
THE DYNAMIC TRANSFORMATIONS ON THE LABOUR MARKET IN BULGARIA IN CONDITIONS OF DIGITAL TECHNOLOGIES AND PANDEMIC

Desislava Koleva-Stefanova¹,

¹University of National and World Economy – Sofia, Bulgaria

E-mail: ¹stefanova_desi@abv.bg

Abstract: This article discusses the main transformations which have occurred in the labour market due to the accelerated processes of digitalization throughout the last two years. In their essence, those changes are caused by the fourth industrial revolution and the ongoing COVID-19 pandemic. The research places the emphasis on the necessity of developing “hybrid” forms of employment based on flexibility and security. Special attention is paid to the necessity of investing human capital in an environment of digital technologies and intensive entering of artificial intellect in labour processes.

Key words: labour market, flexibility and security, professional skills.

This article shall be **cited** as follows: **Koleva-Stefanova, D.** (2022). The Dynamic Transformations on the Labour Market in Bulgaria in Conditions of Digital Technologies and Pandemic. *Economic Archive*, (4), pp. 37-57.

URL: www2.uni-svishtov.bg/NSArhiv

Jel: J21, I12.

* * *

Introduction

The COVID-19 pandemic has brought unusual changes to the social life of the entire humanity. Serious restrictive measures were imposed; they were related to preserving people's health and life. Social isolation has resulted in new organization and models of functioning of labour markets as a large number of enterprises have switched to a remote work process. The imposed measures have had an enormous impact on those economic sectors which, due to the organization of the labour processes, have not been able to adjust to "hybrid" employment. One of the most affected spheres in Bulgaria's business is the hotel, tourist, and entertainment sector, the restaurant business, the automotive industry, etc. In response to this social and economic "shock", state institutions have implemented a package of financial stimuli targeted at the most vulnerable enterprises and economic sectors. Despite the institutional measures which have been adopted, many of the above-mentioned economic sectors have had to terminate part of their business, lay off personnel, reduce the worktime, etc. This has also brought changes to the labour market, restructuring of the labour processes and employment to achieve flexibility and security.

The aim of this article is to research the dynamically changing processes in the labour market related to the establishment of new professions and forms of efficient employment. The paper defends the thesis that there is an undisputed necessity of wider implementation of the European concept of flexibility and security in the labour processes combined with the evolution in the enhancement of knowledge, skills, and competences of human capital in the contemporary enterprise.

To achieve the aim, we shall complete the following **objectives**:

1. Define the economic and social factors determining the transformations on the labour market in Bulgaria;
2. Motivate the necessity of combining flexibility, security, and professional development of the workforce on the labour market in digital environment;
3. Analyze the trends and challenges on the labour market throughout the critical for the economy period 2020–2022;
4. Draw certain major conclusions and recommendations on the basis of the critical analysis of the information.

1. Economic and social factors of the transformations on the labour market in Bulgaria in the period 2020–2022.

Europe's first encounter with the COVID-19 virus was on 24 January 2020. All European and state institutions have made enormous efforts to limit the fast-spreading pandemic by imposing restrictive measures with one aim – to preserve the health and life of people. The restrictions involve strict conditions for travelling, certain safety measures for visiting public places, hybrid educational activity, recommended remote work from home – at home offices.

The imposed general changes in the daily routine of employed persons have resulted in tangible changes in production processes and services on the labour market. Globally, the normal labour rhythm and organization of the employment of the workforce have undergone significant restructuring. During the period 2020–2021, the world economy registered a decline and a delay in the rate of growth, which has had an impact on decreasing the demand of the business especially in some critical production spheres.

The ongoing fourth industrial revolution and pandemic have significantly accelerated the already started smooth changes on the labour market towards synergy between man and artificial intellect. There have been substantial changes in social life, caused mainly by several factors such as: health crisis, digitalization, ageing workforce, the transition to green economy, virtual forms of communication and paid distance employment. The above-mentioned factors are part of the “catalyst” which has caused the dynamic changes on the labour market. We shall also point out the deepening serious discrepancies between the search for workforce by enterprises and the offered professional skills by employees. Digital transformation has entirely changed production and the requirement to the competences and skills of employees. The business has faced serious difficulties regarding finding personnel with the necessary qualities for an efficient work process.

2. The necessity of flexibility, security, and professional development of the workforce

Bulgaria is an inseparable part of the emerging Industry 4.0 which forms an environment of global technological transformations which experts expect to continue into the next decade. Innovations, intensive digitalization, and artificial intellect constantly update all sectors of the economy by introducing significant changes on the labour market. More and more attention is paid to hybrid forms of employment in the labour process as a factor of economic growth and competitiveness of enterprises. Bulgaria, in unison with the concept and policy

of the EU of encouraging flexible labour markets, has directed its efforts towards the development of an institutional framework which shall stimulate the contemporary approaches for employment in a dynamic environment.

One of the priority political documents in this direction is the Employment Strategy 2021–2030. It fully supports the achievement of the Action Plan of the European Pillar of Social Rights. The strategy focuses on taking measures and actions for increasing the offering of labour, the increase of investments in the knowledge and skills of the workforce in the field of digital competences. Remote work, as one of the flexible forms of labour, is regulated in the labour legislation as early as November 2010; it is established with the signing of a National Agreement on the Organization and Implementation of Remote Work among the nationally represented organizations of Bulgaria's social partners. This agreement has found application in the amendment and addition to the Labour Code.¹ The document aims at normatively regulating the specific legal relations in remote work.

Our opinion is that, despite the normative regulations which have come into effect, and which regulate the flexible forms of employment, what we need is a more efficient and complex legislative framework which complies with the contemporary changes on the labour market. In the spirit of a unified and social Europe, establishing a balance between flexible employment and social security, which has gained public acceptance as “flexicurity”, is an essential element of building a contemporary legislation which stimulates new professions, non-standard forms of employment and flexible numbers of the personnel.

In order for the reforms to be expedient, radical transformations in the social security system shall be made. They shall provide an opportunity for optimized security in the various forms of flexible labour contracts, flexible worktime, and flexible workplaces and labour schemes.

Social security is of utmost significance when a specific social security event has occurred, and the social risk is covered. The main purpose of flexicurity is high degree of employment based on flexible hybrid work processes and social security in the context of the fifth principle of the European Pillar of Social Rights.² (https://ec.europa.eu/info/strategy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/european-pillar-social-rights/european-pillar-social-rights-20-principles_bg). Despite the way

¹ Amending and Adding to the Labour Code Act, State Gazette, issue 82 from 21 October 2011 (Section VIII B, Chapter Five – Additional Conditions of Remote Work).

² The fifth principle of the European Pillar of Social Rights concerns good labour conditions, the access to training and social justice. In compliance with the institutional framework and collective agreements stimulate the innovative and adaptive forms of employment on contemporary labour markets.

of contracting with flexible forms of employment, there is a potential risk of disinformation, insufficient clarity, and discrepancies. The challenges in building contemporary institutional legislation affect almost all issues in labour legal relations. What is needed is a legislative framework regarding the control, measurement of productivity, payment, bonus schemes, safe and healthy labour conditions, social security, holidays, etc.

What is also needed is new strict rules which regulate comprehensively the work process in non-standard forms of employment. The development of these forms shall be part of the leading business strategy of every contemporary enterprise if it is to be competitive and adjustable to the global technological markets. Labour flexibility provides a better balance between work and personal time of the workforce. It enables a large part of the population to take part in the labour market, unlike the nine-to-five attendance workday. Some of the social groups which have had the chance to integrate in the labour market are: women with young children, people who look after an ill relative, people with chronic diseases and disadvantaged people, ageing workforce, regularly studying students, discouraged people, etc.

The fixed whole-day worktime at the office and the lack of suitable forms of flexible labour process have led to inefficiently used capacity of the people at working age. (Flexible forms of employment and the competitiveness of Bulgarian enterprises, <https://obuch.info/gvkavite-formi-na-zaetost-i-konkurentosposobnostta-na-blgarski.html>, 2022).

The contemporary fast-developing technological world constantly creates a series of innovations. (Dulevski, St., 2020, 58–59). In this respect, we need radical changes which are expressed mostly in the overwhelming need for a highly qualified workforce which possesses the skills necessary for the professions of the future, and the hybrid forms of employment. The world trend of development of flexible forms of employment occupies an increasingly significant place in the work process and goes in parallel to the necessity of high professional level of the workforce. There is a unanimous decision by all world and state institutions to make large scale investments in the acquisition of contemporary knowledge and skills of the workforce.

Professional competences shall meet the requirements of digital labour markets and the reorganization of the work environment. Human capital is the most precious resource which determines profitability, competitiveness, and wellbeing of each economic organization. Permanent knowledge is not a formality, but an unconditional necessity in the occurrence of new professions. Investing in innovative technologies, development activity, and security, the reforms in education and vocational training are key aspects in the transformation of the labour market.

Cedefop is one of the decentralized agencies of the EU. Its primary function is stimulating, achieving, and support of vocational education and training (VET) in the EU member states. Cedefop plays a significant role in developing functioning and efficient European policies in the field of VET. In 2020, the Agency develops an analytical forecast for the necessity of Bulgarian personnel who possesses specific knowledge and skills, which shall be sought by the business for the period until 2030. The trends on the labour market in our country are that more workplaces shall be opened at medium and high level of qualification, approximately 48% for each of the two educational levels, and only 4% of the workplaces are intended for people with low or no qualification (<https://www.cedefop.europa.eu/bg/about-cedefop>, 2022).

Long-term forecasts of the Ministry of Labour and Social Policy for the period 2020–2034 point out that the highest employment is expected in the sectors of trade, building, processing industry, health care. Professions in the field of broadcasting information, creative products, telecommunications will preserve their positions on the labour market (<https://mlsp.government.bg/uploads/1/lmforecasts-analysis2-bg1.pdf>, 2022). In the future, the perspective professions will be specialists who process large databases, specialists in cybersecurity, specialists in developing digital products, software engineers, product and web designers, IT consultants, financial managers, operators of call centers, doctors and nurses, people who work in social and health care, etc.

Some of the professions which are forecast to become extinct and be replaced by artificial intellect are: security guards, tellers, interpreters, bodyguards, factory production activities which do not require specific knowledge and skills, workplaces in the transport sector, including the transportation of people, etc. The above-mentioned professions are only some of the labour activities which are in danger of extinction. It cannot be precisely predicted when and how artificial intellect will occupy a significant place in contemporary labour markets, but it is without doubt that it dynamically enters all spheres of social life. A priority goal of the state is that institutions, employers, and workforce shall be prepared and adjustable in order to meet the future transformations in the work process.

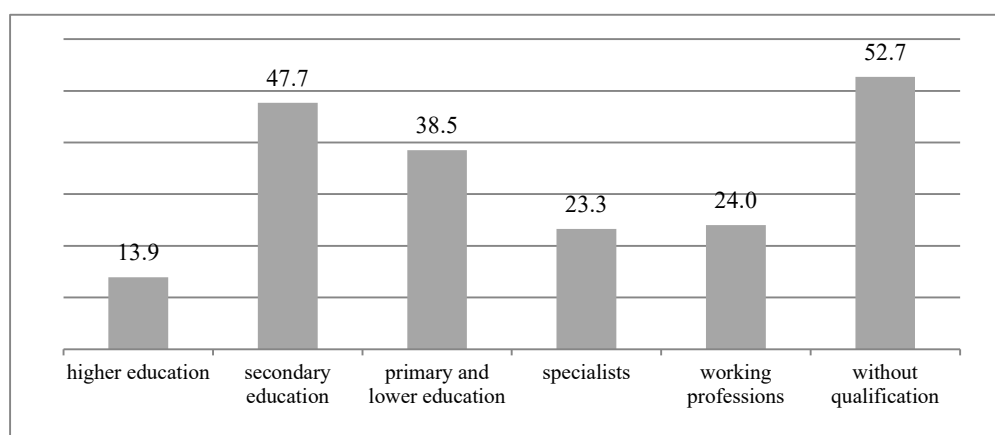
The changing professions require radical restructuring of knowledge and skills of the workforce. The focus of active labour policy shall be on people who are in danger of losing their workplaces due to the changes in some labour professions or their becoming extinct. An important direction of the measures and programmes is to form training courses that meet the demand of fast-developing industries which in the future will need a workforce. The investment in the acquisition of knowledge and skills directed towards the new professions is a significant factor in restricting future unemployment. Building stable labour

markets based on knowledge, high income, social security, and flexible employment are of utmost importance.

3. Comparative analysis at educational level on the labour market and flexible forms of employment in the period 2020–2022

This part of the article places an emphasis on the analysis of the specific characteristics of the labour market in Bulgaria, flexible employment, digital skills of the population, and the development of VET.

The first researched indicator allows outlining the most vulnerable groups on the labour market, which, due to the transformation of the labour markets, are in danger of losing their jobs even in the future.

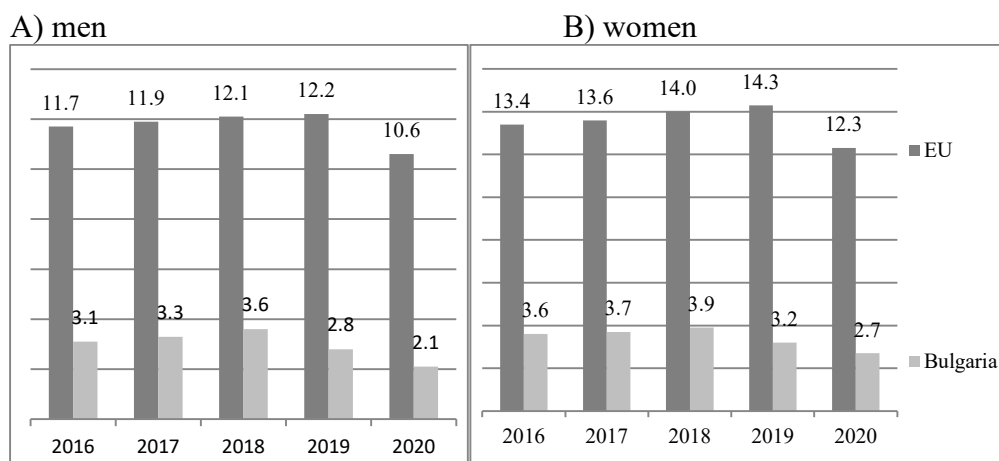


Source: The Employment Agency

Figure 1. Vocational and educational structure of the newly registered unemployed persons in January 2022

Figure 1 visualizes the vocational and educational structure of the newly registered unemployed persons in the month of January 2022. For this period, the Employment Agency has registered a growth of the newly registered unemployed persons by 4,087 more people compared to the end of 2021. The destabilization on the labour market also affects the unemployed who have started work in this month, as their number by 2,282 people fewer compared to the month of December 2021 sourcing data from the Employment Agency (<https://www.az.government.bg/bg/stats/view/1/332/>). The lowest level of newly registered unemployed persons is observed with those who have higher education, who are 13.9%, followed by specialists with 23.3%, whereas third place is occupied by working professions, who are 24.0% of the newly registered unemployed persons. The highest level of this indicator is registered

at the workforce without qualification, namely 52.7%, followed by those with secondary education, who are 47.7%. Those with primary or lower education are 38.5%. They are the lowest share of the workforce because a large part of those with a low level of education are occupied in the shady sector or are either discouraged or are not part of the labour market.



Source: Eurostat

Figure 2. *Percentage of participation in education and training (last four weeks) (A)-men; (B)-women, aged 25-49 years.*

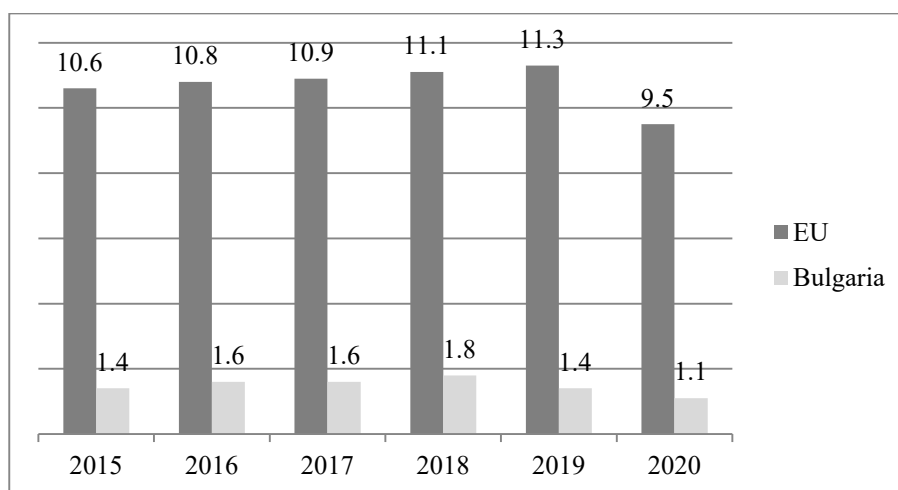
The second researched parameter shows the percentage of participation in education and training (last four weeks) of men and women aged 25–49 years. The indicator allows making a comparison by years between Bulgaria and the average level for the EU. The participation of the workforce in such training is of utmost importance for securing labour qualities and skills meeting the requirements of the transforming labour markets.

Figure 2 shows that throughout all researched years, Bulgarian population aged 25–49 years is at an incredibly low level compared to the average for the EU. With men, the average percentage for all researched years from 2016 to 2020 is 2.98%, whereas for the EU, it is 11.7%. Observations show that there are no significant amplitude differences with men during the whole researched period both for Bulgaria and for the EU. In our country, the percentage values vary between 2.1%–3.6%, whereas in the EU, the boundaries are between 10.6%–12.2%. 2020 registers the lowest values for participation in education and training by men for Bulgaria and the EU (Bulgaria – 2.1%, EU – 10.6%).

The participation of Bulgarian women in professional training courses is at an extremely low level compared to the average level for the EU. With women, the average percentage for all researched years (from 2016 to 2020) is 3.42%, which compared to men is by 0.44% higher. For women from the EU,

the average percentage for the five years is 13.52%, which compared to men is by 1.82% percentage points higher. With both women and men, in 2020, in Bulgaria (2.7%) and in the EU (12.3%), we observe the lowest values of this indicator. The decrease in the participation in educational programmes in 2020 can be explained with the Covid-19 pandemic and all restrictive measures which were imposed for limiting the spread of the disease. Those restrictions have interfered with the normal rhythm and active policy on the labour market.

The data in figure 2 shows that with women the percentage values of this indicator are slightly increased compared to men both for Bulgaria and for the EU. The total average percentage of the two genders of the workforce aged 25–49 years for the five years for Bulgaria is 3.2%, whereas for the EU, it is 12.61% or by 9.41% percentage points higher compared to our country. The results show by far an unsatisfactory level of the Bulgarian workforce aged 25–49 years participating in professional trainings compared to the average value for the EU.



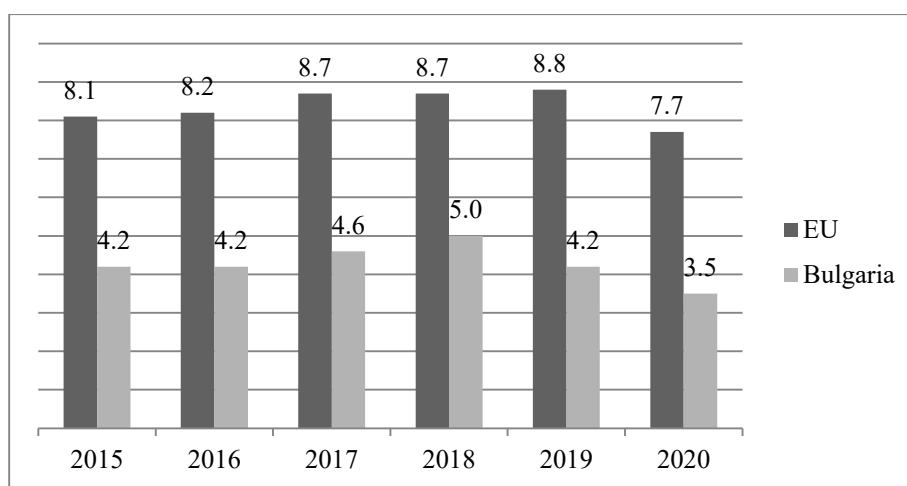
Source: Eurostat

Figure 3. Workforce participating in professional training courses over the last four weeks, 2015–2020, %, aged 25–64 years.

Figure 3 discusses the percentage participation of the workforce aged 25–64 years in professional training courses. The data shows that for 2020, similar to Figure 2, both Bulgaria (1.1%) and the EU (9.5%) register the lowest percentage level compared to the rest of the years (2015, 2016, 2017, 2018, 2019). In Figure 2, the persons participating in professional training courses are aged between 25–49 years, as the average level for Bulgaria for the five researched years (2015–2020) is 3.2%.

Figure 3 again researches the persons who participate in professional training courses, but the difference is that their age is 25–64 years, i.e., the oldest

part of the workforce is included as well (50–64 years). Figure 3 clearly shows that the percentage of the average level of the Bulgarian workforce aged 25–64 years participating in trainings in all researched years is 1.48% for Bulgaria, and 10.7% for the EU. The lower percentage level of participation in professional training by the workforce aged 25–64 years compared to those aged 25–49 years shows that the aging part of the workforce has the lowest activity regarding their participation in qualification and additional qualification courses. At the same time, those persons are the most vulnerable groups on the labour market and shall actively participate in training programmes for acquiring new professional skills which shall guarantee them security in the workplace in the future.



Source: Eurostat

Figure 4. Persons outside the workforce participating in professional training courses over the last four weeks, 2015–2020, %, aged 25–64 years.

Figure 4 shows the persons outside the workforce who participate in professional training courses in the period 2015–2020. 2020 registers the lowest level of participation in professional training courses of the persons outside the workforce aged 25–64 years both for Bulgaria (3.5%) and average for the EU (7.7%). The average value for Bulgaria for all researched years is 4.28%, whereas for the EU 8.36%. We shall note that for Bulgaria the percentage of the persons outside the workforce who participate in education and training courses is higher (4.28%) compared to the persons who are in the workforce (1.48%). The average values for the EU show contrasting results to those from our country, i.e., a higher percentage of participation in professional programmes by the employed and unemployed Europeans (10.7%), but not of the participants in trainings who are outside the labour market (8.36%).

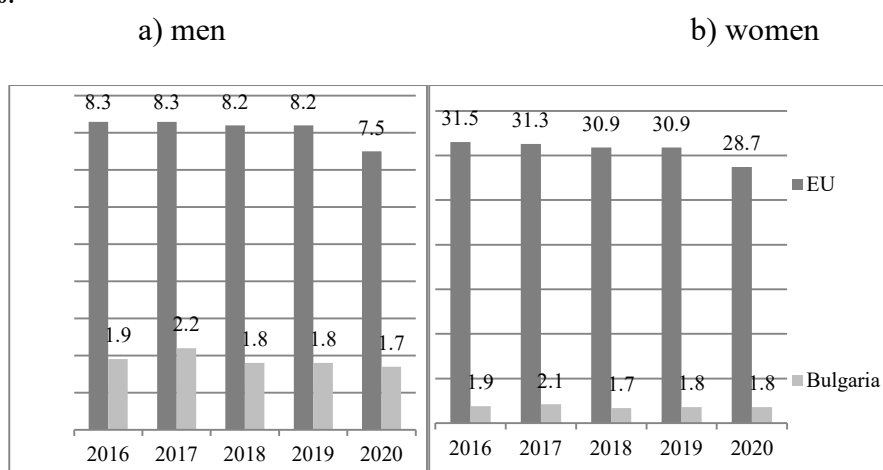
Table 1

Skills of the Internet user, Bulgaria/EU, %, 2021

Skills of the Internet user	Bulgaria men	Bulgaria women	EU men	EU women	Place of Bulgaria in the EU
• at least basic digital skills	28%	30%	58%	54%	26%
• more than basic digital skills	10%	12%	33%	29%	26%
• at least basic software skills	30%	32%	60%	56%	27%

Source: Women in digital scoreboard 2021, European commission

Table 1 visualizes the Internet users in Bulgaria and the average level for the EU. In Bulgaria, the values concerning the digital skills of women compared to men is higher by 2%. Whereas the average level for the EU is the opposite, the difference between the two genders is between 2–4% in favour of men. Bulgaria occupies the penultimate place by basic digital skills as the average level of Bulgarian users is 29%, whereas in the EU it is almost double – 56%. Bulgarians occupy again the penultimate place as regards the indicator of more than basic digital skills – 11%, whereas the average value for the EU is 31%. 31% per cent of Bulgarians possess basic software skills as by this indicator we occupy the last 27th place in the EU, where the average level is 58%.



Source: Eurostat

Figure 5. **Employed persons who work part time, (a) – men; (b) – women, aged 20-64 years, % of total employment, 2016–2020**

Figure 5 shows data that registers the percentage of employment by men and women for Bulgaria and the EU regarding *part-time work time*, which is one of the flexible forms of employment. For the period 2016–2020, the average value with men for Bulgaria during the researched period is 1.88%, whereas for the EU it is 8,1%, which is a significantly higher percentage compared to our country. The lowest level is registered in 2020 both for our country (1.7%) and for the EU (7.5%). With women, the average employment for Bulgaria is 1.86%, whereas for the EU, it is significantly higher – 30.66%. It shall be noted that the levels of hourly employment for Bulgaria with both men and women are almost equal, for 2020, with men it is 1.7%, whereas with women it is 1.8%. However, in the EU, the situation is entirely different – hourly employment with women has a significantly higher level compared to that of men for the same period.

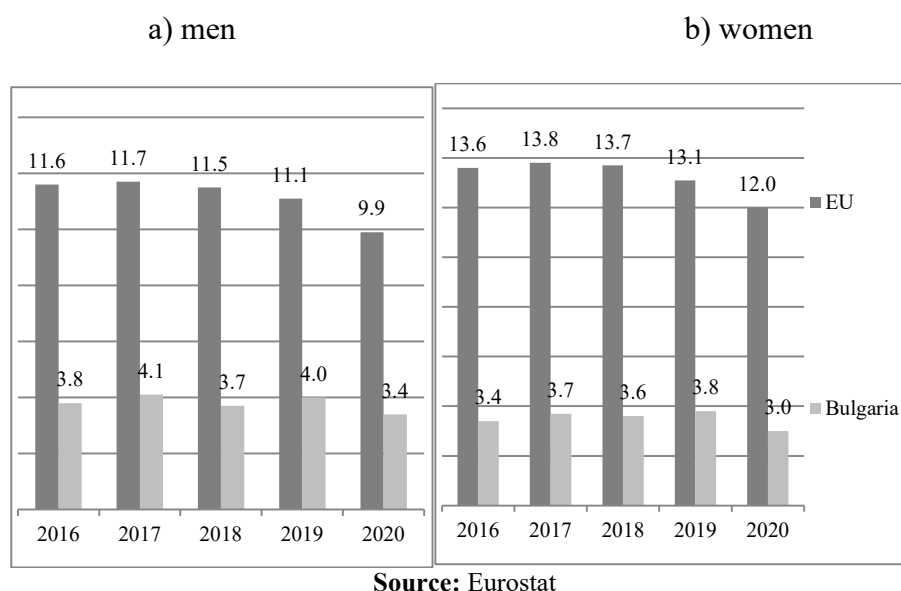
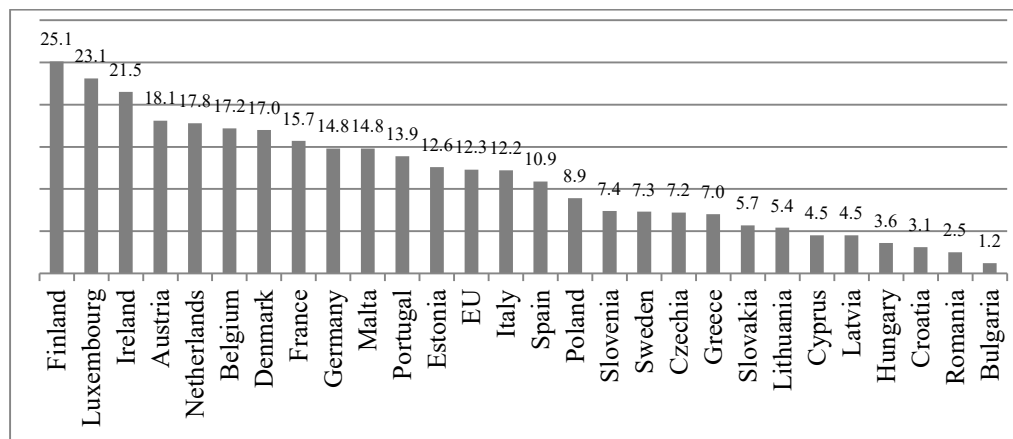


Figure 6. Employed persons who work under temporary labour contracts, (a) -men; (b) – women, aged 20-64 years, % of total employment, 2016–2020

In Figure 6, the Eurostat data registers that the percentage of men working under temporary labour contracts compared to total employment, for our country, the average level for all researched years is 3.8%, whereas the average level for the EU is 11.6%. The lowest values of this indicator both for our country and for the EU are registered in 2020: for our country (3.4%), whereas for the EU (9.9%). As regards women, the average level for the whole period for Bulgarian women is 3.5%, whereas for the EU it is 13.24%. For Bulgaria, we observe a slightly lower percentage with women with this type of

temporary employment compared to men, whereas the average level in the EU registers the opposite, namely, a higher percentage with women.



Source: Eurostat

Figure 7. People who usually work from home for 2020

The data in Figure 7 shows that in 2020 the average value of the remote form of employment for the EU is 12.3%, whereas for Bulgaria, it is as low as 1.2%; our country occupies the last place compared to the rest of the countries. The penultimate place is occupied by Romania with 2.5%, followed by Croatia with 3.1%. At the other pole, with the highest level of this type of flexible employment is Finland with 25.1%, Luxembourg is runner-up with 23.1%, followed by Ireland with 21.5%.

4. Some conclusions and recommendations for the positive impact on the development of the Bulgarian labour market

First, the registered results in Figure 1 show that the persons with secondary education, without professional qualification, occupy a large share of the newly registered unemployed persons for the month of January 2022 (47.7%). At the same time, the persons with the lowest level of education register a lower percentage level (38.5%) compared to the above-mentioned group of unemployed persons. The main factor for those results is that in reality, people without education occupy an exceedingly small share of participation on the labour market. “Low education or the lack of such decrease significantly the opportunity for legally finding employment and is often the reason why people in such a situation accept employment without signing any contract.” (Dulevski,

L., 2021:10). Most of them are employed in the shady economy and do not have the right to register at employment agencies as unemployed persons.

Those with secondary education occupy a higher percentage of the workforce having the right of compensations when the risk of “unemployment” occurs. The unemployed persons with a low and average level of employment are some of the most vulnerable groups on the labour market. They do not possess specific professional skills; therefore, they shall be included in suitable qualification and additional qualification courses that comply with the developing professions of the future. State institutions face a serious challenge to soften the expected stress situations of the dynamically transforming labour market. “They shall prepare their social security systems for a probable growth of unemployment and a drop in employment, whereas the educational systems shall adjust and train some of those professions which are in demand by employers.” (Pandurska, R., 2020:178).

Second, the conducted research illustrates that the average percentage of Bulgarians aged 25–49 years, who participate in professional courses, is 3.2%, whereas with the age group 25–64 years, the level of participation is lower – 1.48%. When the persons aged 50–64 years are added to the age group 25–49 years, this indicator registers a drop. Thus, it may be concluded that the oldest workforce group has the lowest participation in qualification training courses. At the same time, bearing in mind the ageing population in Europe, they are a significant labour resource. This proves the necessity of developing purposeful activities focusing on the 50+ persons.

The deepening demographic processes in our country related to low birth rate, fewer working age persons, and ageing of the workforce, have an unfavorable impact on all social systems, including the labour market. What is needed is more efficient and stimulating measures by Bulgarian state institutions for encouraging active life of elderly citizens. One base document in this respect is the National Concept of Encouraging Active Life of Elderly Citizens (2012–2030).

Following this concept is important for meeting the future challenges of the demographic ageing of the population. The aim is to create conditions that involve training activities that provide longer-term labour activity for elderly citizens, high incomes, equal opportunities, and equal participation in economic and social life.

Third, the analysis presents the average percentage rate throughout the researched years 2015–2020 of the workforce (1.48%) and those who are outside the workforce (4.28%) in our country participating in professional training courses. The results indicate that the second research group, which also involves the discouraged citizens, shows a higher percentage of participation in qualification courses. The conclusion is that the development of stimulating

activities for integration of the unemployed working age population on the labour market function positively. “The development of policies and strategies throughout the last years has led to positive trends in this direction.” (Mancheva, M., 2020:42) The programmes and measures for activating the non-active reaches those people. The fact that those persons participate in trainings and aim to develop their competences is an indicator that they have the necessary readiness and qualification to find realization on the labour market;

Fourth, the data in Table 1 ascertains that Bulgaria’s population occupies the last and the penultimate place as regards possessed digital skills. The state and the employers shall focus their efforts on training programmes of the working age citizens so that they acquire and enhance their digital knowledge. Those are mandatory competences which guarantee future employment, career advancement, and adjustment to the developing professions on the labour market. The essence of the reorganization of the labour market lies in better flexibility, security, and life-long learning. The field of vocational education and training requires significant reforms towards contemporary training programmes. The development of purposeful qualification courses depends on the introduction of a system of management of vocational education, which plays the role of a linking unit between the educational sector and the demands on the labour market.

Fifth, the acquisition of digital skills among Bulgaria’s population is practically impossible without building digital networks and comprehensive access to computer technologies. State institutions and business organizations, within the context of the Digital Europe programme, shall implement in every sphere of social life high-technology devices, artificial intellect (AI), computer services in the cloud, quantum communication infrastructure, etc.

Sixth, the state of most of the small and medium enterprises in the country, which do not have the necessary financial resources for investments in innovative technologies and training of human resources, is worrying. The inability of those organizations to adjust to the new forms of labour and production processes makes them uncompetitive and hard to defend the increasing demands of the dynamic economic environment. The European and national institutions shall accumulate cash flows for Bulgarian enterprises to provide them with investments in contemporary technologies and educational courses for people. In addition to what has been mentioned above, there could be schemes for tax reliefs, providing access to low-interest or non-interest loans, compensations for some of the production and other costs that shall relieve economic organizations.

Seventh, the development of artificial intellect and robotics threatens some of the workforce which can become unemployed, especially those who do jobs that are to become extinct. The future expects fast rates of economic growth

and at the same time a high level of unemployment caused by the replacement of an unskilled workforce with artificial intellect. The funding of adequate programmes for training of the workforce is among the preventive measures for limiting the level of unemployment.

Eight, the acquisition of digital competences shall be combined with the building of other professional and personal (soft) skills such as: teamwork, organizational skills, communicativeness, creativity, combination skills, analytical thinking, initiative, making decisions under stress, listening to and at the same time defending positions, motivation, desire for growth, improvement, etc. The above-mentioned skills of the workforce are cognitive skills which are an especially crucial factor for the competitiveness and professional realization of the workforce. “Cognitive skills comprise the ability to understand complex ideas for efficient adjustment to the environment, for learning from experience/practice, for engaging in various forms of thinking/concluding and overcoming obstacles/barriers through thinking.” (Atanasova, M., 2020:19).

Ninth, the results of this research confirm that in Bulgaria hourly employment with both genders is at extremely low level (2020 – 1.7% for men and 1.8% for women). At the same time, for women in the EU the percentage is significantly lower – 2020 for women 28.7%, and for men 7.5%. Unlike most countries in the EU, Bulgarian working women avoid hourly employment. As one of the main reasons for the poor development of this form of flexible labour activity we can point out the low payment and restricting social security and protection. What is necessary is a better regulated legislative framework regarding the cost of labour and social security, which shall stimulate the development of hourly employment. It is a suitable form of employment through the combination of personal and professional life by the woman. The average level in the EU with women shows that hourly employment has a future at the Bulgarian labour market as it is motivated and developed more actively with active policies.

Tenth, the analyzed data in the research hints that temporary contracts are not a preferred form of employment not only for Bulgarian workforce, but also for the EU member states. Since the beginning of the COVID-19, remote work has become one of the most preferred flexible forms for performing a labour process. Unfortunately, according to data by Eurostat for 2020, our country ranks last with only 1.2% working from home, followed by Romania (2.5%), Croatia (3.1%), Hungary (3.6%), Latvia and Cyprus (at 4.5%).

All this gives us a ground to confirm the proposition for continuing work towards the development of new legislative regulations on the labour market, which regulate ***the combination of personal and professional life, including the coordinated development of remote work, flexibility, and security in an environment of demographic ageing.***

In solving those important *long-term problems* posed by the European Commission in important European strategic documents, we shall take into consideration the issues related to:

Firstly, the main advantages of remote work:

- Good practices show that it significantly limits the consumer costs by employers. The reduction allows investing the funds saved by enterprises in other profitable activities. Some of them are investments in human capital aimed at enhancing the professional skills and competences of the workforce. Parallel to this, there are prerequisites for attracting a highly qualified and competent workforce with capacity and suitability for remote work, as well as securing resources for funding and updating the enterprise's facilities, etc.

- Disadvantaged people are given the chance to have more full-value employment and a dignified existence. The persons in working age realize their capacity, the flexibility and security of vulnerable social groups are combined, labour productivity is increased;

- An opportunity is provided to decrease the losses due to absence from work when on sick leave, which makes the labour process and labour performance more efficient. Those who look after children or ill members of the family can do it along with their professional development;

- Development of higher motivation and satisfaction by the personnel by creating an environment of better autonomy and self-esteem in planning the work process, opportunity for creativity, enhancement of organizational skills and making independent decisions that include higher personal responsibility and self-control;

- Saving time and limiting the daily expenses in remote modes of work such as transport, food, refreshments, etc. A significant plus of flexible employment is the possibility for more free time of the employees, which has an impact on their psychological equilibrium, the stress and fatigue in the labour process;

- Last but not least, relieving the traffic in city centers which leads to decreasing the degree of environmental pollution, etc.

Secondly, the inadequacy of the environment for implementing the disadvantages of flexibility and security (flexicurity) in employment:

- The outdated legislative framework regulating mainly the "fixed" nine-to-five employment. We need a new legislative framework for regulating, control, feedback, and monitoring of flexible employment. We shall apply a new way of organizing and structuring remuneration and develop flexible bonus schemes for motivating the personnel. We seriously need a new regulation for healthy and safe remote work;

- We need significant changes in the institutionalization on the labour market and the social security relations which shall allow adjustability, mobility, social security, and protection of all forms of flexible employment;
- The lack of efficient cybersecurity for personal data protection of the employees and the intellectual property of the organization;
- With remote work there is often discrepancy between personal and professional duties, which leads to working a lot more hours, lack of sufficient rest, and a feeling of dissatisfaction by the employee;
- Remote work leads to loss of personal contact, emotional relationship, verbal communication with the team in the organization. These factors are a prerequisite for social isolation, worsening of the emotional and psychological state of the employee, interfering with the unity and the teamwork at the organization;
- For most people who work from home, there is no specific workplace and no suitable work conditions can be provided. This is a prerequisite for future health problems;
- With remote work, most employees personally cover their work expenses. They are most often related to providing access to Internet networks, computer devices, communication connection, electricity costs, etc.
- Research by psychologists shows that “the enormous burden related to working with technologies leads to chronic fatigue, irritation, and insomnia.” (Apostolov, V., 2020:13). In addition, there are frequent technological problems with digital work platforms, with which the employee must deal by him/herself, which leads to additional stress.

Despite the above-mentioned disadvantages of remote work, this form of flexible employment will find even wider application in contemporary labour markets. There has to be improvement of non-standard forms of employment by ridding of the problems and stimulating this new type of work. The purposeful functioning of digital networks in social spheres requires three major components: the first component is effective legislation, which shall encourage the development of digital technologies and cybersecurity simultaneously; the second component is the comprehensive and generally available to everyone digital network; the third component is educated people who have the skills to work with the fast-developing digital technologies. (<https://osha.europa.eu/bg/emerging-risks/developments-ict-and-digitalisation-work>, 2022)

Conclusion

The labour market faces serious challenges under the influence of the world economic and social crisis. To overcome the negative consequences on the workforce, we shall acquire new knowledge and skills. Building a better balance between professional and personal life, flexibility, and security in the work process are the main factors which determine the high productivity in the country. What we need to do is efficiently apply the concept of “flexicurity”, which will lead to “... decreasing the insecurity and segmentation on the labour market, the quality of employment, competitiveness, and labour productivity will improve, the living standard will change, and so will social harmony, which will lead to high economic growth.” (Pavlov, N., 2008:57). Corporate social responsibility will have even more significance for attracting educated, creative, and motivated human capital in organizations. Without doubt, the world is changing, and transformations are inevitable for all people who are part of society. New professions emerge, others change or become extinct. The 21st century offers opportunities for the development of flexible forms of labour and possessing high knowledge and skills. They shall comply with the contemporary labour markets, which are even more demanding for the workforce, but they also provide better opportunities for professional development and vast capacity in the field of digitalization and artificial intellect.

References

- Amending and Adding to the Labour Code Act, State Gazette, issue 82 from 21 October 2011 (Section VIII B, Chapter Five – Additional Conditions of Remote Work), 2022.
- Anna Galik, Monika Bąk, Katarzyna Bałandynowicz-Panfil, Giuseppe T. Cirella, (2022). Evaluating Labour Market Flexibility Using the TOPSIS Method: *Sustainable Industrial Relations, Sustainability*, 10.3390/su14010526, 14, 1, (526).
- Apostolov, V., (2020). Psycho-social Risks and the Stress Related to Work – Specific Characteristics and Problems, *Industrial Relations and Public Development Scientific Journal*, issue 1/2020, p.13.
- Arntz, M., Gregory, T. and Zierahn, U., (2016). The Risk of Automation for Jobs in OECD Countries: *A Comparative Analysis. OECD Social, Employment and Migration Working Papers*, No. 189. Paris.
- Atanasova, M., (2020). Continuing vocational education of the employed enterprises – within the context of corporate social responsibility, *Research Papers Journaln*, volume 3, UNWE Publishing, Sofia, p.19.

- Dulevski, L., (2021). Human Capital and Investments, *Industrial Relations and Public Development Scientific Journal*, issue 2/2021, p.10.
- Dulevski, L., (2010). Labour Market, Ciela Publishing, Sofia.
- Dulevski, St. (2020). Digital Permanent Establishment, *Economic Archive*, (4), pp. 55-75., pp.58-59
- Economic and Social Council (2018), opinion on: “The Future of Labour: the Challenges of the Fourth Industrial Revolution”, Sofia.
- European Foundation for the Improvement of Living and Working Conditions, (2018). *New tasks in old jobs: Drivers of change and implications for job quality*, <https://www.eurofound.europa.eu/publications/report/2018/new-tasks-in-old-jobsdrivers-of-change-and-implications-for-job-quality>.
- Flexible Forms of Employment and Competitiveness of Bulgarian Enterprises (2022), <https://obuch.info/gvkavite-formi-na-zaetost-i-konkurentosposobnostta-na-blgarski.html>, 2022.
- How technology and globalisation are transforming the labour market. In:OECD Employment Outlook (2017). Paris, France: OECD Publishing, pp. 81–124.
- Iida Häkkinen Skans, (2019). Technological change and the labour market, <https://www.riksbank.se/globalassets/media/rapporter/ekonomiska-kommentarer/engelska/2019/technological-change-and-the-labour-market.pdf>.
- Mancheva, M., (2020). Relevant Problems of Employment for Women, *Industrial Relations and Public Development Scientific Journal*, issue 1/2020, p.42.
- Manuel Sanchis i Marco, (2020). Flexicurity, Encyclopedia of Quality of Life and Well-Being Research, 10.1007/978-3-319-69909-7, (1-6), (2020).
- Michael McGann, Mary P. Murphy, Nuala Whelan, Workfare redux?, (2020). Pandemic unemployment, labour activation and the lessons of post-crisis welfare reform in Ireland, *International Journal of Sociology and Social Policy*, 10.1108/IJSSP-07-2020-0343, ahead-of-print, ahead-of-print.
- Pandurska, P., (2020). Labour Market, UNWE Publishing, Sofia.
- Pandurska, P., (2020). Transformations on the Labour Market Related to Digital Economy and Industry 4.0, Management of Human Resources in the Age of Digital Challenges, *Proceedings of the International Scientific and Practical Conference Organized by the University of Economics – Varna*, p. 178.
- Pavlov, N., (2008). Labour Markets and Unemployment, Faber Publishing, Sofia, p. 57.
- Schultz, T. (1971). Investment in Human Capital (The role of education and research). New York: The Free Press.

Women in digital scoreboard 2021, *European commission*, [https:// digital-strategy.ec.europa.eu/en/news/women-digital-scoreboard-2021](https://digital-strategy.ec.europa.eu/en/news/women-digital-scoreboard-2021).
<https://ec.europa.eu/eurostat/data/database>, 2022.
https://ec.europa.eu/info/strategy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/european-pillar-social-rights/european-pillar-social-rights-20-principles_bg, 2022.
<https://mlsp.government.bg/uploads/1/lmforecasts-analysis2-bg1.pdf>, 2022.
http://ophrd.krib.bg/bg/wpcontent/uploads/Guide_Flex_Time_NOV_2013.pdf, 2022.
<https://osha.europa.eu/bg/emerging-risks/developments-ict-and-digitalisation-work>, 2022.
<https://www.az.government.bg/bg/stats/view/1/332/>, 2022.
<https://www.cedefop.europa.eu/bg/about-cedefop>, 2022.

Desislava Nikolova Koleva-Stefanova is chief assistant professor at the Department of Human Resources and Social Security, University of National and World Economy – Sofia, Bulgaria. Doctor in Economics and Organization of Labour. Research interests: in the field of labour market, education, demographic, and social statistics.

ORCID ID: 0000-0001-8653-8589

ECONOMIC ARCHIVE

YEAR LXXV, BOOK 4 – 2022

CONTENTS

Meriem Chafik, Mohammed Nabil El Mabrouki

Opportunities and Challenges of Cross-Border Banking: Focus on Pan-African Banks /3

Kalina L. Durova

The Impact of Absorbed European Funds on the Economic Growth of Bulgaria and New Member States /17

Desislava Koleva-Stefanova

The Dynamic Transformations on the Labour Market in Bulgaria in Conditions of Digital Technologies and Pandemic /37

Rayna Stoyanova Petrova

The Competence-Based Approach Through the Prism of Academic Training in Management Accounting /58

Ana Borisova Ivanova

The Health Insurance Reform in Bulgaria – Financing Models and Status Evaluation /79

EDITORIAL BOARD:

Prof. Andrey Zahariev, PhD – Editor-in-chief
Prof. Yordan Vasilev, PhD – Deputy Editor
Prof. Stoyan Prodanov, PhD
Assoc. Prof. Iskra Panteleeva, PhD
Assoc. Prof. Plamen Yordanov, PhD
Assoc. Prof. Svetoslav Iliychevski, PhD
Assoc. Prof. Plamen Petkov, PhD
Assoc. Prof. Anatoliy Asenov, PhD
Assoc. Prof. Todor Krastevich, PhD

INTERNATIONAL BOARD:

Prof. Mihail A. Eskindarov, DSc (Econ) – Financial University under the Government of the Russian Federation, Moscow (Russia).
Prof. Grigore Belostechnik, DSc (Econ) – Moldovan Academy of Economic Studies, Chisinau (Moldova).
Prof. Mihail Zveryakov, DSc (Econ) – Odessa State Economic University, Odessa (Ukraine).
Prof. Andrey Krisovatiy, DSc (Econ) – Ternopil National Economic University, Ternopil (Ukraine).
Prof. Yon Kukuy, DSc (Econ) – Valahia University, Targovishte (Romania).
Prof. Ken O'Neil, PhD – University of Ulster (Great Britain)
Prof. Richard Thorpe, PhD – Leeds University (Great Britain)
Prof. Olena Nepochatenko, DSc (Econ) – Uman National University of Horticulture, Uman (Ukraine)
Prof. Dmytro Lukianenko, DSc (Econ) – Kyiv National Economic University named after Vadym Hetman, Kyiv (Ukraine)
Assoc. Prof. Maria Cristina Stefan, PhD – Valahia University of Targoviste (Romania)
Assoc. Prof. Anisoara Duica, PhD – Valahia University of Targoviste (Romania)
Assoc. Prof. Vladinir Klimuk, PhD – Baranovichi State University, Branovic (Belarus)

Support Team

Rositsa Prodanova, PhD – Technical Secretary
Anka Taneva – Bulgarian Copy Editor
Ventsislav Dikov – Senior Lecturer in English – Translation from/into English
Petar Todorov, PhD – Senior Lecturer in English – Translation from/into English

Editorial address:

2, Emanuil Chakarov street, Svishtov 5250
Prof. Andrey Zahariev, PhD – Editor-in-Chief
☎ (+359) 889 882 298
Rositsa Prodanova, PhD – technical secretary
☎ (+359) 631 66 309, e-mail: nsarhiv@uni-svishtov.bg
Blagovesta Borisova – computer graphic design
☎ (+359) 882 552 516, e-mail: b.borisova@uni-svishtov.bg

In 2022, the journal will be printed using a financial grant from the Scientific Research Fund – Agreement № KP-06-NPZ-69 from Bulgarska Nauchna Periodika – 2022 competition.

© Academic Publishing House “Tsenov” – Svishtov
© D. A. Tsenov Academy of Economics – Svishtov

ISSN 0323-9004

Economic Archive

Svishtov, Year LXXV, Issue 4 - 2022

**Opportunities and Challenges of Cross-Border
Banking: Focus on Pan-African Banks**

**The Impact of Absorbed European Funds on
the Economic Growth of Bulgaria and New
Member States**

**The Dynamic Transformations on the Labour Market
in Bulgaria in Conditions of Digital Technologies
and Pandemic**

**The Competence-Based Approach Through the Prism
of Academic Training in Management Accounting**

**The Health Insurance Reform in Bulgaria –
Financing Models and Status Evaluation**

D. A. TSENOV ACADEMY OF ECONOMICS
SVISHTOV



Requirements to be met when depositing articles for Narodnostopanski arhiv journal

- 1. Number of article pages:** from 12 to 25 standard pages
- 2. Deposit of journal articles:** one printout (on paper) and one in electronic form as attached file on E-mail: NSArhiv@uni-svishtov.bg
- 3. Technical characteristics:**
 - performance Word 2003 (minimum);
 - size of page – A4, 29-31 lines and 60-65 characters on each line;
 - line spacing 1,5 lines (At least 22 pt);
 - font – Times New Roman 14 pt;
 - margins – Top - 2.54 cm; Bottom - 2.54 cm; Left - 3.17 cm; Right - 3.17 cm;
 - page numbering – bottom right;
 - footer text – size 10 pt;
 - graphs and figures – Word 2003 or Power Point.
- 4. Layout:**
 - title of article, name of author, academic position and academic degree – font Times New Roman, 14 pt, with capital letters Bold – centered;
 - workplace, postal address, telephone and E-mail;
 - abstract in Bulgarian up to 15 lines; key words – 3 to 5;
 - JEL classification of publications on economic topics (<http://ideas.repec.org/j/index.html>);
 - main body (main text);
 - tables, graphs and figures are software inserted in the text (they should allow linguistic corrections and translation in English). Numbers and text in them should be written with font Times New Roman 12 pt;
 - formulas are inserted with Equation Editor.
- 5. Rules for footnote:** When citing sources, authors should observe the requirements of **APA Style** at <http://www.apastyle.org/> or at <http://owl.english.purdue.edu/owl/resource/560/01/> or at <http://www.calstatela.edu/library/guides/3apa.pdf>.
Each author is responsible for promoting ideas, content and technical layout of the text.
- 6. Manuscripts of lecturers without an academic rank** should be accompanied by a transcript of the minutes of the Department meeting at which the proposed paper was discussed.

From 1st of January 2017 the English language title of the journal is changed from “Narodnostopanski archiv” (transliterated from Bulgarian) to “Economic Archive”.

Authors of papers published in Narodnostopanski arhiv journal are responsible for the authenticity of the materials.

From the Editorial Board

nsarhiv.uni-svishtov.bg