed their results finding as that CR (customer reputation) is a very tough task to build and increase the elation of customer relationship with the firm. Similar results were given by (Su et al., 2016) that higher shared values between Organisational providing facilities and customer satisfaction will boost up the relation of the customer with the organisation for the long term. Company reputation may also be defined as that consumer pleasure level through which he/she seem own self-image intersecting with the company brand image (Lam et al., 2013) customer improve their sense of individual self and express their finding through publicly identified relationships. Condition of organisation in a market fit themselves in the skeleton with other social exchange of thoughts minimise their popularity in future (Su et al., 2016). The infield of marketing development of company reputation in the market is the crucial leading task for an organisation to maximise the interest of consumer towards the company and it creates a positive image in their mind towards the organisation. Identification of a new band for the customer is helpful in the development of customers trust over the organisation. Authors (Su et al., 2016) that provision of standard services to the consumer of an Organizational leads the improvement in customer trust over Organizational for a long run in future concluded a similar finding. We thus hypothesise that Company reputation is an essential driver for customer satisfaction.

H_4: Company reputation has a significant impact on customer satisfaction.

Customer Satisfaction and Customer Loyalty. Customer satisfaction is one of the essential objective or organisation, to providing their services for a more significant period in term for fulfilled clients, for example, positive verbal remark, client dependability, and economic increment in benefit. In previous studies, a lot of work has been done on the CS in the unidimensional construct context, which evaluates full customer satisfaction from the supplier's products, that situation is very important for the organisation. In the current study, we examine the customer satisfaction effect on company trust; it shows that it enhances organisational loyalty.

In addition, Customer loyalty has received remarkable attention in the marketing literature, which finding suggests that customer satisfaction is creating an excellent opportunity for organisations. The growing significant relationship of loyalty's customers over reputation most organisational chain members have recruited loyalty programmer to attract new customer and retain the interest of the previous one for more time in future as their regular customer. Notwithstanding, in watching a visitor's readiness to rehash themselves and backing through the proposal of same Organizational decidedly to others purchaser

faithfulness investigate has affirmed the attitudinal reliability point of view instead of the social one.

Customer loyalty is entirely dependent on the fulfilment of the customer desire in different satiations such a retailing, hospitality of every customer, organisational and different sort of company Tourism sector. However, it is also believed that customer loyalty has a significant and positive effect on customer satisfaction (Lam et al., 2013). Nevertheless, from the finding of previous research conclusion over customer loyalty while in some research outputs the author concluded that it had indicted effect over CL. Therefore, we postulate on the base of the past literature that customers satisfaction has a positive and significant impact on CL, the hypotheses to be empirically tested are as follows:

H_5: Customer's satisfaction has a positive effect on customer loyalty.

Mediating Role. In marketing, the acid views the trust and duty as builds that advance clients dependability and proficiency. Consumer loyalty is one of the definitive objectives that look for authoritative help, for long haul advantages of having fulfilled clients, for example, positive expression of unwavering client ness and practical increment productivity of the organisation. However, customer satisfaction generally realised that the combination of believing association final consumer memory. While, authors (Cretu, Brodie, 2007) suggested that consumer satisfaction assessment for any organisation with a reputation of meaningful correlation, which is the sign of excellent performance. Higher will be the assessment procedure; the company will allow rapidly more for the higher company reputation. In addition, other marketing researchers reveal that company reputation will affect customer performance. If a company's products feature their status of non-functional features and traits to be incorporated, as a means of strengthening the customer's motivation and retain their attention for the brand, then this new brand will affect on customer mind positively and it will improve the relation of the customer with the organisation.

Therefore, it will affect the customer mind set up and they will believe in company trust and make a relation with that brand for a long time. Authors (Armstrong, Kotler, 2000) resulted from that customer relationship with a brand is directly related with the goodness of the brand item, when the thing is in good quality their consumer will quickly trust on it and its results in the form of organisational profitability and the consumer will directly contribute an increase in the quantity of selling of trust. Certifying tarnished reputation with the help of management advantages have increased the significant chance comment and resultantly have a positive effect on the commodity popularity because a company is transparent for its internal and external communication and practices respectively. Results are given by (He, Lai, 2014) that there is an inverse relation between CSR and loyalty of brand by introducing facilitator of customer satisfaction, including symbolic and useful images.

In addition, forerunners of client steadfastness have been dependent upon generous examination of various literature contemplates on shopper administration and retailing. Although there is no far-reaching hypothetical system for recognising the variables influencing client dependability, researchers concur that consumer loyalty is a fundamental essential of client reliability. Consumer loyalty was found to affect unwavering client ness in such varied settings as client reliability. It was likewise found to have an aberrant impact and

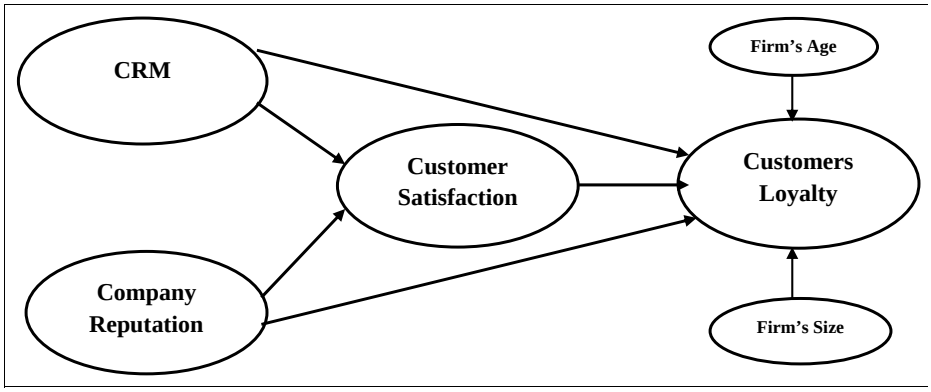
assume an intervening job in the client relationship the board, notoriety client reliability relationship.

Likewise, shopper unwavering ness regard was found to affect customer relentlessness in numerous help and retailing affiliations. In any case, buyer reliability in some past examinations was found to have a direct constructive outcome on customer commitment it has an atypical effect on customer constancy and companion's reputation. As needs are, on the bases of the past examinations, we construed that unwavering customer ness suitably energises the relationship between CR the board, customer reputation and customer dependability.

H_6: Customer satisfaction significantly mediates the relationship among customer relation management, customer reputation and CL.

Figure 1

Framework



Research Methodology

The Study of Population. Our target population is SMEs operationalised in Islamabad and Rawalpindi districts. The list of SMEs was received from (Islamabad chamber of commerce & industry), having 3752 SMEs and (Rawalpindi Chamber of business & industry) have 5408 SMEs verifies from Small and Medium-sized Enterprises Development Authority (SMEDA). The list of SMEs has a different kind of categories (i-e, manufacturing, trading and servicing).

The underlining study conducted quantitative research and examine the mediating effect of customer satisfaction among the customer relation management, company reputation and customer loyalty. For achieving the main objective of the current study, we decided 370 sample-sized on the base of (Morgan, 2012). Therefore, we distributed 370 questionnaires among the SMEs and received 329 response, and just 300 respondents were used for further analysis after excluding the miss felling questionnaires. The current underline study adopted self-reported structured questionnaires, distributed among the executive, owners, top managers and middle managers. We collected the data from responsible managers (owners) of SMEs because they are more concerned with policymaking and strategies of their firms.

Every country must define SME's in its own contexts on the base of characteristics including the total number of employees, total turnover and an annual sale of the firm.

The definition of SMEs in Pakistani context according to (SMEDA).

Sources	Max. No. of Employees	Max. Annual Sale/Turnover
SBP	250	Rs. 75-800 million
SMEDA	250	Rs. 250 million
World Bank	300	$15 million

Measurement of Variables. The following underlined section explains the variables in our study, customer relation management and company reputation as independent variables; customer satisfaction is as mediator variable while customer loyalty as a dependent variable.

Customer Relation Management. The CRM is an extensive system and procedure of gaining, holding, and working together with specific clients, to make an unusual incentive for the organisation and the client. For the developing of client connection the board, the sizes of (Rather et al., 2019), was embraced with minor changes. What's more, CRM is estimated through the 4 things, and the example thing is "The point at which somebody reprimands this organisation, it feels like an individual affront" and so forth.

Customer Reputation. The customer reputation defines as "the customer's unconditional commitment and a strong relationship with the brand, which is not likely to be affected under a normal circumstance". While in the current study, we choose the (Rather et al., 2019) 4 item to measure the CR, so a sample item is "The services of this company make me feel a sense of security" etc.

Customer Satisfaction. In addition, customer satisfaction helps organisations and companies increase their returns and gain a competitive advantage. Thereby, it is measured via 4 items of (Rather et al., 2019) was adopted. Since the sample item is "the whole response which I got from the company is positive" etc.

Customer Loyalty. Customer loyalty is clarified as that it is a focused resource for any endeavour and has developed as a fundamental driver of benefit, given that steadfast clients will in general buy more. In this way, we measure client faithfulness through 4 things received by (Rather et al., 2019), an example thing of client responsibility is "I would prescribe this organisation to somebody who looks for my recommendation" and so forth. All the items estimated based on the 5-Likert scales. Moreover, in the survey, we asked respondents to circle as one option regarding your company performance representing: 1 (strongly disagree); 2 (disagree); 3 (neutral); 4 (agree); 5 (strongly agree).

Control Variables. Firm's size plays a pivotal role to find an opportunity in the turbulence market. In the turbulence market, the newly established firms need to support financial and non-financial for survival as compared to large firms. So, much previous literature has suggested the firm's age, industry type, and the firm's size are controlled (Saleh, Saheli, 2018).

Therefore, the current study, suggest using the firm's, size, age and the nature of the industry as control variables. So, the finding explains that it has no significant relationship between the quality of the industry (manufacturing, trading and servicing. Thereby, we dropped the industry type from further analysis, and the firm's size and firm' age is further used as a control variable because both have a significant influence on NVP.

Data Analysis and Results

The current underline study is further analysed through the SPSS.23 for more fruitful results. First of all, we check the missing value of the survey graph, so, the results show that our data has no missing value. Second, we review the data normality, and the insights explain that all the latent constructs have reliability in the acceptance range. Third, we discuss the correlation between the main variables, which shows that there is no multi-collinearity problem in our data. Forth, we analyse the central hypothesis regarding the research questions. Hence, the hypothesis analysis results show that all hypothesis is significantly supported.

Profile of the Firm. The table 1 results explain the firms' details that participated in our study survey. Therefore, about the firm's age, 103 firms age was less than 10 years, 140 firm's ages were between 11 to 20 years and just 57 firms age were above 21 years. While about the nature of the firms, 137 firms belong from the manufacturing sector, 74 firms related to the trading sector and just 29 firms linked with the service sector. Similarly, about the gender differentiation among the respondents, 80 were male and 220 were female respondents.

Table 1

Descriptive statistics

Variables	Total Number	Percentage of Total	Min	Max
Firm's age			1.00	3.00
1. 10 years or less	103	34.3		
2. 11 to 20 years	140	46.7		
3. 21 and above years	57	20.0		
Nature of Industry			1.00	3.00
1. Manufacturing	137	50.6		
2. Trading	74	33.1		
3. services	29	16.3		
Gender			1.00	2.00
1. Male owners/managers	80	26.7		
2. Women owners/managers	220	73.3		
N	300	100		

The testing of Convergent. So, according to specific conditions suggested by (Fornell, Larcker, 1981), the convergent validity is acceptable because it is between the safe position $p < .001$ (Table 2). Thereby, in the following, we explain one by one the validity and reliability of the latent contracts.

Table 2

Validity and reliability

Items	Factor Loading	Cronbach's Alpha	C.R	AVE
Customer Relation Management				
CRM1	0.715	0.833	0.882	0.599
CRM2	0.833			
CRM3	0.786			
CRM4	0.806			
CRM5	0.723			
Company Reputation				
CR1	0.803	0.850	0.893	0.626
CR2	0.792			
CR3	0.736			
CR4	0.835			
CR5	0.785			
Customer Satisfaction				
CS1	0.754	0.832	0.879	0.593
CS2	0.695			
CS3	0.827			
CS4	0.822			
CS5	0.745			
Customer Loyalty				
CL1	0.884	0.885	0.916	0.685
CL2	0.816			
CL3	0.781			
CL4	0.823			
CL5	0.833			

Reliability testing. In the current underline study, the reliabilities of each construct is above the 0.70, it suggests that the present study contract data is reliable, because it relies on the acceptance range (Hair et al., 2014), because according to the Hair et al., the Cronbach's alpha values acceptance range from .81 to .95, therefore, on the base of current finding, all learnt contract value is > 0.70. While about the composite reliability, the acceptance range of composite reliability varied from .81 to.95, so, our results explain that it is higher than the recommended cut-off value of .70 (Fornell, Larcker, 1981; Khan, 2019).

Normality. Before analysing of hypothesis, first, we check data normality and then goes towards further analysis. Simply normality means the data distribution on a specific systematic way of all the constructs. We investigated the normality of our data through Skewness and Kurtosis using SPSS.23 followed by (Akhtar et al., 2015). Therefore, in the current study, we are following these authors assumptions, checking normality through (Skewness and Kurtosis) using SPSS.23 software.

Skewness: skewed means that if the respondents are equally weighted on both sides but not rely on the one side, so we called it Skewness. Hence, the previous suggestions that if it is distributed towards 1 or above, that is positive (right) skewed, otherwise negative (left) skewed.

Hence, both results are shown in Table 3 where skewness values for Customer relation management (-1.09), company reputation (-1.75), customer satisfaction (-1.32), customer loyalty (-1.08), while Kurtosis values for customer relation management (1.259), company reputation (1.983), customer satisfaction (1.923), customer loyalty (1.798). The acceptance range of these is +2 indicate normality as recommended by (Khan & Ghufran, 2018). Hence, from finding, we suggest positing that our data is normally distributed (Table 3), so we can go towards the second step of hypothesis analysis.

Furthermore, in the underline study, we analyse the mean and standard deviation of the latent contracts. Therefore, the mean of customer relation management (1.023), company reputation (1.828), customer satisfaction (1.021), customer loyalty (1.822). While, Standard Deviation (S.D.) of customer relation management (0.169), company reputation (0.127), customer satisfaction (0.167), customer loyalty (0.123) (Table 3).

Table 3

Discriminate validity

S.No	Mean	S.D	1	2	3	4
Customer Relation Management	1.023	0.169	0.774			
Company Reputation	1.828	0.127	0.743	0.791		
Customer Satisfaction	1.021	0.167	0.720	0.709	0.770	
Customer Loyalty	1.822	0.123	0.780	0.711	0.745	0.828
Skewness	-	-	-1.09	-1.75	-1.32	-1.08
Kurtosis	-	-	0.976	1.983	1.923	1.798

Discriminate validity testing. According to (Fornell, Larcker, 1981), which highlights/ explain the discriminate validity. The Discriminate validity is the association among the latent constructs while also finding the square root of these constructs. Hence on the base of results (Table 3), it is acceptable because the discriminate value of all constructs relied on range .709 and .828.

Correlation explains the variance independent variable due to the independent variable. For instance, if the latent contracts are linearly correlated, it explains that overlapping is biased (Gujarati, 2004). For checking correlation in the underline study, we analyse through correlation option in SPSS. First, we checked the correlation between customer relation management, company reputation and customer loyalty, and then customer satisfaction and customer loyalty. Hence, correlation result shows (table 4) that the entire contract is positively associated with each other (CRM and customer loyalty r = 0.65, with 95 per cent confidence level), company reputation and customer loyalty r = .60, p = 0.05), customer satisfaction and customer loyalty r = 57, p = 0.05).

Table 4

Correlation

	CRM	CR	CS	CL
Customer Relation Management	1			
Company Reputation	0.692**	1		
Customer Satisfaction	0.595**	0.622**	1	
Customer Loyalty	0.651**	0.710**	0.574**	1

Simple Regression. In the current study, we apply a separate test for each hypothesis to gain fruitful insights and protect the results from the overlapping of performance. Thus, in the first step, the CRM has a significant effect on customer trust (β = 0.52, with 95 per cent confidence level) respectively (Table 5). While R^2 explains the 49% variance in customer loyalty due to customer relationship management. Hence, on the base of our study results, hypothesis 1 is supported.

Table 5

Customer Relation Management impact on Customer Loyalty

Coefficients[a]						
Model	B	Std. Error	t	Sig.	R^2	ΔR^2
Step 1.						
Firm' size	0.052	0.016	3.211	0.001		
Firm' age	0.019	0.008	2.276	0.024	0.049	0.049
Step 2.						
Firm' size	0.013	0.012	2.094	0.035		
Firm' age	0.010	0.006	3.659	0.003		
Customer Relation Management	0.520	0.031	16.563	0.000	0.486	0.437

[a] Dependent Variable: Customer Loyalty

In step 2, we are analysing the impact of company reputation on customer loyalty. Therefore, the details of the results in table 6, explain that company reputation has a positive and significant influence on customer loyalty (β = 0.46, $p < 0.05$). In table 6, the results fully explain the influence of IV on DV. While, R^2 explains the variance independent variable due to the independent variable, here in our case, 40% variance explains in customer loyalty due to company reputation. Hence, on the base of our results, the hypothesis is also supported.

Table 6

Customer Reputation impact on Customer Loyalty

Coefficients[a]						
Model	B	Std. Error	t	Sig.	R^2	ΔR^2
Step 1.						
Firm' size	0.053	0.016	3.211	0.001		
Firm' age	0.019	0.008	2.276	0.024	0.049	0.049
Step 2.						
Firm' size	0.011	0.013	3.843	0.002		
Firm' age	0.014	0.007	2.094	0.037		
Customer Reputation	0.461	0.035	13.712	0.000	0.397	0.348

[a] Dependent Variable: Customer Loyalty.

In underline study step 3, we check the impact of customer satisfaction on customer loyalty, thereby the results show that customer satisfaction has a positive and significant influence on customer loyalty (β = 0.46, $p < 0.05$). Hence, the results explain the impact of an independent variable on the dependent variable in Table 7. While R^2 defines the variance in an independent variable, so in our case, 52% variance explains in customer loyalty due to customer satisfaction. Hence, on the base of our results, hypothesis 3 has been supported.

Table 7

Customer Satisfaction impact on Customer Loyalty

Coefficients[a]						
Model	B	Std. Error	t	Sig.	R^2	ΔR^2
					Step 1.	
Firm' size	0.052	0.016	3.211	0.001		
Firm' age	0.019	0.008	2.276	0.024	0.049	0.049
Step 2.						
Firm' size	0.029	0.012	2.517	0.012		
Firm' age	0.007	0.006	1.127	0.261		
Customer Satisfaction	0.712	0.042	16.923	0.000	0.517	0.468

[a] Dependent Variable: Customer Loyalty

Testing Mediation. In mediation case, table 8 and 9 explain the full or partial mediation among the customer relation management, company reputation and customer loyalty. So, our results (Table 8) clarify that customer satisfaction partially mediates the relationship between customer relationship management and customer loyalty ($\beta = 0.46$, $p < 0.05$). While the R^2 value indicates that 60% variance occurs in customer loyalty due to the relationship among customer and their satisfaction in the presence of the form's age and firm' size as control variables.

Table 8

Customer Mediates the relation between CRM and Customer Loyalty

Coefficients[a]						
Model	B	Std. Error	t	Sig.	R^2	ΔR^2
Step 1.						
Firm' size	0.052	0.016	3.211	.001		
Firm' age	0.019	0.008	2.276	.024	0.049	0.049
Step 2.						
Firm' size	0.013	0.012	1.994	0.75		
Firm' age	0.010	0.006	2.659	0.038		
Customer Relation Management	0.509	0.032	15.863	0.000	0.486	0.434
Step 3.						
Firm' size	0.015	0.011	2.418	0.047		
Firm' age	0.006	0.005	3.115	0.006		
Customer Relation Management	0.291	0.037	7.868	0.000		
Customer Satisfaction	0.460	0.050	9.196	0.000	0.601	0.115

[a] Dependent Variable: Customer Loyalty

In the next mediation case, table 9 explain the full or partial mediation between the company reputation and customer loyalty. Therefore, Table 9, demonstrate that does customer satisfaction mediates the relation between company reputation and customer loyalty. Therefore, our results clarify that customer satisfaction partially mediates the association between company reputation and customer loyalty ($\beta = 0.54$, $p < 0.05$). While the R^2 value

indicates that 58% variance occurs in customer loyalty due to company reputation and customer satisfaction in the presence of a form's age and firm' size as control variables.

Table 9

Customer Mediates the relation between customer reputation and Customer Loyalty

Coefficients[a]						
	B	Std. Error	t	Sig.	R^2	ΔR^2
Step No. 1						
Firm' size	0.052	0.016	3.211	0.002		
Firm' age	0.029	0.008	2.276	0.024	0.049	0.049
Step No. 2						
Firm' size	0.011	0.013	2.843	0.001		
Firm' age	0.014	0.007	2.094	0.003		
Customer Reputation	0.461	0.034	13.712	0.000	0.397	0.348
Step No. 3						
Firm' size	0.014	0.006	2.277	0.027		
Firm' age	0.007	0.036	2.287	0.013		
Customer Reputation	0.234	0.035	6.899	0.000		
Customer Satisfaction	0.536	0.048	11.376	0.000	0.578	0.180

[a] Dependent Variable: Customer Loyalty

Discussion

The underline study contributes to customer relation management, company reputation and customer loyalty underpinning through the relationship marketing theory Buttle (1996). The relationship marketing theory explains the nature and scope of marketing relationship, picking out characteristics such as related for the customer welfare, trust and commitment between shareholders and the importance of the customer service or loyalty. While marketing relation management theory also explains the number of successful relationship marketing. Hence, there is scarce literature available to examine the relationships among Customer relation management, corporate reputation, organisational brand, and customer loyalty, having created and exactly tried a coordinated model that exhaustively surveyed these connections. Hence, our results indicate that CRM has a significant impact on customer loyalty. Therefore, our finding similar to previous studies (Long, 2013), because these studies have been done in developed economies, which suggest that customer relation significantly improve customer loyalty. Thereby, the author (Gronroos, 2007) indicated that if customers have strong management relation, it directly affects their commitment, trust in the organisation. Therefore, on the base of the current finding, we support his first hypothesis.

Second, Company reputation has a positive and significant effect on customer loyalty. Hence, our second hypothesis is also supported. The previous studies suggested that organisational reputation towards customers or employee, it enhance the customer loyalty and trust towards the organisation (McIntosh, 2015).

Besides, about the third hypothesis, our results suggest that customer satisfaction has a positive and significant impact on customer satisfaction. Hence, our third hypothesis is also

supported. Because if the customer is satisfied with organisational products, then it directly affects the customer trust and loyalty.

To test the fourth hypothesis about the mediating effect of customer satisfaction on the relationship between CRM and CL, show that customer satisfaction plays a mediating role entirely between CRM and customer loyalty, supporting H_4. Therefore, customer satisfaction fully mediates the customer relationship management and customer loyalty, while customer satisfaction and loyalty have a strong association.

While the last hypothesis, of mediating role of customer satisfaction on the relationship between corporate reputation and customer loyalty. Hence, our finding suggests that customer satisfaction fully mediate the relation between corporate reputation and customer loyalty, therefore our results familiar to the previous studies. So, our last hypothesis is also supported. The mutual relationship between corporate reputation, customer satisfaction and customer loyalty mean that the higher the customer reputation for attaching with the organisation.

Implications for practice. The customer behaviour is an intrinsic quality of relationship and evaluation of suppliers behaviours according to customer marketing theory. The most dominant behaviour is representing the power of customer relation commitment (Moorman et al., 1992). Because satisfaction is important constructs concerning the assessment of a supplier's loyalty, therefore, in our model, CRM is an internal behaviour of the customer, because customer loyalty is the rewards in behalf of the trust. Many researchers improve the quality of reputation theory in the context of brand management and corporate reputation (Argenti, 1997). Thereby, in our organisational study reputation improve customer loyalty underpinning through the corporate reputation theory. In addition, the previous studies regarding customers' satisfaction, author (Oliver, 1980) introduce the theory of "customer marketing theory", so, as per customer marketing theory, the customers feel satisfied when the product fulfil their needs and their expectation is lower than their actual.

From a practical perspective, our results suggest some implication for firms operationalised in developing economies have strong relationships with their customers. First, to establish a secure link with customers for the managerial perspective to receive individual attention. Therefore, our underline study explaining customer trust and loyalty, which significantly influence customer relation management, corporate reputation and customer satisfaction. The corporate reputation has a strong impact on customer loyalty as compared to customer relationships management and thus, promoting experts ought to recognise the essential job of brand trust in affecting clients' support, suggestion practices, and goals to return. Along these lines, the intensity of the connection between trust and waveringness aims in the present model is to Organization their administrations as dependable, reliable, and aware, for example, securing customer information. These practices will build customer trust in hierarchical administration and give a chance to proposals to other people. Therefore, corporate trust has been recognised that it is a very critical factor for a relationship in future between customers and organisational providers (brand). Similarly, (manufacturing, trading and servicing) SMEs can build trust among customers by caring for their attitude of customers, employees.

Second, corporate reputation suggested that to ensure companies to invest more for company brand identification. Therefore, the brand investment may help to develop reliable identification for customers because it helps for best brand identification of customers, instead of giving preference to brand awareness. Subsequently, top directors may alter their social trade speculation as well as an interest in client association. Thereby, company administration staff may also help to create the customer reputation, and trust through different steps (advertising, public relations and marketing campaigns) are very pivotal tools, can change customer's behaviours and also for general activities even, i-e, social works, campaigns, sponsorships, and CSR activities.

Our findings suggest that Relation management theory explain that customer satisfaction significantly enhance customer trust. Trust is an essential asset of a corporation in a competitive sector. Accomplishing and keeping up client reliability is vital in the corporate segment. Compelling methodologies will interpret consumer loyalty into client reliability just as draw in potential clients. These suggest that corporate reputation support make faithful clients if the activities fulfil their end states. Given that full of feeling duty, consumer loyalty, and corporate reputation, customer relation management considerably influences of identification on customer loyalty, so it suggests to the corporation that not to concentrate on personality-based showcasing procedures exclusively.

Limitation and Future Direction. Our study has several limitations because no review is without imperfections. First, the underline study is limited up to just two cities (Islamabad and Rawalpindi), which is not enough for fruitful results, so we suggest to the researcher that expand the study towards other big cities also. Therefore, the researcher who has an interest in this area is recommended that conduct the study through different sectors, countries. So, we suggest for future researchers, which interesting in this area, that to extend the underline construct through adding new variables as moderator such as literacy relation (Hollebeek et al., 2016) because literacy can help the managers during the decision making.

Conclusion

The underline study is investigating the customer behaviour and corporate reputation studies in the marketing context, mostly in small and medium-sized enterprises. Therefore, we are going this study first time to evaluate the relationships among the customer, corporate customer commitment, customer satisfaction, and customer trust, underpinning through the relationship marketing theory. While, the main objective of the study, does CS mediates the relation between the relationship between customers, corporate reputation and customer loyalty in the Pakistani context. To fulfil this objective, we collected the data from small and medium-sized enterprises operationalised in Islamabad and Rawalpindi cities.

The data collected through structured questionnaires and 300 reliable respondents were used for further analysis, using SPSS.23 for hypothesis testing. Therefore, applying simple and multiple regression through SPSS, and finding suggest that customer relationship management and corporate reputation has a positive and significant impact on customer loyalty. While, customer satisfaction significantly mediates the relation among customer relation management, corporate commitment and customer loyalty.

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ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ
ECONOMIC STUDIES

Volume 30 (2), 2021

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ENHANCING THE COMPETITIVENESS OF DESTINATION BULGARIA THROUGH DIGITAL TRANSFORMATION IN TOURISM

The relevance of this paper is determined by the dynamic competitive environment of the international tourist markets and the necessity for seeking possibilities for increasing the competitive advantages of Bulgaria as a destination. One of these possibilities is through a digital change of the tourist sector in our country. The research goal in the article is to make an analysis and assessment of the competitiveness of destination Bulgaria, together with defining directions for enlarging it through digital transformation in tourism. In analysing and synthesising for the goals of assessing the competitive positions of Bulgaria as a tourist destination, there are applied the approaches of induction, deduction and glocalisation. The publication is based on the methodology of determining the Travel and tourism competitiveness index of the World Economic Forum. Particular suggestions and recommendations are made for the digital transformation of the tourist sector in Bulgaria on a macro- and micro level. Guiding and stimulating the processes of digital transformation in the various sectors of the national economy, incl. those in tourism, have to be carried out by the state, its governmental authorities and responsible institutions, the respective enterprises and organisations.
JEL: Z32; O33

Introduction

Modern tourism is a phenomenon with strongly explicit socio-economic nature. Moreover, even in the COVID-19 pandemic conditions, tourism keeps on being a phenomenon with a significant role and essential importance for the social development and global economy. Despite the unprecedented crisis and the threat of businesses gone bankrupt, tourism needs to adjust, with a fast rate at that, to turbulent and contradictory conditions. This is the only way for it to withstand the challenges, to offer safe and secure travels and vacations with high quality of the tourist experience. Actually, closing boundaries in the first half of 2020 and pausing trips, including tourist ones, lead to the loss of tens of millions of jobs, followed by a collapse in road transport servicing nearly 60% of tourism flows. Apart from it, tourism water travels stopped as well, which caused anchoring cruise ships for a long period of time

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(Rakadzhiyska, 2020). As a consequence, the considerable shrinking of tourist activities resulted into a big limitation of the business of numerous suppliers of basic and additional goods and services for the tourist companies such as: foods, drinks and equipment; cosmetics and souvenirs; entertainment and attractions.

As one of the world's largest economic sectors, in 2019 the travel and tourism industry support 1 in 10 jobs worldwide (WTTC, 2020). Moreover, the sector generates 10.3% of global GDP and experienced 3.5% growth, outpacing the world economic growth of 2.5% for the 9th consecutive year with 1,462 million international tourist arrivals (UNWTO, 2020). In the last five years, 1 in 5 new jobs was created by the sector, making tourism industry the most effective tool for national economies to generate employment (WTTC, 2019). Thus, the total impact of tourism in 2019 (direct, indirect, induced effects) accounted for: USD 8.9 trillion contributions to the world's GDP; 330 million jobs; USD 1.7 trillion visitor exports (nearly 7% of total exports, over 28% of global services exports); USD 948 billion capital investment, 4.3% of total investment.

The economic indicators for tourism in the last decade, before the current pandemic, define it as a major category of international trade in services. As a worldwide export industry, tourism ranks third after chemicals and fuels, before automotive products and food. Nowadays the travel and tourism industry is the top export category in many developing countries. Tourism represents 40% of services exports, for emerging economies, well above the 30% world average. Total export revenues from international tourism grew faster than merchandise exports (UNWTO, 2019, p. 8). Besides, the sector is a crucial component of export diversification for emerging and advanced economies.

A characteristic feature of the global tourist market today is the clearly expressed competition between particular destinations in their aspiration to attract even more visitors and increase their market share and revenues from tourism all the time. Countries compete intensely not only in respect to the volume of tourist flows, but also with respect to the national economic prosperity and welfare of local people. Besides, globalisation and liberalisation of international trade sharpen competition on various levels even more: branch, national, regional and world. That is why, national competitiveness is a relevant issue of research and its scientific interpretation in the aspect of macroeconomics aims at searching for strategic possibilities for development and enhancement.

The circumstances and facts presented above determine the significance and importance of the chosen topic. The ground for its ***relevance*** lies in the dynamic competitive environment of the international tourist markets and the need of searching for opportunities to increase the competitive advantages of Bulgaria as a destination. That is why the ***subject*** of this paper is improving the competitiveness of tourism through digital transformation. The ***object*** of research is the tourist competitiveness of our country and the ways of enhancing it through digitalisation in the tourist sector. ***The scientific-and-research objective*** of the paper is: to analyse and evaluate the competitiveness of destination Bulgaria and make suggestions for enhancing it through digital transformation in tourism. To achieve the formulated goal the following ***research tasks*** have been completed:

- defining the competitiveness of a tourist place and determining the essence of digital transformation;

- survey and assessment of the tourist competitiveness of Bulgaria in terms of key indicators, incl. those that concern the "ICT readiness" criterion *the implementation of which determines the opportunities for digital transformation in tourism*;
- systematisation of suggestions and recommendations on macro and micro levels for a digital transformation of the tourist sector in our country.

To complete the set goal and the above-mentioned research tasks, the following ***methods of research*** have been used:

- a scientific *literature* review for defining basic concepts concerning the subject of research in the paper;
- analysis and synthesis for assessing the competitive positions of destination Bulgaria through the methodology for determining the travel and tourism competitiveness index (TTCI), incl. a comparative characteristic with rival destinations;
- glocal approach in assessing information and data for the condition and dynamics of global tourism and the local level and the peculiarities of the tourist sector in Bulgaria;
- the approach of induction and deduction for analysing results in terms of separate indicators of the competitiveness index, tendencies and conclusions about relevant circumstances and factors which determine the level of development of Bulgarian tourism.

Literature Review

Competitiveness is a concept of multi-aspect and complex nature which is well discussed in the context of tourist destinations. Researchers often cite the definition of Ritchie and Crouch (2003, p. 2), which says that a really competitive destinations are able to "increase tourism expenditure, to increasingly attract visitors, while providing them with satisfying, memorable experiences, and to do so in a profitable way, while enhancing the well-being of destination residents and preserving the natural capital of the destination for future generations." Dwyer and Kim (2003, p. 372) add that the main goal of the competitiveness of a destination is "to maintain and increase the real income of its citizens, usually reflected in the standard of living of the country."

The plentiful definitions of competitiveness are based on its structure and elements; most often they focus on users' satisfaction, the quality of tourist services, the economic and social benefits, sustainable development and others. It is accepted that destinations with a high degree of competitiveness attract larger tourist flow and visitors make bigger expenses in tourist sites (Webster, Ivanov, 2014). In most cases, these facts cause the respective increase of GDP and stimulate economic growth in the destinations, which, in turn, has an impact also on the improved economic welfare of the local population. The key advantages of tourism as a socio-economic phenomenon pointed out above determine the necessity for directing, allocating and investing considerable public resources for increasing the tourist flow to destinations through stimulation and enhancement of their competitiveness.

Broadly accepted by researches is the definition of competitiveness in tourism of the Organization for Economic Co-operation and Development (OECD), which says that: "tourism competitiveness of a destination is about the ability of the place to optimise its attractiveness for residents and non-residents, to deliver quality, innovative and attractive (e.g. providing good value for money) tourism services to consumers and to gain market shares on the domestic and global market places, while ensuring that the available resources supporting tourism are used efficiently and in a sustainable way" (Dupeyras and MacCallum, 2013, p. 7). In compliance with the objectives and tasks of this publication, we accept the cited definition as a ground for ensuing analyses and assessments. For surveying the competitiveness of a destination, OECD defines a set of 11 key indicators classified in four basic categories for (Dupeyras and MacCallum, 2013, p. 17):

- measuring tourism performance and impacts – tourism direct gross domestic product, inbound tourism revenues per visitor by source market, overnights in all types of accommodation, exports of tourism services;
- monitoring the ability of a destination to deliver quality and competitive tourism services – labour productivity in tourism services, purchasing power parity and tourism prices, country entry visa requirements;
- monitoring the attractiveness of a destination – natural resources and biodiversity, cultural and creative resources, visitor satisfaction;
- describing policy responses and economic opportunities – national tourism action plan.

The World Travel and Tourism Council (WTTC) and the World Economic Forum (WEF) periodically publish reports on the competitiveness of destinations which are made on the ground of the presented methodological framework. The results in the reports are especially important for determining the guidelines for the development of tourism because they point out the advantages and disadvantages of the sector on national and regional levels.

Unlike the publications on tourist competitiveness, research works in the field of digital transformation are rarely spread. Most papers concern the digitalisation of information and focus mainly on technological innovations rather than the caused changes on a national and organisational level (Henriette, Mondher and Boughzala, 2015). Also, there are a limited number of researches on implemented projects for digital transformation and a more accurate way of determining the manner of managing the changes in a digital environment, identifying and guiding costs in these processes.

According to Stolterman and Fors (2014), digital transformation refers to all aspects of society and the ensuing changes as a consequence of the application of digital technologies for its development. Bounfour (2016, p. 20) defines digital transformation as "a new development in the use of digital artefacts, systems and symbols within and around organisations". For Tolboom (2016, p. 3) it is a set of the changes caused by digital technologies in various aspects of human life. Because of a missing universal definition of digital transformation, in this publication, we accept that it is an integral and complex process which contributes to increasing the level of digitalisation of organisations, sectors and national economies in compliance with the relevant technological tendencies and innovations.

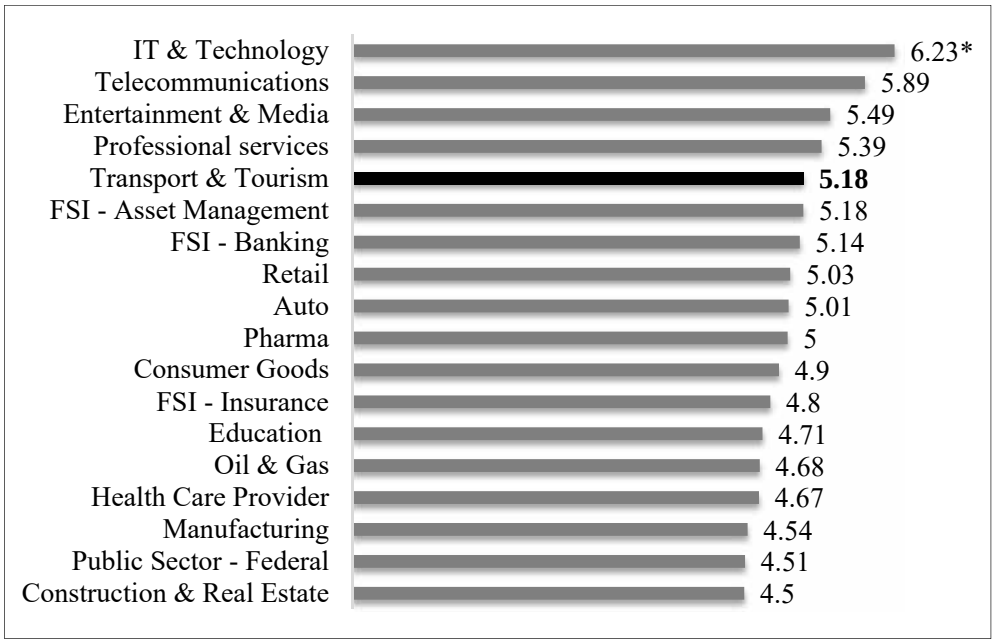
By large, the consequences of digital transformation can be grouped in macro- and micro-level (Bounfour, 2016). In the first aspect, there are analysed the effects and impacts of Internet and modern ICT on the economic growth on a national level. From a macro *perspective,* digital transformation is a process of expanding the application of Internet and technological achievements in particular sectors of the national economy of a country. The process has a different contribution to the performance and development of economic branches and has a specific impact on the overall condition of a national economy. In the micro aspect, digital transformation is analysed and assessed on the organisational (corporate) level. In this case, it is defined as the use of modern technologies for radical improvement of organisations' activities, i.e. the level of their digital maturity is evaluated. Irrespective of the aspects for assessing digital transformation, its influence is significant and leading, that is why it is defined as a peculiar industrial revolution (Degryse, 2016; Tihinen, Iivari, Ailisto et al., 2016).

As an integral process, digital transformation encompasses many economic sectors in a large number of countries. A global survey of MIT Sloan Management Review and Deloitte's shows, that as a result of this global process the sectors have different degrees of maturity (Kane, Palmer, Philips et al., 2015). Tourism, together with transport, is among the leading industries worldwide by the criteria "digital maturity" and ranks fifth, i.e. a little above the average degree of digital maturity (Figure 1). Also, according to the survey, tourism is among the leading industries in using digital technologies for maintaining better relations with clients and professional communication among employees in tourist companies. The results of the global research present that digital qualities "strategy to transform" and "manager encourages use" are the qualities, where the travel and tourism industry is among the five most digitally matured sectors. Nevertheless, other digital qualities like "clear strategy", "skills provided" and "leaders have skills", rank tourism at lower positions. These three digital qualities are areas that can be significantly transformed in order to improve the overall digitisation of the travel and tourism. This would contribute to enhancing the competitiveness of the entire tourism sector.

Digital transformation is not a new phenomenon for the sector of tourism. The global electronic tourist system formed currently results from four consecutive periods of digitalisation of travel and tourism: the GDSs period (1960-1995), the Internet period (1995-2000), the SoLoMo period (2000-2012) and the hybrid one (from 2013 onwards). On a national level, digital transformation has considerable potential for generating and stimulating economic growth, thus increasing the national competitiveness. Destinations with a developed digital economy, incl. the field of tourism and travel accumulate 20% more economic benefits compared to those with digitalisation in an initial stage (Sabbagh, Friedrich, Darwiche et al., 2012, p. 121). Through digitalisation, there can be achieved greater transparency and effectiveness in the activity of central and local authorities in managing and regulating tourism on various levels.

Figure 1

Digital maturity by industries



* Note: Average value from the answers for a particular sector. The respondents have ranked each sector on a 10-point scale, 1 being the lowest degree of digital maturity and 10 – the highest.

Source: Created by the author, based on Kane, Palmer, Philips et al., 2015.

Data and Methods

For assessing the competitiveness of Bulgaria as a destination, the travel and tourism competitiveness index (TTCI) is used. Its methodology is based on the "Competitiveness monitor" developed by the World Travel and Tourism Council (WTTC). Since 2007 the World Economic Forum (WEF), by a parallel with the Global competitiveness index, has been publishing a biannual TTCI Report. For the goals of this publication, we have tracked and analysed the changes in the results for 2015, 2017 and 2019. In its essence, TTCI is a synthetic indicator designed for measuring a set of critical factors and policies that allow for tracking the sustainable development of the sector of travel and tourism. The growing consumption of services and products in the sector contributes significantly to the long-term expansion and enhancement of the competitiveness of each country. Since competitiveness has relative nature, in studying and assessing it in respect to destination Bulgaria a comparative analysis as a basic method of research has been used.

The methodology for determining TTCI includes 4 sub-indexes comprising 14 pillars and 90 individual indicators (quantitative and qualitative) altogether for each country (Table 1). The indicators are calculated on the basis of primary data from the survey (executive opinion survey conducted by the WEF) and from other public sources, the so-called non-survey

(secondary) data: World development indicators database; Global health observatory data repository; UNESCO institute for statistics and World heritage list; ILOSTAT database; World telecommunication indicators; Tourism satellite account research; UNWTO database; Country brand ranking; Environmental performance index; SRS analyser and IRF world road statistics; World database on protected areas. The survey data ranges in value, using a 7-point scale (1 worst – 7 best).

Table 1

The travel and tourism competitiveness index framework

Subindexes	Pillars	Individual Indicators
I. Enabling environment (25% weight)	*1. Business environment* (5% weight)	1.1 Property rights; 1.2 Impact of rules on FDI; 1.3 Efficiency of legal framework in settling disputes; 1.4 Efficiency of legal framework in challenging regulations; 1.5 Time required to deal with construction permits; 1.6 Cost to deal with construction permits; 1.7 Extent of market dominance; 1.8 Time required to start a business; 1.9 Cost to start a business; 1.10 Extent and effect of taxation on incentives to work; 1.11 Extent and effect of taxation on incentives to invest; 1.12 Total tax rate.
	2. Safety and security (5% weight)	2.1 Business costs of crime and violence; 2.2 Reliability of police services; 2.3 Business costs of terrorism; 2.4 Index of terrorism incidence; 2.5 Homicide rate.
	3. Health and hygiene (5% weight)	3.1 Physician density; 3.2 Access to improved sanitation; 3.3 Access to improved drinking water; 3.4 Hospital beds 3.5 HIV prevalence; 3.6 Malaria incidence.
	4. Human resources and labour market (5% weight)	Qualification of the labour force: 4.1 Primary education enrolment rate; 4.2 Secondary education enrolment rate; 4.3 Extent of staff training; 4.4 Treatment of customers. Labour market: 4.5 Hiring and firing practices; 4.6 Ease of finding skilled employees; 4.7 Ease of hiring foreign labour; 4.8 Pay and productivity; 4.9 Female labour force participation
	5. ICT readiness (5% weight)	5.1 ICT use for B2B transactions; 5.2 Internet use for B2C transactions; 5.3 Individuals using the Internet; 5.4 Broadband internet subscribers; 5.5 Mobile telephone subscriptions 5.6 Mobile broadband subscriptions; 5.7 Mobile network coverage; 5.8 Quality of electricity supply.
II. Travel and tourism policy and enabling conditions (25% weight)	*6. Prioritisation of travel and tourism* (6.25% weight)	6.1 Government prioritisation of the T&T industry; 6.2 T&T government expenditure; 6.3 Effectiveness of marketing to attract tourists; 6.4 Comprehensiveness of annual T&T data; 6.5 Timeliness of providing monthly/ quarterly T&T data; 6.6 Country Brand Strategy rating
	7. International openness (6.25% weight)	7.1 Visa requirements; 7.2 Openness of bilateral Air Service Agreements; 7.3 Number of regional trade agreements in force.
	8. Price competitiveness (6.25% weight)	8.1 Ticket taxes and airport charges; 8.2 Hotel price index; 8.3 Purchasing power parity; 8.4 Fuel price levels.
	9. Environmental sustainability	9.1 Stringency of environmental regulations; 9.2 Enforcement of environmental regulations; 9.3

Subindexes	Pillars	Individual Indicators
	(6.25% weight)	Sustainability of travel and tourism industry development; 9.4 Particulate matter (2.5) concentration; 9.5 Number of environmental treaty ratifications; 9.6 Baseline water stress; 9.7 Threatened species; 9.8 Forest cover change; 9.9 Waste water treatment; 9.10 Coastal shelf fishing pressure.
III. Infrastructure (25% weight)	*10. Air transport infrastructure* (8.33% weight)	10.1 Quality of air transport infrastructure; 10.2 Available seat km, domestic; 10.3 Available seat km, international; 10.4 Aircraft departures; 10.5 Airport density; 10.6 Number of operating airlines.
	11. Ground and port infrastructure (8.33% weight)	11.1 Quality of roads; 11.2 Quality of railroad infrastructure; 11.3 Quality of port infrastructure; 11.4 Quality of ground transport network; 11.5 Railroad density; 11.6 Road density; 11.7 Paved road density.
	12. Tourist service infrastructure (8.33% weight)	12.1 Hotel rooms; 12.2 Extension of business trips recommended; 12.3 Presence of major car rental companies; 12.4 ATMs.
IV. Natural and cultural resources (25% weight)	*13. Natural resources* (12.5% weight)	13.1 Number of World Heritage natural sites; 13.2 Total known species; 13.3 Total protected areas; 13.4 Natural tourism digital demand; 13.5 Quality of the natural environment.
	14. Cultural resources and business travel (12.5% weight)	14.1 Number of World Heritage cultural sites; 14.2 Number of oral and intangible cultural heritage expressions; 14.3 Number of sports stadiums; 14.4 Number of international association meetings; 14.5 Cultural and entertainment tourism digital demand.

Source: Created by the author.

The travel and tourism competitiveness index (TTCI) is calculated as an average (arithmetic mean) of the 4 sub-indexes and their pillars. Each pillar is an unweighted average of the individual component variables. The fourth pillar "Human resources and labour market" is the unweighted average of its two sub-pillars: "Qualification of the labour force" and "Labour market". As the sub-indexes are more directly linked to tourism, the number of pillars per sub-index decreases, but pillar weights increase (e.g. pillar 12 "Tourist service infrastructure"). The non-survey data are normalised to the 7-point scale too. Each secondary indicator is converted to the scale with a standard formula. There are some indicators for which the higher value presents a worse result (e.g. "cost of starting a business", "fuel price levels", "tax rate", "hotel price index", "purchasing power parity"). In this case, a normalisation formula is used to convert the data to the 7-point scale and reverses it so that 1 corresponds to the worst and 7 to the best result (Table 2).

The methodology of TTCI is not accepted completely unconditionally by experts in tourism. It is criticised mainly in respect to: the possibilities for enlarging the primary sources of information outside the survey carried out by WEF; the theoretical grounds of some variables; the lack of reporting the size of the territory of separate countries (Vanhove, 2018). Irrespective of the notes mentioned above, for the goals of this publication the TTCI methodology is accepted to be representative enough, comprehensive and well-grounded in

order to be used for assessing the competitiveness of Bulgaria as a destination. The separate variables are analysed for the time period 2015 – 2019. In addition, results have been analysed concerning eight individual indicators constructing the fifth pillar "ICT readiness "in the first sub-index ("Enabling environment"). Besides, a comparative analysis has been made of the positions of destination Bulgaria according to the particular indicators in the pillar in respect to Greece, Turkey, Croatia, Austria and Slovenia. These countries are defined as competitive in the field of tourism, the criteria for selecting them being: offering similar tourist products; similarity in respect to price placement; geographic proximity to markets that generate tourists; available resources similar in type (even though different in volume); attracting similar tourist flow; expert opinion and assessment, reported in the Updated national strategy for sustainable development of tourism in Bulgaria (2014-2030).

Table 2

Formulas to calculate TTCI

STANDARD FORMULA (indicators of stimulating impact)	NORMALISATION FORMULA (indicators of reducing impact)
$6x\left(\frac{country\ score-lowest\ score\ of\ the\ sample}{highest\ score-lowest\ score\ of\ the\ sample}\right) + 1$	$-6\ x\left(\frac{country\ score-lowest\ score\ of\ the\ sample}{highest\ score-lowest\ score\ of\ the\ sample}\right) + 7$

Source: Created by the author, based on the Methodology of the TTCI 2019.

Applying the WEF methodology for estimating TTCI makes easier the process of monitoring separate criteria, the analysis of changes in their condition and the way of determining possible guidelines for improvement. In this way, the indicative presentation of the tourist industry of each country supports the identification of the favourable and unfavourable aspects of competitiveness not only of the tourist sector, but of the respective national economy as well.

Results and Discussions

The tourist industry in Bulgaria has a significant impact on the economy of the country which is confirmed by the values of key indicators in respect to the volumes of the tourist flow, the revenues from tourism and the contribution of the sector in terms of GDP and employment, according to data from the TTCI Report of WEF for 2019 (Table 3). Yet, in reality, for a decade (2009-2019) the number of international tourist arrivals has increased by nearly 55% (5783783 in 2009, Ministry of Tourism), while the overall contribution of travel and tourism to GDP is about 13% and the direct effect – 3.1%. Despite the significant rise of international tourists in Bulgaria, the market share of the destination is only 1.3% for the international tourist visits made and 0.8% for the generated revenues. To make a comparison, the rival countries have market shares according to the respective indicators as follows: Turkey – 6.4% and 4.4%; Greece – 4.7% and 3.3%; Austria – 3.4% and 4%; Croatia – 2.3% and 2.1%; Slovenia – 0.6% and 0.6% (UNWTO, Highlights, 2019, p. 18). Data show that with the exception of Slovenia, the country loses competitive positions as a destination. Therefore, the considerable increase of tourist visits for a single decade does not have the respective positive effects and impacts on the condition of the tourist sector and the national economy.

Table 3

Travel and tourism industry of Bulgaria (2019 edition)

KEY INDICATORS	VALUE
International tourist arrivals	8,883,000
International tourism inbound receipts	USD 4,045.0 million
Average receipts per arrival	USD 413.5
Travel and tourism industry GDP	USD 2,026.9 million
Travel and tourism industry share of GDP %	3.1
Travel and tourism industry employment % of total	93,000 jobs 2.9

Source: Created by the author. Data from the TTCI Report, 2019 (WEF).

In conditions of the world tourist industry growing faster than the global economy (until the start of 2020), the tourist business in Bulgaria is not taking enough advantage for development from the favourable environment. This reflects even more also on the level of competitiveness of the destination. The values of TTCI for 2019 show that our country ranks 45th (out of 140 countries) with the result of 4.2 (out of 7 maximum). In comparison with the leaders Spain, France, Germany and Japan with the result of 5.4 (for each country), one can evaluate the position of Bulgaria in respect to the competitiveness of the tourist sector as a good one. Irrespective of this fact, though, tracking the results of TTCI in 2015 shows stagnation, a lack of a significant positive change and development, no matter the rise (four positions up) in the general ranking (Table 4). Actually, this means that in the course of the four-year period (2015-2019) there have been made no significant improvements in the sphere of economy and the separate indicators, directly and indirectly tied with travel and tourism, as a juxtaposition with the large increase of the tourist flow to our country in the last decade.

Table 4

TTCI performance for Bulgaria

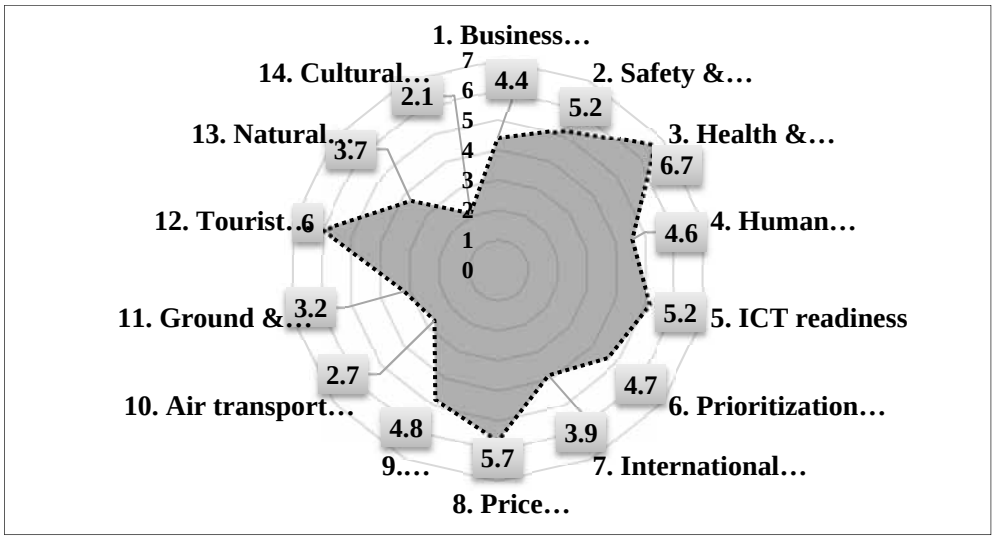
TRAVEL AND TOURISM COMPETITIVENESS EDITION	2019	2017	2015
Rank	45 (out of 140)	45 (out of 136)	49 (out of 141)
Overall Score 1–7 (best)	4.2	4.1	4.2

Source: Created by the author. Data from the TTCI Report, 2019 (WEF).

The results in the separate sub-indexes and pillars show higher values and respectively better competitiveness according to the following five criteria: “health and hygiene” (6.7); ‘tourist service infrastructure” (6); “price competitiveness” (5.7); “ICT readiness” (5.2); “safety and security” (5.2). The lowest result, hence too limited competitiveness, is marked in the criteria “cultural resources and business travel” (2.1), “air transport infrastructure” (2.7) and “ground and port infrastructure” (3.2). The values in these criteria are even lower than the average worldwide (Figure 2).

Figure 2

2019 TTCI – Bulgaria



Source: Created by the author.

The comparison with the average EU values in the separate criteria presented in Table 5, shows that destination Bulgaria has lower results in eight pillars of TTCI (1, 2, 4, 5, 6, 10, 11 и 14), and in the remaining six ones the results are better (3, 7, 8, 9, 12 and 13). In the monitored period of time a growing level of competitiveness, without any doubts, is reported only in three criteria: "price competitiveness "(+0.6), "prioritisation of travel and tourism "(+0.5) and "ICT readiness "(+0.4). Therefore, in most indicators for destination Bulgaria, there are possibilities and a necessity for a significant perfection in the field of tourism. Increasing the values of the sub-indexes, pillars and indicators for the tourist competitiveness has a potential for enhancing the national competitive positions, incl. those in the field of economy and social development.

In order to achieve greater objectivity in assessing the competitiveness of Bulgaria as a destination, there have been analysed more important particularities of the tourist sector in the surveyed period. For Bulgarian tourism last year (2019) is characterised as very contradictory, dynamic and turbulent. The rates of development slowed down and this was felt mostly because of the stagnation on the tourist sector in our country, together with the signs of saturation in tourist demand. At the same time, against the background of the dramatic failure of the British tour operator Thomas Cook and the ensuing bankruptcy of its Bulgarian contracting party, tourism somehow managed to keep its stability. As a whole, the falls in key parameters (number of tourists, nights, tourist visits, revenues) in 2019 were minimal. However, the negative effects are still deepening because the low indicators concern the leading markets for destination Bulgaria – British, German and Russian. The possibilities for making up for the losses are minimal, at that.

Table 5

Competitiveness of destination Bulgaria by TTCI sub-indexes and pillars

Sub-Indexes & Pillars	Global Average 2019	EU Avg 2019	Bulgaria Ranking 2019 – Value (out of 140)	Bulgaria Ranking 2017 – Value (out of 136)	Bulgaria Ranking 2015 – Value (out of 141)
I. Enabling environment	**4.8**	**5.4**	**55 – 5.2**	**47 – 5.2**	**46 – 5.1**
1. Business environment	4.5	4.7	66 – 4.4	61 – 4.5	85 – 4.2
2. Safety & security	5.3	5.8	93 – 5.2	89 – 5.1	78 – 5.2
3. Health & hygiene	5.1	6.2	5 – 6.7	10 – 6.6	5 – 6.7
4. HR & labour market	4.5	5	68 – 4.6	54 – 4.7	48 – 4.7
5. ICT readiness	4.6	5.4	53 – 5.2	48 – 5.0	47 – 4.8
II. Travel & tourism policy	**4.4**	**4.6**	**27 – 4.8**	**19 – 4.6**	**22 – 4.4**
6. Prioritisation of travel & tourism	4.6	4.9	67 – 4.7	92 – 4.3	95 – 4.2
7. International openness	3.3	3.7	49 – 3.9	48 – 3.9	45 – 3.9
8. Price competitiveness	5.3	5.1	44 – 5.7	37 – 5.3	35 – 5.1
9. Environmental sustainability	4.3	4.7	19 – 4.8	11 – 5.0	27 – 4.6
III. Infrastructure	**3.5**	**4.2**	**53 – 4.0**	**53 – 3.8**	**52 – 3.9**
10. Air transport infrastructure	3.1	3.6	73 – 2.7	80 – 2.4	79 – 2.4
11. Ground & port infrastructure	3.5	4.1	76 – 3.2	73 – 3.1	79 – 3.2
12. Tourist service infrastructure	4	4.9	12 – 6.0	14 – 5.8	13 – 6.1
IV. Natural & cultural resources	**2.7**	**2.9**	**44 – 2.9**	**45 – 3.0**	**48 – 2.7**
13. Natural resources	3.1	3.1	40 – 3.7	41 – 3.8	48 – 3.4
14. Cultural resources & business travel	2.2	2.6	48 – 2.1	52 – 2.1	54 – 1.9

Source: Created by the author.

A brief analysis of the condition of Bulgarian tourism in the last couple of years according to data from the Ministry of Tourism shows that there still existed an upward tendency of development based on the inertia gathered from the high rates and good performance in the preceding couple of years. 2016 is defined as the best one for the sector, with generated record high levels in the basic parameters: 16.2% rise in the number of foreign tourists and 15.4% increase in revenues as compared to 2015 (Ministry of tourism, 2016). The following 2017 is remembered with the growth in international travels due to increased activity of low-cost airlines, thus leading to nearly 8% more tourist visits in 2017. Apart from that, cheaper flights to destination Bulgaria brought the fact that cultural tourism in an environment of attractive cultural-and-historic potential outran the traditional sea recreational tourism. The alternative

forms of tourist travels are also on the rise. However, at the background of this data, the indicators about Bulgarian tourism in 2019 are rather modest and their values are too low: only 0.4% growth in tourist visits and hardly 0.02% more revenues from incoming tourism compared to 2018 (Ministry of Tourism, 2019). Moreover, the judgment that the tourist season in 2019 for destination Bulgaria was exceptionally difficult and contradictory has also been confirmed by a comparison with the neighbouring rival countries (Greece and Turkey). While they are marking upward development in tourism with 6-8%, our country is lagging behind with about 10% (Marinova, 2019).

Even though for Bulgarian tourism 2019 was a time of stagnation and no considerable growth in key indicators, the sector remained relatively stable. Unfortunately, the favourable conditions from the previous years were missed, they were not used and reconfirmed by the tourist industry. Besides, the policies implemented in the sector do not support and encourage the upward tendencies. The past year proved another interesting phenomenon about destination Bulgaria. The structure of tourist markets of importance for Bulgaria changed as a consequence of the tendency for the prevailing regional reallocation of tourist visits (Rakadziyska, 2018). There is a weak presence on behalf of leading European and non-European emitting markets like France, Italy, USA, Canada and China. Worse are the positions of Russia, Poland and the Czech Republic. The Romanian market is the leading one, followed by Greece, while Ukraine and Hungary mark growth, with 24% and 29% respectively (Ministry of Tourism, 2019). The German and British tourists rank third and seventh according to the number of tourist visits in 2019.

The stagnation on the Bulgarian tourist sector, its low competitiveness and the changed structure of the markets that were leading for the destination presuppose the objective necessity for reconsidering the national and international tourist policy. It needs to be bound with an expansion of the tourist sector in the internal and international tourist market, which is actually impossible without digital transformation in conditions of measures for social distance and isolation. Currently, the block-chain technologies, artificial intelligence, IoT (Internet of things), all platforms for hotel bookings and shared travels have been developing intensely, additionally stimulated by the activity of low-cost airlines and the cheap flights they offer. On the other hand, tourists need tourist services provided by various online channels – Internet, email, mobile applications, social media and others. These needs and attitudes are reflected in the structure and features of an even more digitalised tourist industry. Therefore, all participants in the tourist system who wish to efficiently take advantage of the opportunities in the sector and overcome the present complex challenges have to get ready and adjust to active interaction and business in a digital environment.

Undoubtedly, the process of digital transformation is defined by the level of "ICT Readiness" – a basic pillar with weight 5% in the first sub-index "Enabling environment" assessed according to eight individual indicators in the index for tourist competitiveness. The efforts for enhancing the values of each one of them have a positive influence on the competitive positions of Bulgaria as a tourist destination, as well as on its economy. According to the TTCI Report for 2019 our country has the result of 5.2 in the particular pillar which ranks it 53rd out of 140 countries (Table 6). This is a very good assessment and it is the result of a reported upward development since 2015. However, it is not enough and falls under the average for EU.

Table 6

Position of destination Bulgaria –"ICT Readiness" pillar and indicators

Ict Readiness Pillar & Indicators (Sub-Index I. Enabling Environment)	Global Average 2019	EU Avg 2019	Bulgaria Ranking 2019 – Value (out of 140)	Bulgaria Ranking 2017 – Value (out of 136)	Bulgaria Ranking 2015 – Value (out of 141)
ICT readiness	**4.6**	**5.4**	**53 – 5.2**	**48 – 5.0**	**47 – 4.8**
1. ICT use for B2B transactions	4.7	5	63 – 4.8	51 – 4.9	54 – 5.1
2. Internet use for B2C transactions	4.6	5.1	39 – 5.1	40 – 5.0	59 – 4.7
3. Individuals using the internet % pop.	57.6	77	70 – 63.4	67 – 56.7	62 – 53.1
4. Broadband internet subscribers/100 pop.	15.1	27.4	41 – 25.4	41 – 22.7	39 – 19.3
5. Mobile telephone subscriptions/100 pop.	114.5	123.9	67 – 120.4	47 – 129.3	29 – 145.2
6. Mobile broadband subscriptions/100 pop.	70	84.8	34 – 91.6	29 – 81.3	33 – 58.1
7. Mobile network coverage % pop.	95.8	993	31 – 100.0	30 – 100.0	34 – 100.0
8. Quality of electricity supply	4.8	5.7	85 – 4.7	78 – 4.6	85 – 4.2

Source: Created by the author.

Bulgaria has competitive positions in respect to "mobile network coverage" (100.0) and "mobile broadband subscriptions" (91.6), the performance in these indicators being above the average for EU (respectively 993 and 84.8). There is a considerable improvement in the performance in the second criteria – "internet use for B2C transactions" (5.1). Compared to 2015, in it, Bulgaria steps up with twenty positions in the ranking for 2019 (39) and equals the average EU level. There is no change in the position (85) in the last indicator ("quality of electricity supply") – its value for last year is lower than the average EU level with 1.0. The downward tendency is reported in the indicator "ICT use for B2B transactions", the result (4.8) being below the average EU level (5) – thus Bulgaria loses nine positions in the ranking for the surveyed period.

The comparative characteristic of the Bulgarian position with respect to pillar" ICT Readiness" and the performance of our country's direct rivals in the field of sea and mountain tourism are presented in Table 7. By all means, the countries with definitely better positions and higher values of the index for competitiveness in the pillar mentioned are Austria (6.1) and Slovenia (5.5), ranking 16th and 12th, respectively. Greece is ahead in the ranking (51), however, with the same value of the index (5.2) as Bulgaria, followed immediately by Croatia. Actually, the three countries have close positions in the ranking of competitiveness according to the "ICT Readiness" pillar and the same value of the index (5.2). In reality, this means that Bulgaria does not have a clearly expressed competitive advantage in the assessed criteria in comparison with Greece and Croatia. Our country has an outstanding competitive

edge only in respect to Turkey, which is far behind with 18 positions in the ranking and its result is 4.6.

The comparison of Bulgaria's competitiveness in the" ICT Readiness" criterion with the particular rival destinations shows that there is a necessity for systemic, purposeful and long-term actions for the digital transformation of the tourist sector in our country. This transformation needs to upgrade and enhance the achieved degree of competitiveness aimed at making it outstand more clearly. The sector of travel and tourism in Bulgaria has the objective necessity for essential and large-scale digital changes which will stimulate and speed up the implementation of a strategy for catch-up development and coming closer to the leading rival destinations.

Table 7

Comparative competitive position of destination Bulgaria – "ICT Readiness" pillar and indicators

Ict Readiness Pillar	Bulgaria	Greece	Turkey	Croatia	Slovenia	Austria
Ranking 2019 (out of 140)	53	51	71	54	42	16
Value (1–7 best)	5.2	5.2	4.6	5.2	5.5	6.1
Indicators Ranking – Value						
1. ICT use for B2B transactions	63 – 4.8	94 – 4.3	72 – 4.7	77 – 4.6	37 – 5.1	15 – 5.7
2. Internet use for B2C transactions	39 – 5.1	94 – 4.2	59 – 4.7	83 – 4.4	55 – 4.8	31 – 5.4
3. Individuals using the internet % pop.	70 – 63.4	58 – 69.9	66 – 64.7	63 – 67.1	40 – 78.9	21 – 87.9
4. Broadband internet subscribers /100 pop.	41 – 25.4	18 – 33.9	59 – 14.8	38 – 26.2	30 – 28.9	31 – 14.8
5. Mobile telephone subscriptions /100 pop.	67 – 120.4	75 – 115.9	103 – 96.4	96 – 103.0	73 – 117.5	7 – 28.7
6. Mobile broadband subscriptions /100 pop.	34 – 91.6	79 – 63.4	64 – 70.5	55 – 79.7	65 – 70.0	39 – 170.8
7. Mobile network coverage % pop.	31 – 100.0	37 – 99.9	46 – 99.8	1 – 100.0	47 – 99.8	70 – 88.1
8. Quality of electricity supply	85 – 4.7	50 – 5.5	89 – 4.6	40 – 5.9	20 – 6.4	13 – 99.0

Source: Created by the author.

Suggestions and Recommendations

The above presented level of competitiveness of tourism in Bulgaria can be enhanced through respective efforts and actions not only in the scope of the" ICT Readiness" pillar, but in the remaining components of TTCI as well. By large, the essence of a similar process includes successful application of relevant technological tendencies whose implementation in the

tourist enterprises increases the level of their digitalisation, hence the level of their competitiveness, too. In addition, in the process there has to be monitoring of the achieved results, their effects and impacts on the condition of the national tourist industry and tourists' behaviour. More important relevant technological tendencies include active and regular use of: mobile technology, wireless networks and wearables; smart-phones, social media and websites; automated services, self-service technology, artificial intelligence and robotics (Kazandzhieva, Filipova, 2018; Ivanov, Webster, 2019; Borisov, 2019).

Guiding and stimulating the processes of digital transformation in the various sectors of the national economy need to be carried out by the state, its governmental bodies and responsible institutions. On the macro (national) level the general strategic tracks for digitalisation that will enhance the competitiveness of destination Bulgaria and will improve the development not only of tourism but also of the whole economy, are:

- expanding the scope of 5G optical networks. They are of exceptional importance because they provide gigabyte speeds and connectivity in transmitting data. They are necessary to develop the Internet of things (IoT), they allow for high-quality connectivity of businesses and users, they service systems, based on artificial intellect through analysing and managing big data in a real-time;
- making easier access to innovations and guaranteeing financing, especially for SME, incl. tourist ones, of startups and public organisations;
- technological renovation in the field of education and training. Providing reliable and anticipatory information and data on the tendencies and perspectives on the labour market in respect to the need for specific digital skills, acquiring new skills for professions of the future (Manyika, 2017; Pompa, 2015; Atanasova, 2018);
- encouraging investment for enhancing qualification and requalification, especially in the field of digital skills in compliance with the fast and accelerated development of ICT. The scope of such activities can be expanded through partnerships with the private sector;
- digitalisation of sectors like transport, environment, finance, culture, territorial management and others. For transport, the automated and connected mobility is of particular importance. In respect to environment, a vital role is played by technologies that balance the power system through implementing renewable sources and intelligent networks for managing traffic and consumption of power, sustainable development and others. Digitalisation of movable and immovable cultural heritage allows for creating virtual museums and digital libraries. The policy of cultural digitalisation stimulates presentation of the rich Bulgarian cultural heritage, creation of content and new online services, incl. ones for entertainment, education and tourism. Virtual tours in digitalised Bulgarian cultural-and-historic sites are a component of the portal for Europeana – the most massive digital repository of collections (Stoyanov, Yordanova, Somova et al., 2011). In territorial development, synergic effects are achieved – applying innovative technologies and digitalisation contribute to creating smart cities where traditional networks and services are more effective for the benefit of local citizens, visitors and business (Popova, Malcheva, 2020). Investment is oriented to improving and developing digital and safe transport connectivity, healthcare and social services, education and

professional training, culture, sport and tourism, circular economy and power efficiency, measures for improving the quality of the external environment and others;

- enlarging free open data published by various national and regional administrations and agencies. This data is accessed through transparency in the work of administration and provide opportunities for effective civil monitoring and control on the activity of administrative organs.
- More important recommendations to governmental and institutional authorities for enhancing the competitiveness of Bulgaria through digital transformation in travel and tourism concern the implementation of a set of important activities and actions for:
- comprehensive support and stimulation through making and applying a long-term program for digitalisation of tourism in Bulgaria. In it there need to be defined the vision and objectives, the priorities and measures in the policies for the digital transformation of the Bulgarian tourist sector until 2020. The initiative for writing the program should be on behalf of the Ministry of tourism and it has to be complied with a National strategic document "Digital transformation of Bulgaria for the period 2020-2030 "(Ministry of Transport, Information Technology and Communications, 2020);
- introducing electronic government in the sector of tourism by building the necessary infrastructure, connecting the tourist registers, preparing electronic passports of the places for accommodation and dining, of the tourist sites and sightseeing and others. It is purposeful to have operational matching of automated exchange of information, data and electronic documents and development of the system for electronic identification in compliance with the national and international legislation;
- assistance and support on behalf of the Ministry of tourism for Bulgarian tourist business, especially SME, so that they can benefit from European financing for projects concerning digitalisation (for ex. in the "Innovation and competitiveness" programme);
- stimulating and maintaining, incl. financially, the establishment of interactive tourist platforms about Bulgaria and the tourist regions. Such projects based on virtual reality in real-time (3D) are actually online travel guides with recommendations for itineraries, entertainment, rest, eating places and others, i.e. the whole set of tourist services needed by the visitor in order to gain memorable and unique experience;
- enhancing transparency in the activity and work of the state tourist administration through introducing block-chain technology. It is suitable for tracking public expenses and investment in tourism, guaranteeing fair and transparent spending of funds when defending governmental subsidies and investment from fraud and deception. Besides, applying block-chain technology is a chance to stimulate tourist visits;
- tapping in the potential of digital transformation for enhancing the competitiveness of Bulgarian tourism. This can be achieved through: automation and adding extra value to the sector; digitalisation of tourist advertising and presenting the country and the regions with tourist potential; intensifying the supply and efficiency of electronic public services for tourist enterprises and visitors (foreign and local); development of innovative tourist models and others;

- providing museums, tourist places and attractions with equipment and suitable and perspective technologies. They allow for free and interactive interplay with the visitors (in various languages), have the potential to create a memorable experience and tourist experience according to individual interest, needs and wish.

- Digital transformation is a complex and comprehensive phenomenon which can enhance the competitiveness of destination Bulgaria, provided that it is implemented successfully and consistently on sector and micro (organisational) level. In this respect, leading strategic trends for digitalisation of tourism in Bulgaria encompass a set of integrated and mutually dependent activities and initiatives of enterprises and business for:

- increasing the degree of introducing digital technologies in specific tourist activities and enhancing the competitiveness of tourist companies. To do this, there is a need for a high extent of technological integration and stimulation of increasing the share of e-commerce of tourist services and products;

- increasing the intensity of digitalisation of the tourist enterprises and encouraging the application of artificial intelligence and other perspective technologies in the public and private sectors. The trend concerns broadening the use of software components of information systems in tourist companies for electronic management of the documentation flow, managing the supply chain and that of company resources, geographic information systems, business intelligence software and others;

- carrying out joint surveys between the academic community, tourist business and representatives of the IT sector on assessing the role and significance of technological innovations for developing e-tourism (Kazandzhieva, Santana, 2019), the effects of implementing innovative business models and consumers' attitudes;

- increasing investments and enlarging the application of modern information and internet technologies in tourist enterprises. The latter are necessary in order to allow for making easy purchases in real time and implement comprehensive booking systems with multiple possibilities and functions;

- improving the foreign-language versions of the sites of tourist companies and better quality of the information about the services and products on offer. Appropriate is also the integration of a large number of communication channels in user-friendly, comfortable and speedy booking and servicing processes in the electronic environment;

- supporting active profiles of tourist companies and destinations on social media because of their strong influence on tourists' choice. They are able even more to digitalise their own emotions (positive and negative) by creating and using their own content (prosumers = producers + consumers);

- differentiating clients, online supply of personalised services and easy individual service before, during and after staying at tourist places. Providing combined offers in compliance with the requirements and needs of the bleisure (business + leisure) segment;

- complex use of the advantages of ICT and Internet for stimulating e-tourism, guaranteeing security in online transactions with services and products for travel and

tourism. Providing consumers with possibilities to control the booking process and the way of using the personal information they have provided and shared with the tourist companies;

- designing and implementing online thematic and specialised tourist offers (for Bulgarian and foreign tourists) which provide possibilities for an authentic unique experience, interaction with local population and others. In addition, the design of 3D virtual tours with sites and experience in Bulgaria stimulates tourist consumption;
- designing and implementing mobile applications in line with the tendencies and prognoses for enlarging the share of m-tourism. Providing comfortable, fast, locally based services and individualised offers for visitors. Tourist companies can apply successfully the strengthened relation with the user via mobile technologies by providing him with better experience aimed at increasing the revenues from the available capacity and services on offer. Thus, through innovative mobile decisions, one can manage and create a personal relationship with the tourist during the whole stay in the hotel or the destination (through chatbot, for ex.). Successfully implemented mobile technologies enable travellers through activating innovations useful for them: individual hotel check-in or registration for a transport service, mobile key for a hotel room, virtual *concierge,* electronic ticket and others. Mobile applications allow for improving visitors' experience through offering tourist services according to their own preferences and location, as well as through activating mobile analysis of their tourist record. There are more possibilities for mobile payment with lower operating costs and use of "green" (paperless) technologies and others;
- expanding the scope of smart offers for increasing both tourists' satisfaction and the loyalty index of guests at tourist destinations. Provision of personalised and location-based promotions to visitors, analysis of the type of consumption, client profile, the period and place of consumption and others. Appropriate are also incentives based on tourists' preferences concerning their loyalty and history of visits, finding new possibilities for online promotions and lucrative tourist offers.

Carrying out successfully the activities and initiatives for digital transformation on macro and micro level combined with the relevant technological achievements and innovations lead to: simplified, speedy and more efficient tourist service; information and data provided in a better way; higher quality of tourist services, incl. a higher level of comfort and amenities before, during and after the stay in the destination. This is the way to increase tourists' satisfaction which is an important prerequisite for successful sustainable development of tourist companies. Due to the digital transformation, they are able to provide various offers through online tourist service 24/7. Besides, advertising destinations, bookings, ways of payment, negotiation and communication with clients are done fast and easy, with optimised costs and efforts. Apart from that, in tourist companies accountability, data analysis and documentation flow are improved and simplified in real-time, relations with clients are stimulated as well.

In addition, the digital transformation of tourism stimulates the creation and maintenance of business relations between various regions, cultures and sectors. Yet, in many parts of Bulgaria, especially in the less populated and rural areas, the access to suitable technologies

is difficult or completely missing. Similar imbalance in the possible ways of access to digital services, incl. those for travel and tourism, is a prerequisite for digital inequality which is also reflected in the economic and social status of particular regions. Therefore, overcoming digital differences is an important condition for achieving a high degree of integrity, cohesion and efficient participation in the digital economy of Bulgaria in a modern information society. Neglecting lagging behind and the issues concerning digitalisation, discredits and restricts the benefits from digital transformation in the tourist sector, it also lowers its competitiveness. There is a necessity for specialised surveys for designing national and regional strategies for digitalisation of tourism which will take into consideration the broad framework of applying ICT in this respect.

Conclusion

In conditions of the digital transformation of tourism, the role of tourist enterprises is changing; in some cases, this takes place rapidly. Those who ignore the new opportunities created by the impacts of ICT and the Internet and do not adjust are exposed to considerable risk and difficulties. The challenges concern a choice of suitable technologies for digitalisation of tourism provided to clients in such a way that risks and issues of using them unreasonably are avoided. The efforts need to be made mainly in investments in technological optimisation for the benefit of users and business, for automation and digitalisation of company processes in order to ensure individualised and smooth service.

The integrated implementation of actions and initiatives of the strategic guidelines on particular levels need to be guided by an objective understanding of the advantages, shortcomings and effects of the digital changes of Bulgarian tourism. Combining them with the rates of expanding shared economy is not an ordinary change, it is an obligatory process of complex transformation instead, one that our tourism should go through in order to be efficient and competitive. More and more, the scope and dynamics of digital changes in the tourism sector are significant indicators for defining destinations as digital winners or digital losers. The study of the competitiveness of Bulgaria as a destination showed that the country has relatively good chances and potential to be part of the group of the winning countries. The sustainable increase of the competitiveness of our tourist sector can be achieved under the condition that the advantages and favourable possibilities for its digitalisation are adequately and timely used by all stakeholders – public and private sectors, residents and tourists, as well as partner destinations.

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SUMMARIES

Irena Zareva
Alla Kirova

ACADEMIA-BUSINESS COOPERATION IN BULGARIA: PROBLEMS AND PROGRESS POSSIBILITIES

The study presents general results of the research project "Academic sphere and business in Bulgaria: status and possibilities for expanding cooperation" carried out at the Economic Research Institute at BAS. An assessment of the status of the cooperation between the universities, research organisations and enterprises in Bulgaria is made. Main problem areas are identified and on this basis – possibilities for its expansion are derived.
JEL: I23; I28; O3

Vladyslav Bolhov
Inna Akhnovska
Maryna Savchenko
Olga Shkurenko

INFLUENCE OF TRANSNATIONAL CORPORATIONS ON THE GLOBAL ECONOMIC ORDER

The global economy has been in a state of permanent crisis for the last 10 years, the beginning of which is considered to be the financial crisis of 2007. Many studies have been devoted to identifying the reasons for deepening this crisis and gaining global scales, but there is no explicit answer to questions related to measures to overcome crisis phenomena and to create the basis for further sustainable development and its regulation.

In our opinion, one of the main reasons for the failure of national economies and the global economy as a whole to ensure a positive development trend is the significant influence of modern monopolies and monopolistic associations both on the national and international levels.

From the early 1970's to the beginning of the nineteenth century, transnational corporations have become the engine of the global economy and the driving force behind the spread of globalisation, but at the current stage, reaching a large size and with considerable financial resources, they become an obstacle to the development of a free market and support and development of competition.

Most publications in scientific sources are devoted to the analysis of tendencies of development of transnationalization of the world economy and substantiation of efficiency of activity of transnational companies as the organisation of the world economy, but insufficiently covered the shortcomings of activity of transnational corporations and revealed negative influences on the state of development of the global economy.

In a scientific article in order to find ways to overcome the stagnation of the world economy, the influence of international monopolies on economic relations has been researched both within individual states and within the global economy, trends in their development have been identified, and measures have been developed to improve the situation.
JEL: A1; C1; F01; F23; F6

Dimitar Zlatinov
Ilia Atanasov

ABSOLUTE AND CONDITIONAL CONVERGENCE: A STORY ABOUT CONVERGENCE CLUBS AND DIVERGENCE IN THE EU

We examine beta and sigma convergence in the European Union in 2000-2019. Our study shows that the hypotheses for both beta and sigma convergences are not rejected. While the process of convergence is occurring in the EU it is not fast enough, and it is much more concerned with convergence clubs' formation instead of community convergence. Our estimations of speed and years of convergence show that some countries, mostly from Eastern and Southern Europe, will need higher growth rates to catch up with the average level of income. Since the global economic and financial crisis of 2008 divergence process in the EU is underway and it threatens the functioning of the euro area. Facing such challenges, the EU needs an Investment Deal to carry out the fundamental idea of the Single Market and foster the process of convergence.
JEL: O47; R11; F43

Oksana Yaskal
Ihor Yaskal
Mariana Kolosinska
Svitlana Boyda

THE INFORMAL EMPLOYMENT – FACTORS AND PUBLIC POLICIES FOR ITS LIMITATION

The purpose of this study is to outline the perspective public policies to limit informal employment. They are based on a study of its influential factors through The Doing Business international rating in the European Union and the EU candidate countries. For the group of "old" European countries, the priority measures are to improve the contracting procedures it terms of their numbers and time-consuming. For the group of new EU members, such measures are the reductions of the number of procedures to obtain electricity. For EU candidate countries, key steps to improve the regulation of informal employment include the raising legal awareness, reducing specific types of taxes and fees and increasing credit opportunities for business and people.
JEL: E26; E69; J21; J68

Evgueni Evgueniev

INDUSTRIAL RELATIONS – PAST AND PRESENT

This article is a retrospective of the development of industrial relations from their inception to the present day. It clarifies the essence of the basic principles on which they operate and the main participants in these relations. It examines the main trends in modern conditions and the formation of new "players" in these relations. It also clarifies the main changes occurring in the conditions under which industrial relations operate and will have to function in the future.
JEL: J50

Baki Hyuseinov

POLICIES FOR LIMITATION OF THE REGIONAL DISPARITIES DIFFERENCES IN THE EDUCATIONAL INFRASTRUCTURE

The study is dedicated to the current and insufficiently developed problems related to the setting of priorities in the policies aimed at overcoming the existing regional differences in the educational infrastructure of the country. This statement predetermines the main goal of the study – on the basis of the existing European and national regulatory frameworks in the field of regional development and education, as well as the author's study of the differences in educational infrastructure by regions and districts of the country, to propose policies for their restriction.

In view of the main goal, an analysis and evaluation of the European and national regulatory frameworks, as well as of the current legal documents in the fields of education and regional development have been carried out. The focus of the study is: the proposals made for priority policies to reduce regional disparities by regions and districts, according to their concrete specifics features. These policies have a targeted nature and practical applicability in the activities of the relevant local authorities in this area. The proposed policies in territorial terms are defined by different levels of education.

In a conclusion of the study, systematized conclusions are made, which expresses the opinion that the set of proposed policies is a guarantee for achieving minimal differences between regions and districts in terms of their educational infrastructure.

JEL: R11; I2; J71; R58

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SOCIAL DESIGN AS TECHNOLOGY OF SOCIAL MANAGEMENT

Crisis socioeconomic developments our country has been facing lately gave rise a to brand new approach to managing social problems embodied in social design. Social design as a technology of social management has been taking ever more significant place in the development of the Ukrainian society. It has been a while since social design proved to have a significant impact in the developed countries, which extensively design and implement social projects. Social design as it is today should be considered as a social practice phenomenon of the globalized society. Research of social design as a functional, applied management methodology and technology is also important for the development of practical principles of social management and social security. This research is aimed to improve and further develop theoretical provisions and practical recommendations as to the use of social design as a technology of social management in the development of Ukrainian society. The object of this study is the process of use of social design as a technology of social management when addressing social problems of society. The subject of the study is theoretical and applied aspects of social design as a social management technology. The paper analyzes and generalizes the conceptual framework of social design; defines the role and function of social design as a technology of social management, offers a functional block diagram of social design (it details the object, the subject, the base principles, social design tools), substantiates the stages of social design.

JEL: B55; O22; H10

Vesselin Blagoev
Elena Shustova
Inna Mischenko

BUYER BEHAVIOUR IN THE CASE OF ORGANIC AGRICULTURAL PRODUCTS

The aim of this research is to study the consumer's attitude and buyers' behaviour towards organic (bio) agricultural products as key factors to influence the market development and market potential, especially for supply to other regional markets in the particular country, and for export. Three regions have been studied, all of them with production and export potential for organic products. Two of them are in Central Asia – Altay region in the Russian Federation (Barnaul and the region) and Eastern Kazakhstan (Semey and the region). Bulgaria (Sofia and Varna) was included in the research, with the idea to contrast the findings from Siberia with those from Europe. The three regions, which are covered by this survey, have the production capacity to supply the local and foreign markets with organic agricultural products. The findings of this research lead to a better understanding of the consumers' specifics, as well as – the gender specifics, and by this, it provides the producers and sellers with ideas about optimisation of their marketing communication and pricing strategies.
JEL: M31; Q13; L66; F18

P. V. Gudz
Pavlinka Ileva-Naydenova
A. V. Cherep
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USE OF STATE SUPPORT LEVERS FOR SMALL AND MEDIUM-SIZED ENTERPRISES WITHIN THE DYNAMIC ENVIRONMENT

The evolution of theoretical approaches to the definition of the "entrepreneur" and "entrepreneurship" concepts essence was studied. It was established that various risks inherent in entrepreneurship are characterised by the complexity of distinguishing the signs of economy and investment within a turbulent dynamic environment of uncertainty, limited liquidity in a small and medium-sized business. It was determined that in many countries of the world small and medium-sized enterprises enjoy state support through their taxation systems, which necessitates the determination of a fair tax burden and appropriate fair tax bases. The role of small and medium-sized enterprises in ensuring technological progress, eliminating regional imbalances in economic development, achieving socio-political stability in society and strengthening national security was highlighted. The Recommendations of the European Commission on the SME definition in different countries of the world were characterised. The method of SME classifying into independent and dependent was suggested, which will further allow guiding the SME sector activities to ensure stability in society and simultaneously comply with their obligations to manage public finance at all levels.
JEL: G38

Rizwan Ullah Khan
Volodymyr Saienko
Hanna Tolchieva

DEPENDENCE OF THE COMPANY'S REPUTATION AND THE QUALITY OF CUSTOMER RELATIONS

The article is investigating the improving of the company's reputation through quality customer relations. Hence, customer satisfaction is essential for company reputation and loyalty because of a company brand whole dependency on customer satisfaction in turbulence market. Therefore, the current study conducted in Pakistani context to check the customer believes regarding company brand and its reputation, because nowadays the Pakistani market is very flexible, and no one can go smoothly inter in this turbulence market. The underline study finding suggests many recommendations for policymakers and practitioners, that build a cluster of trust among company's staff because it will support the customer reputation, and different steps (advertising, public relations and marketing campaigns) are very pivotal tools, can change customer's behaviours.
JEL: M30

Velina Kazandzhieva

ENHANCING THE COMPETITIVENESS OF DESTINATION BULGARIA THROUGH DIGITAL TRANSFORMATION IN TOURISM

The relevance of this paper is determined by the dynamic competitive environment of the international tourist markets and the necessity for seeking possibilities for increasing the competitive advantages of Bulgaria as a destination. One of these possibilities is through a digital change of the tourist sector in our country. The research goal in the article is to make an analysis and assessment of the competitiveness of destination Bulgaria, together with defining directions for enlarging it through digital transformation in tourism. In analysing and synthesising for the goals of assessing the competitive positions of Bulgaria as a tourist destination, there are applied the approaches of induction, deduction and glocalisation. The publication is based on the methodology of determining the Travel and tourism competitiveness index of the World Economic Forum. Particular suggestions and recommendations are made for the digital transformation of the tourist sector in Bulgaria on a macro- and micro level. Guiding and stimulating the processes of digital transformation in the various sectors of the national economy, incl. those in tourism, have to be carried out by the state, its governmental authorities and responsible institutions, the respective enterprises and organisations.
JEL: Z32; O33