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## THE GLOBAL CHALLENGES TO “TWO-SPEED” INTEGRATION IN THE EU: PROBLEMS AND PROSPECTS FOR BULGARIA'S PARTICIPATION IN THE ECONOMIC AND MONETARY UNION

*The paper discusses the current problems of the integration in the EU in the context of the ongoing restructuring of the global economy and its institutional order under the pressure of rising economic nationalism and protectionism. The differentiated integration conducted in EMU outlines the challenges for Bulgaria from the integration at "two speeds" in the EU. The problems of overcoming the crisis of the current EU integration model are being considered in the context of the ongoing reforms. By revealing the main trends in the world economy the paper discusses the impact of global changes on the European integration. The difficulties in reforming the completion of the Economic and Monetary Union are evaluated as a bottleneck to the further enlargement of the EMU. The opportunities and perspectives of Bulgaria's inclusion in the EMU are outlined.*

*JEL: G21; G24; G28*

### Introduction

Since joining the EU in 2007 Bulgaria considered the preparation for the EMU (Economic and Monetary Union) an inseparable part of its integration. The Currency Board arrangement (CBA) has been a monetary regime since 1997 and it contributes to achieving Bulgaria's compliance with one of the Maastricht criteria concerning the exchange rate stability.<sup>2</sup> The expectations for Bulgaria's entry in the EMU soon after accession have been based also on the good record of public finances and the sustainability of the CBA (BNB, 2004). However, Bulgaria has not been admitted to EMU by 2010 as expected in its pre-accession Strategy to join the EMU. Unfavourable conditions (including the onset of the Global financial and economic crisis and the European sovereign crisis) caused some divergencies from the Maastricht criteria and postponed the entry in the ERM II.

By 2017 within a decade since becoming an EU member state Bulgaria has met the challenges of adjustment to the economic and financial integration in the Single Internal Market and managed to achieve compliance with the Maastricht convergence criteria. At

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<sup>2</sup> The Currency Board provides the fixed exchange rate of the BGL to the Euro.

present Bulgaria's entry in the EMU is on the agenda to be considered with regard to its preparation to join as well as with regard to the challenges of the ongoing deep changes in the EMU in implementing the future EU strategy of deepening of the financial integration as a Monetary, Banking and Capital Union (Completing the Union, 2015).

The aim of the study is to reveal the need of further coherence and solidarity in the EU while undertaking the task of completing the European Monetary Union as a priority of deepening the integration. The paper discusses in the first part some considerations on making the choice of the future model of the integration with regard to the impact of the differentiated integration on the EMU and its enlargement. The problems of the EMU at the present stage are analysed. In the second part, global challenges are revealed which tend to raise the need of EU role's adjustment to the globalisation on the basis of intergovernmentalism as politically feasible at the present stage. In the third part main trends of compliance with the Maastricht criteria by the Bulgaria's fiscal policy are analysed and some conclusions for the preparation to join the EMU.

### **1. The future model of the EU integration and the EMU: opportunities and threats**

The idea of multi-speed Europe is not a new one as it has been a feature of the EU integration process all over the years. Yet better design of the unique role of the EU to play in common interests of member states needs a better understanding of the outcomes of the differentiated integration achieved so far in the EMU. There is a need to conceive that the EMU has acquired new institutional and regulatory features that raise the need of making the right choice for the future while the post-crisis reforms in the EU and in the EMU are still under way.

The case of Bulgaria's joining the EMU may be regarded as an example of the challenges which the process of the ongoing "differentiated integration" may present to a non-Euro area EU member state both in institutional and functional aspects in times of profound reforms.<sup>3</sup> The overall process of the EU enlargement has been characterized by the heterogeneity of the Member States' preferences, dependence and varieties of national capacities which have led to more differentiated integration. Analysing the conditions under which member states have made use of differentiated integration, Winzen and Schimmelfennig (2016), underline: "Threatening to block deeper integration, member states with strong national identities secure differentiations in treaty reform. In enlargement, in turn, old member states fear economic disadvantages and low administrative capacity and therefore impose differentiation on poor newcomers. Opt-outs from treaty revisions are limited to the area of core state powers, whereas they also occur in the market in the context of enlargement."

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<sup>3</sup> As stated in the Article 1(3) Treaty of European Union (TEU) and the Treaty on the Functioning of the European Union within or outside the Treaties of the EU in the field of European economic and monetary policy the differentiated integration is the cooperation of some but not all EU member states.

The implementation of the EMU as differentiated integration has raised the issues of different level of integration among the EU member states: member States “ins” and the member states that are “outs” of the EMU. The post-crisis reforms have increased the contents of the differentiated integration in the EMU by adding up changes to its institutional architecture and policy design. These changes have become inevitably more important to serve the need to deepen the monetary and financial integration of the Euro area countries.

At the present stage, the EU faces the challenges of reforming the model of future integration in the Union and deepen further the integration in the EMU. It is to consider how to upgrade the multi-speed model of integration without sacrificing the achievements made so far.

The discussion on possible alternatives to development of the EU sets the issue of the EMU as the “core” of the integration to be developed at a higher speed than the rest of the EU Member States – non Euro area members. The reform of the economic governance has caused the search for more efficient decisions at EU level for the EMU. In order to overcome disagreement qualified majority voting has been typically made good use of. However, so far the post-crisis slow recovery has lead to rising political tension in some of the member states and the difficulties of structural restructuring combined with rising national “egoisms” have caused the stalemate of the deeper integration. In the current EU governance system, the resistance of some member states to share the common risks often leads to an increased reliance on further negotiations due to lack of agreements. As prof.Papadopoulos has underlined:” The Governance model in the EU is complex and multilevel. It basically is a model of coordination... but it has been producing erratic practices in the management of the Eurozone crisis, breeding thus indeterminacy and insecurity and worsening the regulatory quality of decisions.” (Papadopoulos, 2016).

As the global financial crisis and the European debt crisis have shown, the Eurozone’s institutions as original design have proved to be inadequately equipped to prevent crises and failed to make the currency union resilient enough to deal with them. This is reflected by various reports and reform proposals including the 'Five Presidents Report' (Juncker et al. 2015), the 'White Paper about the future of the EU' (European Commission, 2017a), and the ‘Reflection paper on the deepening of the Economic and Monetary Union’ published by the European Commission (2017b). The adopted documents highlight "banking union" and "fiscal union" as two key objectives that are challenging and complex. The reforms of the EMU have become much in demand as the economic recovery from the crisis has been slow and in spite of the high degree of the synchronisation of the business cycle it showed differences among the member states.

There are several possible models of the future EU integration that have been in the focus of discussions.

One of the proposals is in favour of the deepening and strengthening of the original rule-based institution building of the EMU embedded in the Treaties. It previews that the EMU member states retain sovereignty in economic and fiscal policy but transfer their monetary sovereignty to the European Central Bank (Villeroy de Galhau and Weidmann, 2016; Asatryan et al., 2017). The idea of increasing the capacity of the EU institutions doesn’t

conflict with the member States' choice to deepen the integration while preserving their sovereignty.

The second proposal envisages supranational governance for the EMU, joint fiscal and economic policies and stronger elements of risk sharing building up a fiscal capacity at the European level that can provide fiscal stabilisation in the event of asymmetric shocks. In addition to this the introduction of a 'European finance minister' or a 'Eurozone Parliament' are just two of the proposals included in the new French President's election manifesto. The idea for the delineation of the regulatory regimes between the Euro-area countries and non-Euro area countries will inevitably influence the future of the EU as a two-speed integration community of "core" and "periphery" EU countries. This proposal may lead to the creation of Europe of "concentric circles". The risks of weakening the internal cohesion of the EU as an intergovernmental agreement for integration are very high. Any further implementation of higher speed Europe may deepen the differentiated integration at the cost of reducing centripetal forces for integration in all the areas achieved so far.

In the debate for the future of the EU integration the present institutional structure of the EU as part of the differentiated integration has been acknowledged to be "too rigid to be sustainable in the long term" (Demertzis, Pisani-Ferry, Sapir, Wieser, Wolff, 2018). Their proposal for a hybrid model considers possible to combine the two possible models (a Europe of concentric circles and a Europe of clubs) in order to overcome their respective weaknesses. The "Europe of clubs" is foreseen as being a form of integration of economic and monetary union; Schengen and asylum policy; and foreign and security policy and neighbourhood policy. However, they consider that a governance model could combine the two approaches. The model would be based on a strong 'bare-bones EU' formed by the single market, trade and accompanying policies, the European institutions, treaties, rule of law and a commitment to fundamental EU values. The hybrid model avoids the two-speed integration model but at the same time leaves space quite enough for the member States to join the proposed structural design of the future integration.

The EU faces the challenges of overcoming the uncertainty on the choice to be made among possible alternatives to future development. The concepts of the completion of EMU as the "core" of the European integration proposed in the report "Completion of Economic and Monetary Union" (Juncker, 2017) have given a strong impetus to finding more effective and efficient forms and instruments and further deepen the integration. In addition to the assessment of the integration mechanisms applied, it highlights the need to step up further integration into the EMU at a new level and on the basis of a new legal basis accordingly, in order for the Eurozone gradually to become a genuine economic and monetary union as "a system for further sharing of sovereignty within common institutions".

Under the current state of the Union, the ideas for further development of EMU foresee in various ways the future of "differentiated" economic integration in the EU.

The most acceptable approach could be to strengthen further the EMU and to foster the progress of its further enlargement as the 'core' of the European integration. As it has been stated in the Document adopted by the Economic and Social Council of Republic of

Bulgaria: "The ESC's position on EC proposals to strengthen the institutional framework of the Economic and Monetary Union through separate institutions and budget of the Eurozone is that they would now lead to division of the EU into separate concentric circles whose interaction to achieve common goals would be difficult to achieve. The process of convergence for non-Eurozone countries would be significantly slowed down and their accession to the Eurozone would become difficult" (ESC, Opinion on: "Accelerating the Preparations for Bulgaria's Accession to the Eurozone").

As a country with derogation, Bulgaria has the obligation to prepare for membership in the EMU. Bulgaria has already joined the Fiscal Compact (i.e. the fiscal part of the Treaty on Stability Coordination and Governance in the European Monetary Union), which sets the rules designed to strengthen the consistency between the national and European fiscal frameworks and enhance their ownership in Member States. On the other hand, Bulgaria is already part and subject of the processes of "differentiated integration" between EMU Member States and EU Member States not participating in the EMU. This process has certain negative consequences under the conditions of the crisis trends in the EU since 2007. The introduction of new regulative and institutional arrangements in the EMU as well as the implementation of the non-conventional monetary policy of the European Central Bank have substantiated the differentiated integration.

In 2018 Bulgarian Government chose a new approach to enhance the process of joining the euro area in close co-operation with the ECB. An Action plan and a Road map have been set in implementation to adapt to the reforms in the EMU, part of which are the Banking Union, the money-laundering measures and the insolvency legal engagements.<sup>4</sup> Bulgaria has taken two major steps towards joining the euro area in mid-2018, including agreeing to join the exchange rate mechanism (ERM II) as well as joining the European banking union. Bulgaria has undertaken a more difficult task for the EMU entry as important reforms have to be carried out to join the Banking Union and prepare for the adoption of the euro. The EMU is making further progress as a much more mature currency area with stronger institutions and further plans for deepening the integration among the euro-area countries which is to raise higher the compliance requirements for the joining the EMU entry criteria in the future.

The aim of the study is too reveal the need of further coherence in the EU while undertaking the task of completing the European Monetary Union as a priority of the deepening of the integration. Undoubtedly, the current stage of reviewing the EU integration model has also to reflect better the need of attaining the role of the Union in the global economy.

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<sup>4</sup> On 22 August 2018 the Government approved an Action Plan with measures in response to the Republic of Bulgaria's intentions to join the ERM II and the Banking Union by July 2019. The document has been drafted as a consequence of the joint letter, sent on 29 June 2018, of the Minister of Finance and the Governor of the Bulgarian National Bank concerning the participation of the Republic of Bulgaria in the Single Supervisory Mechanism (SSM) by means of establishing close cooperation with the European Central Bank within the meaning of Regulation (EU) No 1024/2013 as well as the intentions of the country to apply for participation in the ERM II mechanism, which has also received the political support of the Eurogroup.

The first steps towards establishing a banking union have already been taken, despite the still highly controversial nature of elements related to financial risk sharing. The European Banking Union became effective in November 2014 with the launch of the Single Supervisory Mechanism. The Banking Union is aimed to sever the "disastrous sovereign-banking nexus, in which shaky bank balance sheets degrade the solvency of their sovereigns, and vice versa" (Weidmann, 2013). The budget plans of the new Italian government therefore have the potential to trigger a new financial crisis. The case with the liquidation of the two Italian banks Veneto Banca (VB) and Banca Popolare di Vicenza (BPV) in June 2017 shows once again that the rules drawn up by the EU to achieve a more stable monetary union offer sufficient loopholes to make possible the achievements of the targeted reforms (Wollmershäuser, 2019).<sup>5</sup>

The idea of a fiscal union is even more challenging. While there is a general consensus that some type of common fiscal policy framework is needed, views on what fiscal union should mean are different. Some analysts discuss two options of reform approach referred to as the 'Maastricht model' and the 'US model' (Gros, 2017). The Maastricht model implies that ultimate responsibility for economic and fiscal policy remains at the national level. The US model, by contrast, calls for the development of much stronger European institutions. In both cases some degree of policy coordination, a European Banking Union and insolvency procedures for sovereigns are indispensable. The authors argue that certain elements of the two approaches which combine increased risk sharing with increased market discipline and risk reduction could be combined to achieve a more resilient and economically successful Eurozone.

## **2. The global challenges to the European integration and to the EMU**

The concepts of the EU's role in the global economy are of much interest at the present stage of making the choice for the future model of integration with priority being set on the EMU. The 2017 Rome Declaration<sup>1</sup>, agreed on the occasion of the 60th anniversary of the Treaty of Rome, stated that a stronger European Union was a necessity. The EU Leaders emphasised in particular that the EU should become a stronger global actor. It must be better able to withstand global shocks, shape global events and be better equipped to shoulder international responsibilities. (According to the holistic theory, the EU is essentially a fully independent global actor, as it represents the Member States as a "whole". From a political point of view and formally in relation to third countries, the Union has certain characteristics of a community of states as it has proved its importance in substance for the results of its activities in international relations, trade policy, international finance and especially security policy. Such a treatment leaves a number of questions about

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<sup>5</sup> The liquidation of the two Italian banks Veneto Banca (VB) and Banca Popolare di Vicenza (BPV) in June 2017, for whose liquidation the Italian government provided aid in the form of state guarantees (12 billion euros) and cash injections (5 billion euros) (European Commission 2017), is a case of concern. Although these measures did not conflict with the rules of the Banking Union, since the Single Resolution Board of the European Banking Union decided to delegate the responsibility for winding up of the banks to the hands of the national supervisors due to the non-systemically relevant size of the two banks (Single Resolution Board, 2017), they still contradicted the reform spirit.



the complexity of the processes and the mechanism of shaping the EU's trade and foreign policy and the related EU relations with the Member States. According to other versions of the approach under consideration, not only for the Union itself but for its Member States, it is important to accept the "international presence" and the international "identity" with which the EU Member States have accepted to be represented by the Union as an intergovernmental organization. It is inevitable in the wake of a growing "wave" of national "economic egoisms" within the EU itself and the risks of protectionism and trade wars in the global economy to have rational expectations that the challenges to the global role of the EU have increased.

There are important cases on the agenda of EU international negotiations with regard to the subsequent EU referendum on the UK exit and the EU-led 2017 negotiations for the Brexit. On the agenda is pending the renegotiation of US trade relations taking into account that at the end of 2016 President D.Trump unilaterally broke the negotiations on the so-called "Transatlantic Trade and Investment Partnership (TPTI) until further notice. EU faces new challenges in its external economic relations with other third countries at the present stage of renegotiation the Partnership Agreements and free trade agreements on a bilateral basis (EC, 2018). It is inevitable that significant changes in the global environment and global uncertainty will have an impact on making the EU' role stronger when it comes to choosing the integration group model for the future.

As an international organization for intergovernmental cooperation and integration, the EU is in the process of entering a new stage in its development, which will presuppose new features of the EU's involvement in international relations and the global economy. The most important changes are to be linked to the further process of renegotiating the global economic relations through deepening of the need of a common foreign and security policy.

According to *the institutionalist concept of structuralists*, the EU is not a holistic /unitary/ legal entity, as it consists of the "many realities" of its assigned competences for activities. They are inherently assigned EU functions on behalf of the Member States in relation to the EU's position and competences in international institutions or other structures in which the EU participates. This concept is of current importance in attempting to account pragmatically for the existence of differences in the positions of the Member States on issues of EU external relations and the adoption of a common position on shared responsibility for the common foreign policy position.

Since the early 1990s, the characterization of the EU as a participant in international relations on the basis of assigned competences has been influenced by the concepts of multilevel governance in the EU, which are supported by varieties of systemic theories. They are based on the idea of overcoming the existing division between internal and external policies. The different levels of government (supranational, national and sub-national) liquidate the monopoly of governance and greatly weaken the powers of the governments of the Member States to adopt political decisions. However the powers of supranational participations of the EU institutions (European Commission, European Parliament, European Court), which have an independent impact on political processes and their outcomes, are also increasing their impact over national, regional and local authorities (Bretherton, Volpert, 2004).

The institutional structuralist concept is also relevant for the implementation of the differentiated integration under the EMU. This approach may explain the deficiencies as regards the original design of the Monetary Union with common monetary policy but retaining the fiscal sovereignty of the Euro-area members under the conditions of rules-based coordination in the framework of the Maastricht criteria. The outcome of structured competences of the EMU in crisis times has been the lack of common fiscal governance and the ECB has had to undertake a quasi-fiscal role in order to undertake the crisis management.

According to the *constructivist concept* in the theory of international relations, the EU meets five basic criteria, which allow it to be considered a global actor: 1) the attachment to common values and principles shared by the participating Member States; 2) the ability to define political priorities and formulate policies and strategies; 3) the ability to negotiate with other actors in international relations; 4) Possibility of policy options and policy instruments; 5) the legitimacy of the EU's trade and foreign policy decisions within the Member States. At the present stage, the EU's foreign policy is not unified, but it is common, ie. it is not supranational, but it is dependent on both multilevel governance and the coordination of the external policies pursued by the Member States.

The Treaty on the Functioning of the EU specifies the distinction between exclusive competences, shared competences and supportive competences. They are listed under certain EU policy areas. In accordance with Article 3 of the Treaty on the Functioning of the EU, the Union has exclusive competence in the following areas: (a) customs union; (b) establishing the competition rules necessary for the functioning of the EU internal market; (c) monetary policy of the Member States of the Union whose currency is the euro; (d) conservation of marine biological resources within the framework of the Common Fisheries Policy; (e) common commercial policy; (f) concluding international agreements and conducting actions under the solidarity clause of the Union and its Member States. In principle, the Union has competence shared with the Member States when the Treaties confer on its competence which does not concern areas of exclusive competence (referred to in Article 3).

Article 6 TFEU provides for the possibility that the Union also has the competence to take action to support, coordinate or complement the actions of the Member States. The areas of these actions, in their European dimension, are: (a) protecting and improving human health; (b) industry; (c) culture; (d) tourism; (e) education, vocational training, youth and sport; (f) civil protection; (g) administrative cooperation. In the areas of research, technological development and space, the Union has the competence to take action, in particular, to develop and implement programs, and the exercise of this competence may not prevent Member States from exercising their competence.

In summary of the analysis of EU competences, it should be emphasized that with the entry into force of the Treaty of Lisbon, the EU has gained legal legitimacy wider in its scope. The European Union has thus become a subject of international law that can negotiate and conclude international agreements on its own behalf, has competences (or powers) in this field conferred on it under the Treaties to achieve, within the framework of Union policies, any of the objectives set out in the Treaties or is provided for in any of the legally binding acts of the Union. The conclusion of international agreements by the EU may affect

common rules or modify their scope. Agreements concluded by the Union bind the institutions of the Union and the Member States. These international agreements have legal implications in EU and EU internal legislation. In addition, the EU's founding treaties define the procedures that the EU must follow for concluding international agreements. The importance of the legal personality of the EU adopted by the TFEU is particularly important due to the fact that the increase in the scope of this capacity improves the capacity of the EU as a "soft power" in international relations (Nye, 2011). The ability to influence the world through "soft power" is of the utmost importance for the EU and the most characteristic of the EU as this type of "force" is EU enlargement, association of third countries and the way to transpose EU law in Member States and Associated Countries, etc.

It is a fact, however, that due to the crisis processes in the EU over the last decade a number of EU manifestations of "soft power" have been delayed or suspended, such as enlargement with new countries. At the same time, the evolving negative situation in the world and Europe over security threats necessitates the further development of the EU's foreign and security policy, including by strengthening defense and developing the "firm" EU force through a common defense policy, which will develop in the future.<sup>6</sup> Under the Treaty of Lisbon, the principle of conferral of competence determines the limits of Union competence. The principles of subsidiarity and proportionality determine the exercise of this competence. Under the principle of conferral, the Union acts only within the limits of the competence which the Member States have conferred upon it under the Treaties with a view to achieving the objectives set out in those Treaties. Any competence which is not conferred on the Union by the Treaties belongs to the Member States.

Solidarity and Europe's commitment to social justice are important dimensions of the European way of life in a globalized world. The EU has successfully used its budget as a means of stimulating economic development in its less developed regions, but the increased imbalance following the enlargement underlines the importance of economic and social cohesion and raises the question of how the budget can best be used in support for solidarity. Between 1988 and 2007, enlargement led to an increase in the EU population by 50%. In 1988, four Member States out of twelve had GDP per capita below 75% of the EU average. Two decades later, 10 of the 27 Member States are in the same situation and 7 of them have GDP per capita below the poorest Member State in 1988.

Another issue much in need of EU' being a strong political actor is the impact of climate change on Europe's environment and society which has become a cornerstone of the European agenda, challenging policy-makers to seek the best responses through the EU's

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<sup>6</sup> The EU's current competence in the field of external relations and security is based on the Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community signed in Lisbon on 13 December 2007 and entered into force on 1 December 2009 Amended to the Treaty on European Union and to the Treaty establishing the European Community are based on the decision taken by the 27 EU Member States involved to base the Union on the Treaty of Lisbon and the Treaty on the Functioning of the European Union (hereinafter referred to as "the Treaties"). These two treaties have the same legal force. The Union replaces the European Community and is the successor to it. To achieve the values and interests of the EU in its external relations with third countries, the Union pursues its objectives by appropriate means, depending on the areas of competence conferred upon it by the Treaties.

*Houbenova, T. (2019). The Global Challenges to "Two-Speed" Integration in the EU: Problems and Prospects for Bulgaria's Participation in the Economic and Monetary Union.*

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policy instruments. This applies both to efforts to tackle climate change by reducing the growth of greenhouse gas emissions and to measures to adapt to the consequences of climate change. The pressure that climate change has on rural areas and the marine environment is accompanied by demographic change and growing demands from consumers for a new dimension of the European Union's policies on agriculture, village, rural society and maritime areas.

Secure, sustainable and competitive energy is another major challenge facing the society in the EU member states. Limited supply, increased global demand and the need to reduce emissions have led to a new awareness of the need for a real "low-carbon" economy in Europe.

Migration pressures will particularly affect Europe because of its proximity to the poorest regions of the world and to those likely to be most badly affected by climate change. The increasingly difficult situation on our southern and eastern borders will require a strong European response, combining border security with new ways of managing migration and convincing efforts to tackle the root causes of migration: war, instability and poverty.

With globalization, it became clear that EU needs to have an effective presence all over the world if it wants to defend its interests and values successfully.

Enhancing and strengthening mutual solidarity have made the Union a more credible and effective player on the world stage. At the same time, the global context has changed. The world has become more interdependent, making it a matter of principle vital to Europe's great efforts for the stability and prosperity of its neighbors, effective multilateralism, human rights and the rule of law, and its role as a leader in the fight against terrorism and poverty. The differences between internal and external policies are disappearing and key cross-sectoral policies such as addressing climate change, biodiversity, demographic change and migration, competitiveness, terrorism and organized crime or energy can only be solved in an international context. There is a vital need of further strengthening the EU's role to contribute for the stability and prosperity of its neighbors, to develop relations with third countries based on effective multilateralism, protection of human rights and the rule of law. The EU's role as a leader in raising the efficiency of the development policy and the fight against poverty has to contribute to progress achievement in the implementation of the development policy under the contemporary conditions in compliance with the UNO "Agenda2030 for sustainable development".

It is essential that the EU's political levers are geared to these and other challenges. The wider global use of the euro can benefit the European economy. The international role of Euro has increased and its future could be influenced by the enlargement of the EMU. The share of the euro in global holdings of foreign exchange reserves currently in 2018 accounts to around 20%. The US dollar's share, by comparison, is over 60%. No other currency exceeds 5% (IMF, 2018). The benefits attached to a wider use of an international currency come with increased global responsibilities of the European central bank, in line with its respective mandate. The international use of the euro has not yet returned to the situation where it was before the financial crisis. (For instance, the volume of euro-denominated foreign debt issuance reached a peak at 40 % before the crisis (in 2007) and now stands just above 20 %, similar to its share in 1999. Although the benefits of a stronger international

role of the euro outweigh the possible challenges, its consequences would have to be carefully calibrated, for example in the area of balance of payments for the euro area vis-à-vis the rest of the world. In his State of the Union Address of September 2018, President Juncker highlighted the strategic importance of the euro in this context and called on action to make it play its full role on the global scene: “[By] next year, we should also address the international role of the euro. The euro is 20 years young and has already come a long way – despite its critics. It is now the second most used currency in the world with 60 countries linking their currencies to the euro in one way or another. But we must do more to allow our single currency to play its full role on the international scene.” (Juncker, 2018).

Completing Europe's economic and monetary union has to be accomplished as a foundation for a strong international role of the euro. The enlargement of the EMU is also an inseparable part of adding up to make the international role of the euro stronger. Thus the focus of further reforms has to be bringing together the EU member states to the achievement of the commonly acknowledged European values in an answer to global challenges. As prof. A. Inotai has underlined, “As long as the doors to enter higher levels of the deepening integration remain open, multi-speed Europe can and should be considered as an incentive and not as an obstacle. If, however, a member country does not share the basic values of the integration and repeatedly challenges various common policies, it will not be able to find the way to „core Europe”. In this case, it is better to talk about „self-peripheralization” than complaining about the „peripheral position” of a member country... However, it is clear that unprecedented external and internal developments (pressures) require new answers with strategic importance and future-oriented vision.” (Inotai, 2017).

### **3. Bulgaria's fiscal policy implementation on the road to the EMU**

As a country with a derogation but being on the road to prepare for the EMU Bulgaria applies strictly EU fiscal policy requirements. It has consistently taken into account the necessary changes in the economic governance of the EU countries and under the Fiscal Pact the more strict fiscal rules. The abundance of institutional changes for economic governance in the EU and EMU impose the need of further improvement of policy coordination. Thus, under the conditions of the Currency Board for the Bulgarian economy, the issue of the strictness of the fiscal policy is more acute, as it has main responsibility to maintain macroeconomic and financial stability. During the period of Bulgaria's membership in the EU (2007-2016), the budget policy is committed to fulfilling the Maastricht criteria for stable Government finances by implementing the Convergence Programs and the National Reform Program.

*Firstly*, since 2007, the macroeconomic policy framework has become more restrictive, with stronger fiscal discipline and the further deepening of integration of economic policy. In 2009 Bulgaria's failure to comply with the fiscal deficit Maastricht requirement has caused a monitoring procedure for the excessive Government deficit. The economic policy has become engaged to comply with EU policies of achieving the Community priorities and has therefore become subject to strict procedures of coordination and multilateral surveillance.

The main instruments for coordination of the economic policy of Bulgaria as an EU member state are the Stability and Convergence Programs, the Broad Economic Policy Guidelines and the increasing number of Community instruments, including the European Semester, the Macroeconomic imbalances procedure programming concerning structural policies. Bulgaria's fiscal policy has become fully involved with implementation of Community procedures for better economic governance since 2010. This complements with new mechanisms the requirements for compliance with the criteria for EMU and the complementary requirements of the Fiscal Pact which is based on the Stability and Growth Pact in EMU. With Bulgaria's participation in the implementation of the new EU economic governance approaches, the chances of participation in the EU Economic and Monetary Union should be improved.

*Second*, an additional importance for strengthening the role of fiscal policy is the fact that Bulgaria, together with 24 other EU Member States since March 2012, has become a party to the Stability, Coordination and Governance Treaty in EMU. The Treaty is introduced for the improvement of the Stability and Growth Pact of the EMU and comes into force on 1.01.2013. Under Part III of this Treaty (known as the Fiscal Pact) the main tasks of achieving better fiscal discipline are treated. In this context, the role of government finances for the revival of economic growth has been raised by underlying the role of fiscal discipline.

Assessing the importance of Europeanization of Bulgaria's fiscal policy, we can summarize the following conclusions:

- Significant functional and institutional progress has been achieved through the implementation of EU law and Community multilateral surveillance procedures. This is a good prerequisite for a balanced participation of our country in the coordination of the budgetary and economic policies of the member states in the EU. The introduction of the European Semester and the Peer review on specific areas of public finance management also confirms the capacity of our country to participate in oversight at a Community level.
- By implementing the fiscal framework that integrates the budgetary effects of structural reforms in practice Bulgaria strengthens the responsibility and the need for greater managerial accountability not only for policy coherence with public funds with the EU priorities but for resolving the national specific problems of social and economic development.
- Progress and coherence in the area of financial management and control systems in the budgetary sector of Bulgaria, as well as the absorption of European funds, are significant. The independence of government finances is supported by the lawfulness of fiscal rules in line with European requirements.

The Convergence Program of the Republic of Bulgaria for 2018-2021 foresees further cost constraints in the public sector, the implementation of which is inevitably linked to the implementation of the structural and functional reform programs in the respective sectors. Consolidation of expenditure is most significant in intermediate consumption – mainly maintenance costs. Although the setting of goals and targeting of the main parameters of the Convergence Framework framework are bound to the objectives of EU requirements for

fiscal policy, the challenges are increasing due to the necessity to raise the efficiency of public spending and to stimulate economic growth. The forecasts of the international institutions for the economic growth rates of Bulgaria envisage maintaining the current rates and eventually some reduction of the rate of growth for the period up to 2020-2022 under the impact of the openness of the Bulgarian economy and the expectations for the slowdown in the global economy as a whole. Fiscal policy's results highlight the need to ensure a more targeted implementation of incentives to boost economic growth.

The implementation of the EU Multiannual Budgetary Programming and Planning 2014-2020 supports the implementation of integration policy at a macroeconomic level. In principle, this is a priority for which Bulgaria has made efforts and has achieved compliance with the macroeconomic convergence criteria. The overall strategy of economic governance of EU integration is subject to the objectives of restoring the conditions for sustainable growth and employment in the Member States.

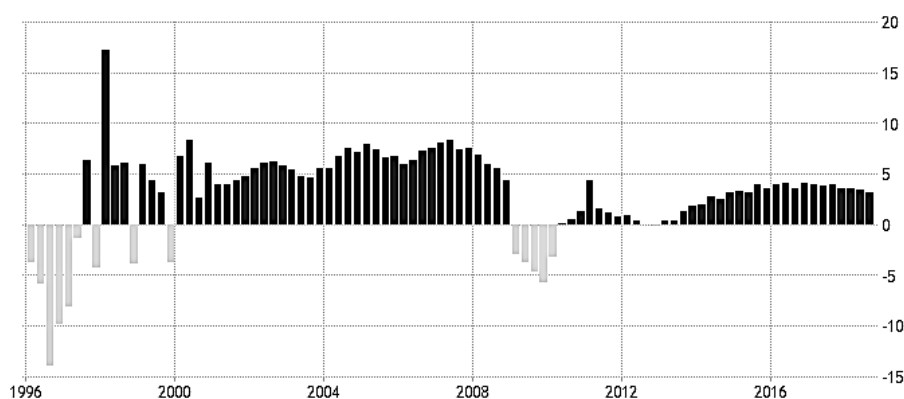
At the same time, the requirements towards government finances in the new EU economic governance are considerably more complicated and the conditions for the entry of EMU are becoming more comprehensive as conditionality. The Europe 2020 Strategy reflects the recognition that the Union's economic and monetary union complicates the implementation of fiscal sovereignty of the countries of the European Union because the possibilities of matching national budgets to the needs of financing growth through budget deficits become strategic issues of the economic governance.

This requirement has laid higher responsibility to Bulgaria's fiscal policy as it is the only one responsible for maintaining the financial stability in Bulgaria under the Currency Board regime because of the lack of monetary and exchange rate policy to influence macroeconomic liquidity, including the change in money supply and demand.

*The goals of meeting the Maastricht criteria* of sound public finance have become an inseparable part of the achieving the overall fiscal policy sustainability. For the entire period, 2000-2018 Bulgaria's government budget deficit shows a trend of fiscal stabilization and consolidation which to a great extent allows the sustainability of macroeconomic stability. There have been only for short periods some deviations to higher negative values compared to the reference Maastricht criterion. The fiscal policy has been influenced by the higher rates of the economic growth as well by the cyclical changes in the period under review (See Figure 1).

GDP growth rate for the period (2005-2008) has averaged annually 6.4%. Compared to other EU member states Bulgaria has experienced since the start of the new millennium high rates of economic growth which have raised the expectations as well as some doubts for the continuity of the "catch up" type of growth after joining the EU. The growth of domestic and foreign capital investments has been concentrated predominantly in construction, real estate, tourism and services which contributed to overheating the economy. During the period 2005-2008, Bulgaria's GDP grew by a relatively rapid pace but in 2009, due to the impact of the Global economic crisis the GDP contracted by 5% and a slowdown of economic growth followed (Figure 1).

Figure 1  
The Annual Rate of Growth of the GDP of Bulgaria (1996-2018) (market prices, %)



The step-by-step process of aligning fiscal policy with EU requirements has progressed in the 2005-2007 period when Bulgaria achieved positive economic growth rates. Thus a budget surplus has been maintained by 2008. Two "episodes" of increased *primary Government budget deficit* should be reported respectfully: in 2009 of 3.32% of GDP and in 2014 of -4.58% of GDP. Due to the exceedance of the reference value of the accrual budget deficit indicator, the European Commission applied the excessive deficit procedure to Bulgaria. Since 2010 began a gradual recovery of the Bulgarian economy, but at a very slow pace. In 2010, growth was only 0.7%, in 2011 rose to 2% and in 2012 was only 0.2%. In 2011, and further up to mid2012 there was some reduction of the Government deficit. In 2013 and 2014 the economic growth remained rather modest at the rate respectively of 1.1 and 1.7%. For achieving the pre-crisis level of growth it has taken five years. In 2015 the rate of growth has increased to 2.9% and higher rate of 3.4% in 2016.

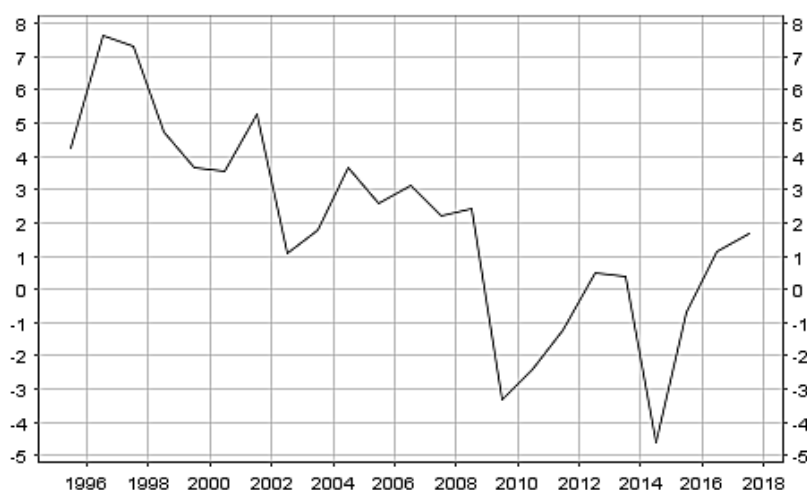
However, since 2012 the unsatisfactory economic growth record has been accompanied by relatively modest fiscal deficits, low inflation and a stable currency. Growth has been deprived of new capital inflows from abroad as direct and portfolio investments have fallen considerably as a result of the Global and the European sovereign crisis and still remains at a very low level in mid-2017. The economic growth has become largely dependent on domestic factors.

Fiscal policy has complied with the EU fiscal rules. Nevertheless, the economic cost of this restrictive policy has become too high not only for systematically underfunded budget systems such as internal order, health, education, social services, defense, science and culture but also for the economy as a whole. Social tensions have exacerbated political uncertainty and economic instability and triggered early parliamentary elections in 2013. In the ensuing period until mid-2014, the slowdown in fiscal policy was a consequence of both government interventions due to the banking system crisis and increased budget



spending in the public sector, which increased the government budget deficit above the reference value for 2014 and 2015 respectively (see Figure 2).

Figure 2  
Bulgaria: Government primary deficit(-) or surplus(+) (as % of GDP) for 2000-2018



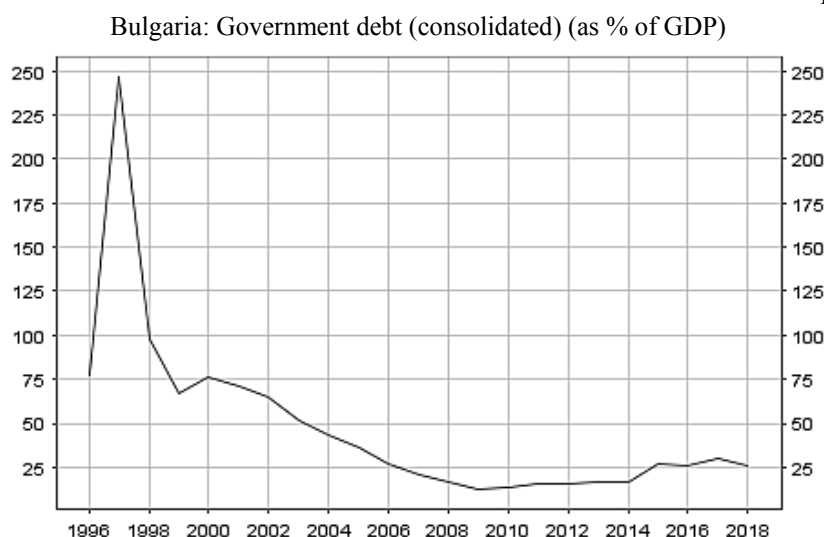
Source: Eurostat, 2018.

As regards the indicator for an average annual rate of growth of the public debt-to-GDP Bulgaria has had consistently consolidated its fiscal policy throughout the period (1998-2018). Fiscal discipline has been much strict if compared with other EU countries. Since the end of the 90s the fiscal policy of Bulgaria has a priority target for a long-term decline in the public debt-to-GDP ratio, not just its stabilisation at post-crisis levels. Having gained from own experience that high public debt tends to raise interest rates, lower potential growth, and impede fiscal flexibility Bulgaria has maintained fiscal consolidation in the period under review.

The public debt was raised in 2014 as the fiscal policy reacted as the ultimate absorber of negative shocks in the financial sector. The need to provide state aid to meet the needs of the deposit guarantees repayments after the closure of Corporate commercial bank and the liquidity support for other 2 domestic banks in crisis has caused fiscal readjustment. The steep rise of the ratio of the public debt-to-GDP caused the assessment of Bulgaria as a country with imbalances by the European Commission's Alert mechanism for macroeconomic imbalances. By the end of December 2015 the Government debt-to-GDP ratio is 26.4%, with the share of domestic Government debt being 8.5% and of external Government debt – respectively equal to 17.9% of GDP. In the Government debt structure, domestic debt at the end of 2015 amounts to 32.1%, and external debt – to 67.9% of the total debt. Any further rise of the external debt indicator for the Government debt may present a challenge to fiscal policy sustainability.

The debt-to-GDP ratio is subject to the threshold of the Maastricht criteria on public debt. The government debt-to-GDP ratio rose but remained well below the required Maastricht benchmark, from 13.7% in 2009 to 17.1% of GDP in 2013. A new increase in government debt followed with the subsequent 2015 new government debt issues on the international market, where the country's credit rating allowed to borrow resources at favorable interest rates levels. But overall, the government debt/GDP ratio of 28.1% in 2016 remained well below the 60% reference value during the entire eurozone crisis and in the post-crisis period. In the present decade, Bulgaria has maintained strict fiscal discipline keeping compliance with the Maastricht criteria and adjusting to more strict fiscal rules of the Fiscal pact (See Figure 3).

Figure 3



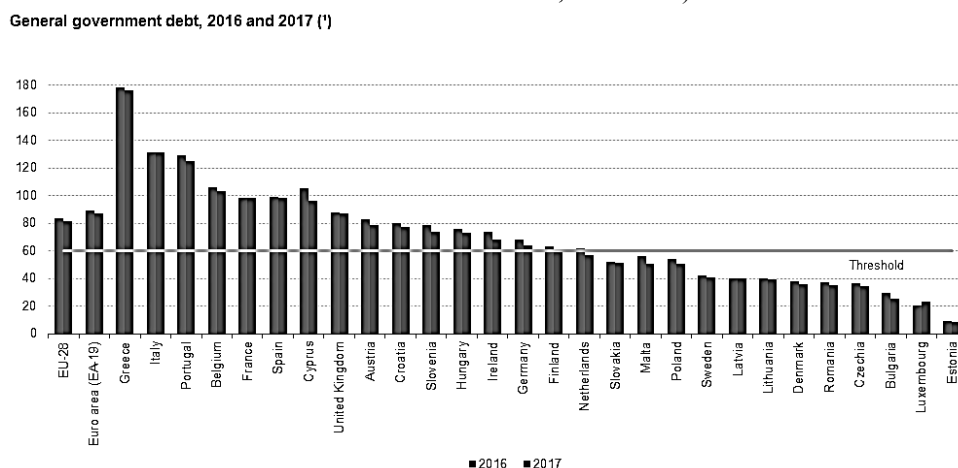
*Source: Eurostat, 2018.*

By the average annual growth rate of government debt in relation to GDP, Bulgaria has performed well and it is among EU Member states with low levels of Government debt as percent of GDP. In 2016-17 the lowest ratios of government debt-to-GDP were recorded in Estonia (8.7 %), Luxembourg (23.0 %), Bulgaria (25.6 %), Czech Republic (34.7 %), Romania (35.1 %) and Denmark (36.1 %). At the end of 2017 the highest debt ratio above 60 % of GDP was registered by some EMU countries including Greece (176.1 %), followed by Italy (131.2 %), Portugal (124.8 %), Belgium (103.4 %), France (98.5 %) and Spain (98.1 %) (see Figure 4).

Assessing the state of general government debt during Bulgaria's accession to the EU, it should be pointed out that the predominant trend towards debt reduction in the period 2000-2014 is a direct consequence of the sustainability of fiscal consolidation. The most "steep" is the decrease in the total government debt in the period up to 2007, which is also a

consequence of the higher average annual rates of economic growth as well as of the inflow of foreign capital reaching their peak in 2007. The positive fiscal balance made it possible in 2006 the Government to repurchase part of the Bulgaria's external debt as well as to make unnecessary a new issue of sovereign debt as there had been high fiscal reserve achieved.

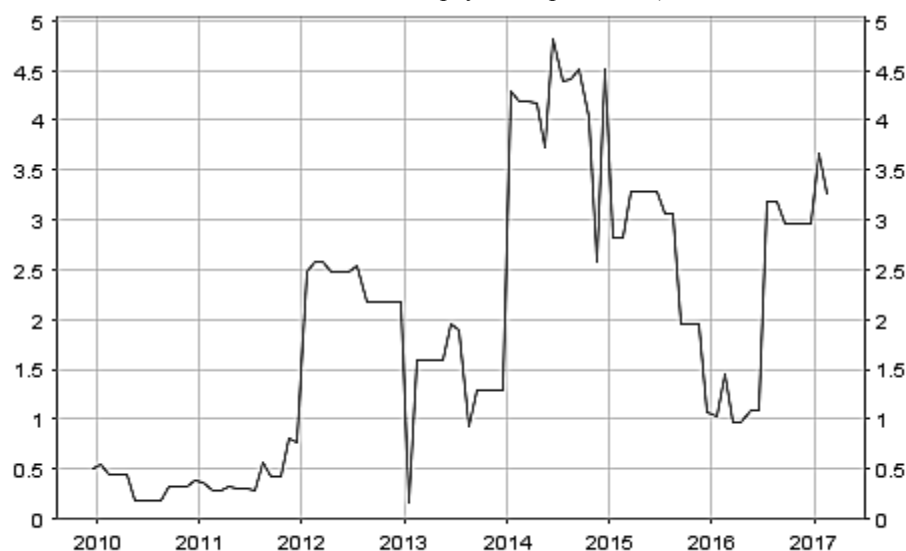
Figure 4  
EU Member States' General Government Debt, 2016 And 2017 <sup>(1)</sup> (General Government Consolidated Gross Debt, % of GDP)



Source: Eurostat, October 2018.

A positive assessment of fiscal policy and government debt management also deserves the fact that government debt service has been carried with no additional negative consequences. Undoubtedly it has been the overall restrictiveness of fiscal policy which has limited budget expenditures. Thus the worsening of the insufficient funding of the public budget systems has lead to the negative trends in a number of subsectors and areas of the Bulgarian economy, such as pension system, health care, education and social services. In the context of the European debt crisis and the sharp deterioration in the government debt management of several EMU countries, the fiscal discipline in Bulgaria needs to be taken into account given the increasing rigor of EU requirements for macroeconomic stability as conditions for EMU participation. The discussion on the issues of the Government expenditure to service the Government debt shows that Bulgaria's fiscal position allows moderation and tolerance of debt service, which is undoubtedly a prerequisite for macroeconomic stability (Figure 5). Even in the conditions of a slowdown of economic growth which is expected to occur after 2008 in the global economy servicing the public debt won't present any problems.

Figure 5  
Bulgaria: Due payments for servicing the Government debt in 2000-2017 (as % of GDP, maturities of due payments per month)



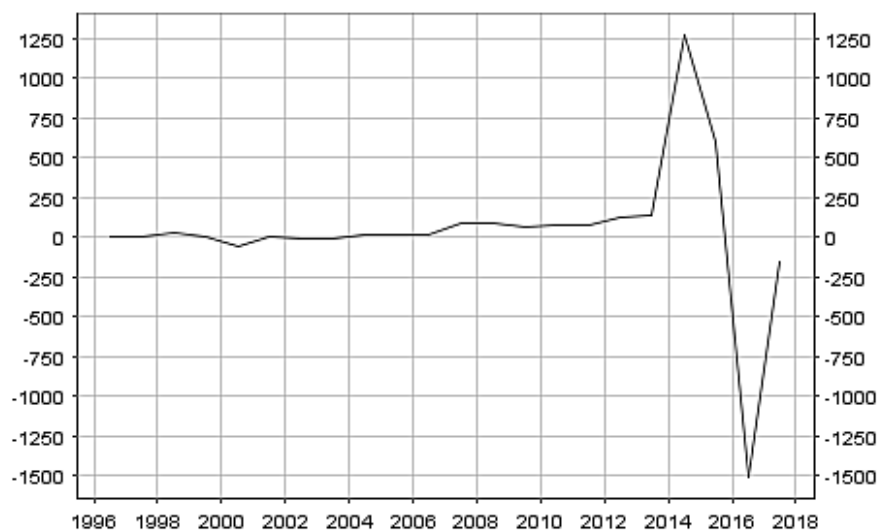
Source: Eurostat, 2017.

An important feature of Bulgaria's fiscal policy is the "return" to a borrowing of financial resources for the state budget through new government debt issues. The incurrence of new liabilities is observed since 2014 when the issues of new loans have raised the level of total Government debt (Figure 6).

The fiscal policy has undergone deep changes as regards the ratio of fiscal revenue to GDP and the sources and structure of fiscal revenues. The ratio of fiscal revenue to GDP has reflected two main tendencies of the economic development. On one hand, it has reflected cyclical changes. Since 2001 there was a downward trend of reduction of the fiscal revenues as a result of disinflation trends and fiscal consolidation. For the pre-accession period, a certain increase of the fiscal revenues from the beginning of 2002 to 2005 when the rate of growth was increased and credit expansion contributed to it. At the end of the membership negotiations in 2005 and under implementation of the Pre-Accession Programs, the fiscal revenue was marked by a certain increase, not least due to the higher rate of inflow of foreign investments and a higher rate of economic growth.

On the other hand, this indicator reflects the Bulgaria's concept of economic liberalization which has been followed for the transition to the market economy and the accession to the EU. This concept involves the diminishing of public ownership through privatization and stimulating business growth by reducing fiscal burden in order to encourage the nascent private sector and business entrepreneurship.

Figure 6  
Bulgaria: Government consolidating amounts in net incurrence of debt (in Millions BGN)



Source: Eurostat, 2018.

Figure 7

Bulgaria: Government total revenue (as % of GDP)



Source: Eurostat, 2018.

During Bulgaria's EU membership, the fiscal revenues started to rebound to about 39% of GDP by the end of 2007. The introduction of the 2008 flat tax of 10% on income of

physical persons and on corporate profits caused steady trend of reducing the fiscal revenues. The downward cyclical trends have also contributed causing less Government revenue from all sources, including taxes. Ever since that time the problems of tax collection and prevention of tax avoidance have been set on the agenda of public financial management and control and the tax collecting agencies. By the end of 2018 the ratio of Government revenue as per cent of GDP amounts to 38% (Figure 7).

An important source of fiscal revenue in Bulgaria is the VAT.<sup>7</sup> The contribution of the VAT has been reduced to some extent since 2007 and nearly kept at an even average level of about 9 % of the GDP in 2012-2017 (Figure 8).

Figure 8  
Bulgaria: Value-added taxes' contribution to Government budget (as % of GDP)



Source: Eurostat, 2018.

As a result of the 2007 integration process the liberalization of the movement of goods, services, capital and labor has made a significant impetus due to a certain nominal increase in tax revenue collected (notably excise duties have increased since 2007 as a result of tax harmonization with EU as well as from social security contributions). At the same time, the Government revenue from taxes on production and imports has declined. The introduction of flat tax from 2008 is a factor for reducing the fiscal burden. The flat tax has been targeted to stimulate investments and attract foreign investors. But the negative trend of reduced revenues from corporate taxation (Figure 9) is indicative of unexpected negative

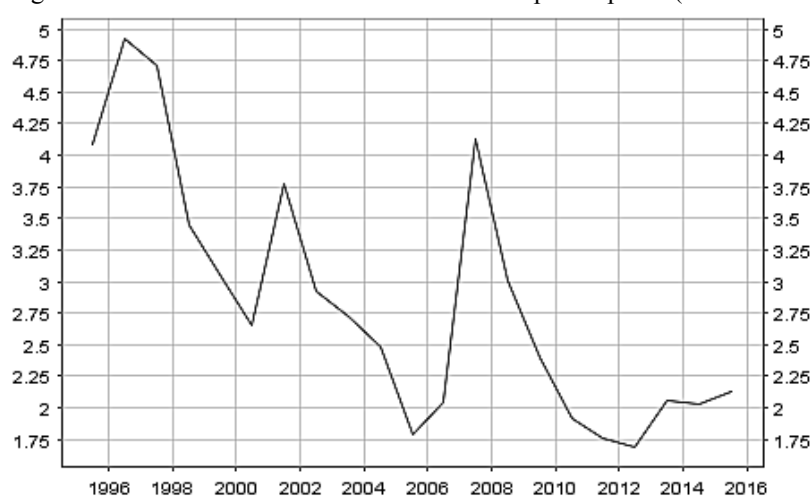
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<sup>7</sup> Bulgaria follows the EU rules on VAT compliance, which stipulate minimum rate of 15% for the VAT in EU Member States as tax harmonization. But following the rules Bulgaria makes use of fiscal sovereignty and has introduced a standard rate on goods and services of 20%. The reduced rate of 9% is valid for hotel accommodation and zero rate is provided for intra-community and international transport.

trends since 2008, namely the lower rate of investments and the lack of inflow of foreign investments. Besides, a process of restructuring the fiscal burden from flat tax for income of physical persons has been underway at the expense of laying a higher burden on lower income groups of the population. After 2008 the redistribution ability of the income tax on persons is almost neutral which positions the poor part of income taxpayers in an unfavourable state (Brusarski, 2012). In spite of the fact that the effective tax burden on labour income as measured by the implicit tax rate on labour is among the lowest in the EU, the tax wedge on low-income taxpayers remains high (Popova, 2017).

Figure 9

Bulgaria: Government revenue from the tax on corporate profit (as % of GDP)



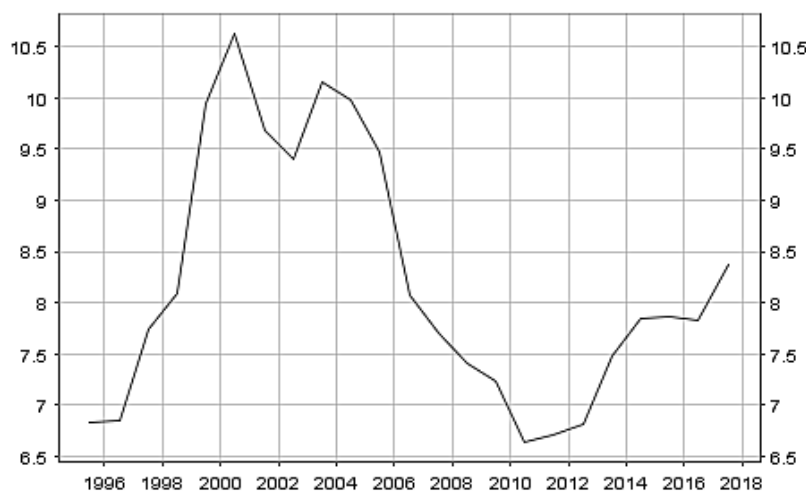
Source: Eurostat, 2018.

This tax system has been subjected to legitimate criticism and discussion about a future tax reform that may introduce tax reform aimed at greater contribution to the Government revenues. The present situation is characterised by a prevailing share of the indirect taxes compared to direct taxes as a contribution to the Government revenue. This structure differs considerably from the practice in the other EU member states where the direct taxes have a major contribution (Yotzov, 2017).

The proposals for tax reform so far have not gained official support though it is recognized that higher revenue may improve the Government budget's spending capacity for on investment, education, healthcare and demographic crisis and poverty. The contribution of corporate earnings tax revenues is highly sensitive to the decline in business growth. Under the impact of the Global and European Debt Crisis there has been a sharp decline of the revenue of corporate taxes as per cent of GDP (Figure 9). The unfavourable business environment in European and international aspect testifies to maintaining a low tax rate for corporations. Front loading fiscal adjustment through tax reform would have been inappropriate in times of economic recovery.

The trend of reducing the net social security contributions as a share of GDP is another feature of the economic reforms in the last decades. After a slowdown in the crisis years, 2008-2010 the increase of social security' contributions to the Government revenues has been resumed in the subsequent period but there share is below 9% of GDP in 2017 (Figure 10).

Figure 10  
Bulgaria: Government revenue from net social contributions (as % of GDP)



Source: Eurostat, 2018.

The trend of Government' expenditures has undergone also significant changes in the period under review. The overall utilization of the Government expenditures is aimed to provide public money for the functioning of the public systems but to maintain fiscal constraints (Figure 11). The Government expenditures depend on cyclical changes and the capacity of the Government budget to execute its redistribution function.

The Government revenue as fiscal burden has been decreased since 2007-2008 for two reasons; 1) due to the reduction of revenues from custom duties as with the entry of the EU these revenues have become own resources of the EU budget; 2) the flat rate of 10 per cent introduction in 2008. But the reduction of Government revenues remains an issue due to the fact the Government budget of Bulgaria has not got capacity good enough to fulfill its redistribution function. In comparison to other EU member states this is indicative of the existing challenges to the modernization of the contemporary fiscal and public policies as regards providing for public goods in demand, especially public services, education, healthcare and medical care, internal security and defence, social integration, etc.



Figure 11



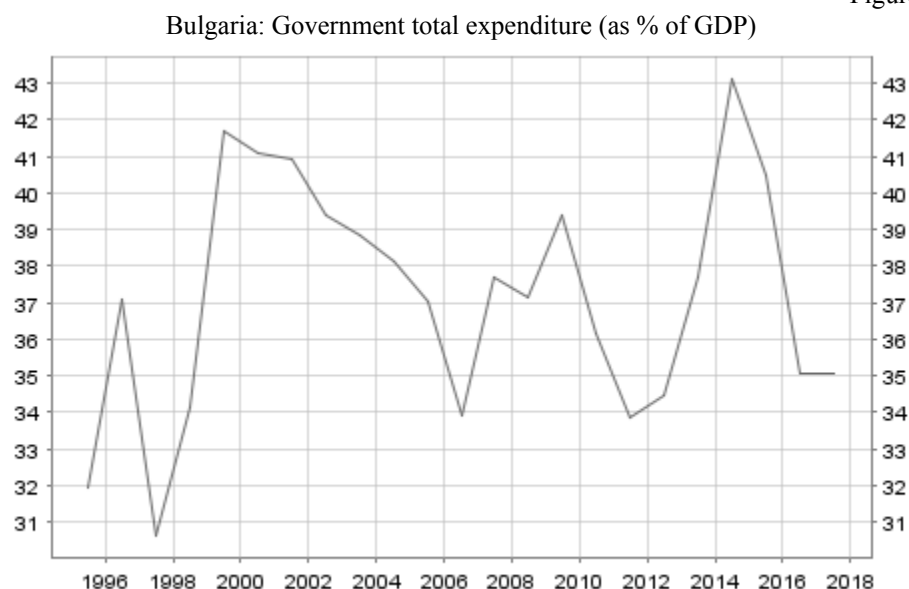
\* Total receipts from taxes and social contributions (including imputed social contributions) after deduction of amounts assessed but unlikely to be collected

*Source: Eurostat, 2018.*

The level of the combined ratio of revenue and expenditure as per cent of GDP for Bulgaria is less than 80% of GDP while in the advanced EU member states it is in excess of 100% of GDP. It is true that the level of general government expenditure and revenue varies considerably between the EU Member States. Besides Bulgaria in 2017 relatively low combined ratios (less than 80 % of GDP) have been reported by other 10 countries, including Ireland, Romania, Lithuania, Latvia, Malta, Cyprus, Estonia, Spain, Czech Republic and Slovakia.

Commitments to the EU to implement strict fiscal rules underpin the maintenance of a restrictive fiscal policy framework in terms of budget spending especially for some subsectors as health care and medical help which have been kept at a low level of funding in the post-crisis period (Figure 13).

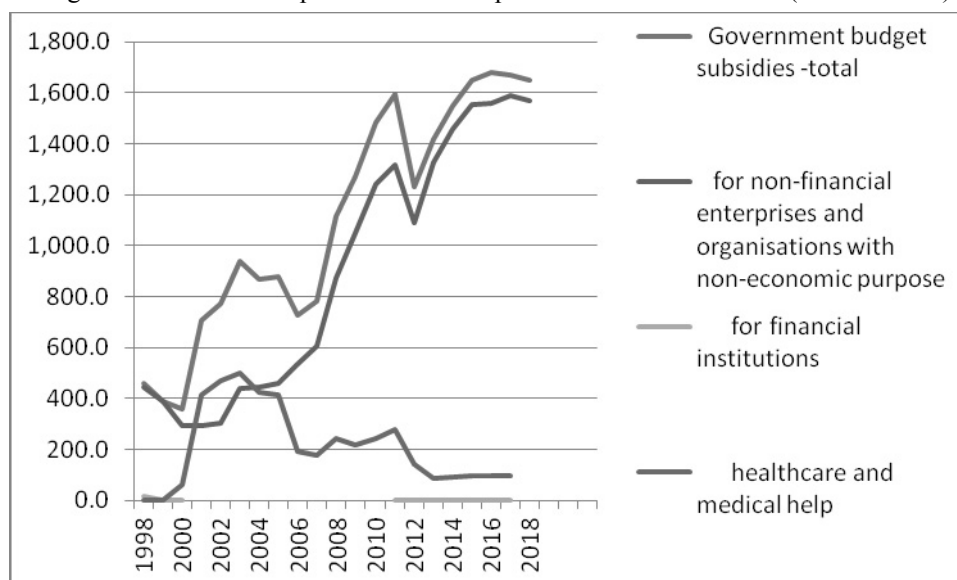
Figure 12



Source: Eurostat, 2018.

Figure 13

Bulgaria: Government expenditures for the public sector in 1998-2017 (In Mill. BGN)



Source: NSI, Bulgaria; Eurostat, 2018.

Another case of the restrictions observed as regards Government social expenditures is presented by the indicator for the old age pensions and survivors' pensions. The Government subsidy for the public pension system has been around 5-6% of GDP until 2015 and increased up to 10% in 2018 (Figure 13). As the ageing of the population of Bulgaria has increased as a share of the total population this trend is unfavourable. The pensions have been maintained at low level which changed after some indexation in 2016. The negative demographic trends may aggravate further the problems of rising poverty among old people. The World Bank "Report on Bulgaria's potential for sustainable growth and shared prosperity: systematic country diagnostic" in 2015 has underlined: "Declining pension coverage plus sizable subsidies from general Government revenue, which are increasingly directed to higher-income groups, tend to redistribute wealth from the unsubsidized poor to subsidized wealthier population. Transfers of about 5.8 percent of GDP already crowd out productivity-enhancing investments in such areas as education, innovation, and infrastructure. It is also likely that the projected contraction in the working-age population will result in a further decline in state revenues as fewer workers join the labor market and pay income taxes. It is reasonable to expect that fewer resources will be available to cover the PAYG deficit as general tax revenues shrink, jeopardizing the back-up financing vehicle for the pension system." (World Bank, 2015).

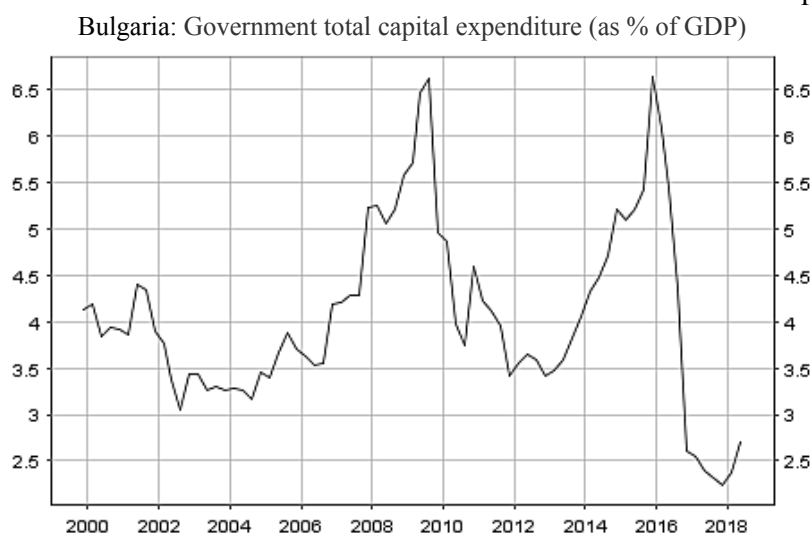
The Government expenditures for gross capital formation have shown an uprising trend in the pre-accession period from 2003 to 2007 because of the higher rate of economic growth and ongoing structural reforms. The absorption of EU funds under pre-accession funds has also contributed to this trend. It should be noted that during the first years of Bulgaria's EU membership, the gross capital expenditures as a share of the GDP decrease in 2009-2013 (Figure 15). This is a direct reflection of the impact of the crisis in the EU and the slowdown in the economic growth of the Bulgarian economy. The trend towards a gradual increase of this relative share after 2013 was overcome to reach 6.56 per cent of GDP in 2016. This result has been largely due to the implementation of infrastructure projects and the participation of the Government budget in the co-financing of the absorption of European funds at the end of the multiannual financial programming period (2007-2014). In 2016-2018 the gross capital formation has dropped sharply and unprecedentedly for recent decades to a level of below 2% of GDP. The main reason for this drop is considered the reduced utilization of EU funds under Programmes funded for the present 2014-2020 multiannual period by the EU budget.

A significant problem for Bulgaria during its preparation to join the EU was that low net public investments (an average of about 1-2% of GDP in 1993-1998) have hampered structural reforms to meet EU requirements in the run-up to accession. According to the Government investment program for the period 2000-2004, public capital investment was expected to grow on average by 3-3.5% of GDP annually.

Given the forthcoming higher needs for public investment in structural reform, infrastructure and human capital development, since 2007 Bulgaria's fiscal policy has encountered challenges for: 1) ensuring the desired growth of capital investment on an annual basis; 2) implementation of public-private partnerships for the realization of public capital investments that are of importance for the economic growth and ensuring the respective publicity and transparency of their realization; 3) Effective absorption of EU

funds for the purposes of economic and social cohesion and implementation of infrastructure projects.

Figure 15



Source: Eurostat, 2018.

The increase in budget capital expenditures has not contradicted the general focus on financial consolidation as far as they can contribute to accelerating economic growth. Increased investment and capital transfers costs could also contribute to future improvement of the overall business environment and increased business growth rates would be more in line with the underlying of the EC to prioritize investment as a key objective of European policies and funds.

Regardless of the good discipline of Bulgaria's public finances, in the context of a longer-than-expected economic and financial crisis in the EU, there is an objective need to take into account the need for better integration capacity. The fulfillment of the required benchmarks under the Maastricht criteria does not prove to be sufficient to achieve the desired integration effect in terms of socio-economic convergence with the EU.

The changed mechanism of economic governance in the EU, in fact, gives better opportunities for the choice of fiscal policy in Bulgaria according to the Government medium-term strategies in line with the recommendations and consistency of EC monitoring for better coordination. The long-term target is accelerating growth in favor of sustainable macroeconomic development.

Bulgaria fulfills its obligation to contribute to the EU budget. Bulgaria is one of the EU countries that receive more money from the EU budget than their installment in the EU, and this will remain the same in the current budget period (2014-2020).

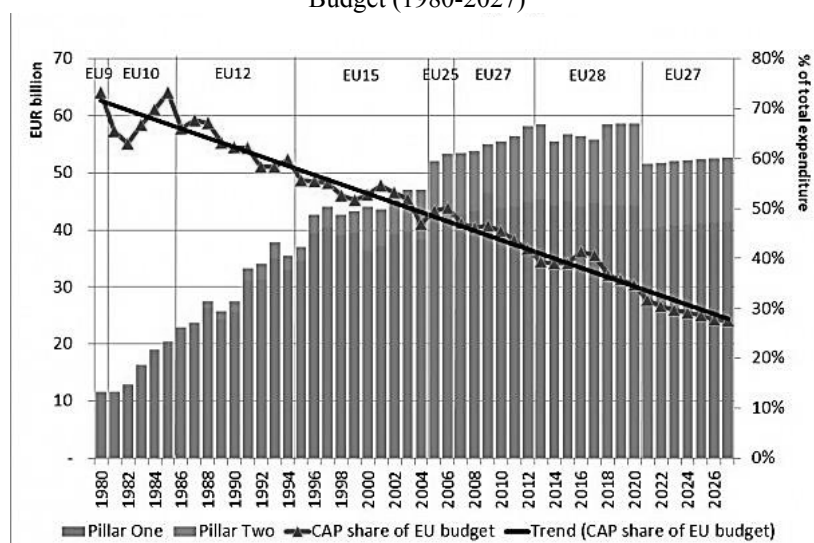
The largest share of the funds that Bulgaria receives from the EU budget is for agriculture and rural development. The agricultural policy of EU aims to help farmers and promote the production of safe and quality food, as well as the protection of the environment and the development of the rural economy. Farmer per worker's earnings increased by 49% in 2012 compared to 2007's level when Bulgaria joined the EU.

Bulgaria's EU accession has coincided with a period of a deep reform of the EU Common Agricultural Policy, where its funding as a share in the EU budget dropped from 70% in 1985 to around 40% today and will fall further to 33% in 2020. With the new reform, which entered into force in the EU in 2014, the Common agricultural policy aims to reduce disparities in countries such as Bulgaria, which receive funds less than the EU average.

But the forthcoming reform of direct payments from the EU budget for agriculture aims to reduce the share of the Common Agricultural Policy for the next Multiannual programming period after 2020 (Figure 16). This trend should draw attention to make timely a nationally responsible policy choice for Bulgaria to support the development of agriculture by raising the role and efficiency of own Government expenditures for the agricultural sector.

Figure 16

The Common Agricultural Policy of the EU as a share of total expenditures of the EU Budget (1980-2027)



Source: <http://Capreform.eu/wp-content/uploads/2018/09>.

Bulgaria's second largest area of budget expenditures related to European policies is co-financing from the state budget of European regional policy projects. Government expenditures are made to co-finance projects for job creation, competitiveness, economic growth, improvement of the quality of life and sustainable development. Ecological and transport infrastructure are top priorities for Bulgaria. Despite the progress made in implementing the European Cohesion Policy for the regions, however, the issue of

significant and deepened disproportions in regional development remains open to our country. Regarding the achievement of a certain ratio of GDP per capita in Bulgaria to the average for the regions in EU-28, the Southwestern is the only region in Bulgaria that has reached the target value. Other regions lag behind this benchmark, with the lowest GDP per capita in the EU – 30% of the EU-28 average (at 45% target). Regional imbalances complicate the problems of the Republican budget to maintain budget systems and public spending in lagging regions and make municipal finance more decentralized.

In the context of the new EU 2010 requirements on the assessment of macroeconomic imbalances, our country does not show persistent sources of imbalances that carry medium to long-term risk. It is a fact that in 2014 our country was in the group of countries with macroeconomic imbalances, mainly due to the banking crisis and the necessary actions to overcome it with state aid.

The future integration has to contribute to Bulgaria's economic development by further fiscal adjustment. The conditionality applied by the European institutions regarding the assessment of the macroeconomic convergence has been given due attention. Having aspired to join the European Monetary union, Bulgaria has undertaken measures to implement policies for better compliance with the EU criteria especially in the reform areas of public education, science, internal order, health system. According to prof. K. Dyson (2008), it is precisely from the way in which conditionality is applied to the new EU countries that the enlargement of the Eurozone is subject to multidimensional conditionality, which is changing dynamically over time.

In summary, in spite of the macro-constraints faced by fiscal policy, it should be stressed that it may contribute better to focus on reforms to improve the business environment, to stimulate economic growth and raise the living standard. At the same time, it should be borne in mind that the implementation of structural reforms does not always have an immediate direct beneficial effect on economic growth, as shown by the experience of the Eurozone itself. The example of some Eurozone members states shows that delayed structural reforms can be with negative consequences for the fiscal sustainability of the countries concerned. In this sense, it is important for Bulgaria that fiscal policy undertakes due to reforms to improve the business environment and increase growth.

## **Conclusion**

The process of financial integration of Bulgaria to the EMU is a dynamic one due to the ongoing reforms of the "core" of the EU. This process is inevitably linked to the higher transaction price of reforms in institutional, legal and functional order for the institutions and economic subjects of Bulgaria. The prospect of Bulgaria's adopting the euro should not be a "moveable" and "unspecified" goal. The timing of the steps taken to adopt the euro must be the subject of a negotiated process with the European institutions and can stimulate further reforms in the Bulgarian economy to bring it closer to EMU. Delaying this perspective will deprive our country of the benefits of adopting the euro related to the effects of the ECB's common monetary policy and overcoming the segmentation of our financial market from the Eurozone.

Bulgaria follows strictly its EU engagement to maintain sustainable and transparent public finance and to create conditions for an economic growth. By implementing the Action Plan measures for Bulgaria's joining the ERM II and the Banking Union as approved in 2018, Bulgaria makes further tenacious efforts to enhance the banking and non-banking sector supervision framework, improve the macroprudential and insolvency framework and enhance the measures aimed at tackling money laundering and modernising state-owned enterprises' management. Participation in the Eurozone can stimulate further reforms and the acceleration of price and income adjustments in the interest of real convergence with the EU. It may stimulate boosting the competitiveness of the Bulgarian economy and improving its integrity with the European Single market.

In EMU, the problem of creating a better potential for Member States to absorb shocks by better risk management and maintaining fiscal buffers remains significant. The economic freedom in this area of the individual countries depends entirely on their own choice of strategic management. However, approaching the end of this decade for the EU the times may have become ripe for a qualitative deepening of the Eurozone by complementing the monetary integration, negotiating some degree of fiscal federalism headed by an EU finance minister and, potentially, a special budget for the Eurozone. But in its future model the EU integration is to upgrade the model of better-shared responsibilities of member states to achieve higher goals of monetary and financial integration instead of resorting to differentiation by "two-speed" among member states.

As a future EMU member country, our country is committed to assuming greater responsibility for risk sharing within EMU, besides being able to absorb the impact of possible external shocks in economic adaptation to the Eurozone by a whole. In the short term, Bulgaria's risk-sharing potential in the financial sector can be improved by implementing bank and non-bank regulatory changes in the EU in order to better integrate the financial sector with EU financial and capital markets. By achieving compliance with the Banking Union, our country can improve banking supervision systems and participate in building and strengthening the future sustainability of EMU. In the medium term, the main challenge will remain fiscal stability and the overcoming of macroeconomic imbalances in meeting the convergence requirements of the Economic and Monetary Union.

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## INNOVATIVE METHODS AND TOOLS FOR PERSONNEL INTERNATIONAL MARKETING DEVELOPMENT

*In the article approaches to the definition of the concept of "personnel marketing" are considered. The essence and definition of concepts "personnel marketing" and "international personnel marketing" are specified. Approaches to the formation of HR marketing mix are considered. The methodical approach to the formation of the system of international personnel marketing in the context of innovative development of personnel technologies is improved. The list of tools for innovative development of personnel marketing at enterprises of international business is substantiated.*

*JEL: M12; M31; O31*

### 1. Introduction

In the conditions of limited financing of personnel programs, reduction of expenses for the performance of functions of personnel management, business entities have difficulties in providing staff with the necessary quantity and qualifications and their maintenance for a long period of time at workplaces. In the international business, this problem is exacerbated, as there are frequent cases of "outflow of the best minds", international headhunting, downshifting. At the same time, the process of creating and promoting HR-brand of the international business entities in the international labor market is more complicated. Due to this, the system of international personnel marketing needs a proper development. A personnel marketing, like any other field of activity, requires innovation. In today's economic environment, the use of innovative development tools is a prerequisite for the successful operation of any business entity, including international business.

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The purpose of the article is to clarify the essence of international personnel marketing and justify the tools for its innovation development.

To achieve the goal, the following tasks were solved:

- to consider existing approaches to defining the concept of "personnel marketing";
- to clarify the essence of the concept of "international personnel marketing";
- to develop a methodical approach to the formation of the system of international personnel marketing on the basis of innovative development;
- to specify the list of tools for innovative development of personnel marketing at international business enterprises.

## 2. Literature Review

The question of the definition of the essence of the concept of "personnel marketing" was reflected in numerous works of such scientists as: Ardzinov V.D. (2003), Belousov A.V. (2001), Kyryan L.P. (1995), Kolpakov V.V. (2006), Kryvoruchko O. M. and Gladka O. I. (2012), Martynenko O. V. (2007), Paschuk L.V. (2011), Povazhny S.F., Larina R.R. and Belousov A.V. (2003), Savchenko V.A. (2009), Sarukhanov E. E. and Sotnikova S.I. (2009), Chulkov A.V. (2007).

Pashchuk L.V. (2011), Tomilov V.V. and Semerkova L.M. (2009), and Toriannik J. I. (2010) in their writings investigate the theoretical foundations of the formation of the personnel marketing system. Consideration of the tools of innovative development of personnel technology took place in the writings of such scientists as: Brich V. Ya. and Borisyak O.V. (2017), Vergun V.A. and Stupnitsky V.I. (2015), Hetman V.V. and Bilodid A.O. (2017), Savenkova T.I. (2013).

Clarification of the essence of international personnel marketing should be based on a critical review of approaches to defining the concept of "personnel marketing". In the literature, there is no single approach to the interpretation of this concept.

Table 1

Interpretation of the definition of "personnel marketing"

Author, Source	Definition	Description of the definition	Approach to definition
1	2	3	4
Martynenko O.V. (2007)	Marketing in the labor market is a system of activity that allows its subjects to assess the state of the labor market, trends in its changes, and to make management decisions in the area of hiring and promoting employment	Employment in the labor market, which is limited to hiring	Functional
Kryvoruchko O. M., Gladko O.I. (2012)	Personnel marketing is an activity aimed at providing the necessary personnel with the help of creating, maintaining or changing the behavior of target audiences (existing and	Activities aimed at the selection and development of personnel	

Author, Source	Definition	Description of the definition	Approach to definition
1	2	3	4
	potential personnel) with respect to this enterprise as an employer, where the creation of behavior, its support and change is achieved by engagement, retention, development, recruitment		
Savenkova T.I. (2013)	Personnel marketing is a kind of managerial activity aimed at covering the needs of staff in a constantly changing environment; planning and collection of all types of activities of the personnel; studying the factors of the external and internal markets that affect the vacancy, the probability and speed of its filling, the terms of approval of the candidature	Activities aimed at selection and planning of personnel	
Saruhanov E.E., Sotnikova S.I. (1995)	Marketing on the labor market is a means of targeting consumers to the product of "labor", where marketers focus on creating conditions for combining the ability to work with capital through all possible types of employment	Labor market activities related to employment provision	
Chulkov A.V. (2007)	Personnel marketing is engaged in questions of long-term maintenance of the enterprise by personnel resources. Personnel marketing regards the workplace as a product that needs to be marketed in the labor market	Activities limited to staff selection	
Kibanov A.Ya. (2007)	Personnel marketing is a complex function of personnel management services of organizations or recruitment agencies that provides for a thorough and comprehensive study of the labor market, labor demand, preferences and needs of the employer, the planning and forecasting of the range of necessary professions, the development of measures to meet the demand for labor, identify potential the needs of employers in rare or scarce occupations, the formation of the buyer's priorities in finding top-not qualified personnel, cooperation with employment services, labor exchanges, education dumb institutions and other sources of workforce, forming an image of the employer	Integrated function of personnel management	Functional
Tomilov V.V., Semerkova L.N. (2009)	Labor market marketing is a kind of activity aimed at achieving the optimal level of correspondence between demand and supply of labor in order to meet the labor demand of all subjects of labor relations	Activities related to the provision of the labor force for a specific purpose	Functional and target
Savchenko V.A. (2009)	Personnel marketing is the philosophy and strategy of human resources management,	Philosophy of management	Structural

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Author, Source	Definition	Description of the definition	Approach to definition
1	2	3	4
	which, while focusing on the life and work demands of employees, simultaneously meet the interests of enterprise policy		
Belousov O.V. (2001)	Personnel marketing is a complex system aimed at selection, placement, training and assessment of human resources taking into account production requirements and in order to create a favorable socioeconomic climate in the team, inculcation of employees to the values and norms adopted at the enterprise, enhancement of corporate culture.	A system that includes hiring, evaluation and training of staff	Systemic
Kyyan L.P. (1995)	Marketing in the labor market can be considered as a system of activity that allows its subjects to assess the state of the labor market, its trends and make sound decisions in the field of employment, promote employment and the efficient use of human capital	The system, which includes assessment of the labor market, hiring and promotion of efficient use of personnel	Systemic
Povagniy S.F., Larina R.R., Belousov A.V. (2003)	Personnel marketing is a complex system aimed at the selection, placement, training and assessment of human resources taking into account production requirements and with the aim of forming a favorable social and psychological climate in the team, educating employees of the values and norms adopted at the enterprise, raising the corporate culture	The system is aimed at selection, training and assessment of human resources	
Ardzinov V.D. (2003)	Personnel marketing is the collection and analysis of market data, the study of the situation, the preparation of various forecasts, the receipt of various information on the possible number and structure of the required professions and specialties, and in the further development, conducting advertising activities and stimulating employment	The process of collecting, processing information about the labor market, advertising and stimulating employment	Process
Kolpakov V.M. (2006)	Personnel marketing is a scientific and applied discipline, type of professional work of personnel, management system satisfaction of staffing requirements, strategic and tactical way of thinking, style of behavior, complex of specific functions	Discipline and, at the same time, activity, system and complex of functions related to the selection of personnel	Functional, systemic, structural

Source: Research result, 2018.

The concept of "personnel marketing" in literary sources is used along with such synonymous concepts as "human resources marketing", "labor market marketing", "HR marketing", "personnel marketing". The definitions were listed in tab. 1, according to the

authors; it is advisable to group according to the content characteristics and approaches to the definition. The largest group is the group of authors that define the personnel marketing as a type of activity. However, in each definition, this activity is limited to a certain list of functions. Sarukhanov Ye. E. and Sotnikova S. I. (1995), Martynenko O. V. (2007) and Chulkov A.V. (2007) refer to personnel marketing as activities related only with hiring and selection of personnel. This approach is somewhat limited and does not include such functions as planning, staff allocation and image of the employer. The most complete, based on the functional approach is the definition of Kibanova A. Ya. (2007). However, it is mostly macroeconomic. It is advisable to interpret the personnel marketing from the standpoint of a structural approach, as a set of strategic, tactical techniques, philosophy of management. However, in the definition of Savchenko V. A. (2009), based on the structural approach, the scope of application of these strategic and tactical methods is not specified. Ardsinov V.D. (2003) adheres to the process approach in determining the personnel marketing.

There is target approach. It is implemented in conjunction with a functional approach in the definition of such authors as Tomilov V.V. and Semerkova L. N. (2009). Scientists who use the system approach in defining the concept of "personnel marketing", Ardsinov V.D. (2003), Kijan L.P. (1995), Povazhny S.F. (2003), is understood by the notion of a predominantly system that regulates hiring, evaluation and development of personnel. In our opinion, it is expedient to include in this system the planning of staffing needs and the formation of the employer's image.

Since the functional, structural, process, system and target approaches to the definition of personnel marketing can exist, then, as the authors think, it is advisable to combine them.

In our opinion, the personnel marketing is: 1) from the standpoint of a functional approach, it is a set of personnel management functions related to planning, selection, development of personnel and maintaining the proper image of the employer; 2) in the context of the structural approach, it is a decision-making on choosing a strategy and tactics of providing the company with personnel, its development and maintaining the proper image of the employer; 3) from the point of view of the process approach, it's the process of gathering information on the labor market, planning, selection, development of personnel and maintaining the proper image of the employer; 4) in the context of the target approach, it is an achievement of goals in the field of optimal qualitative and quantitative composition of personnel formation and development of HR-brand of the employer.

In addition, in literary sources there are no interpretations of international personnel marketing, which have its peculiarities of HR-sphere in the international business. Therefore, based on a combination of functional, process, systemic, structural, target-oriented approaches and taking into account the peculiarities of personnel management in international business enterprises, the authors proposed, under the international marketing of personnel, to understand the functional sphere of personnel management, which includes the sequence of actions for monitoring the international labor market, planning, formation and development professionally qualitative and quantitative composition of personnel in the context of strategic and tactical tasks of the enterprise of international business in order to develop its HP brand.

*To increase employee loyalty to top management and the company as a whole, the formation of an HR brand plays a key role. So, Ambler T. (1996) and Barrow S. (1996) understand HR brand as a set of economic, financial and psychological benefits that an employee can get when he starts working in a company. Minchington B. (2006) defines an employer brand as an organization's image as a great place to work for key stakeholders. The authors, sharing the point of view of the scientists, under the HR-brand understand the set of characteristics that form a positive image of the employer in the labor market.*

### **3. Methodology of the Empirical Research**

The issue of the development of personnel marketing at domestic enterprises in literary sources is given considerable attention. Approaches to defining the essence of the concept of «personnel marketing» were sufficiently highlighted. However, the personnel marketing at international business enterprises has its own specifics, therefore, further research to determine the concept of international marketing of personnel and the formation of an international marketing system for personnel in the context of innovation development is required.

In the article we used such research methods as: analysis and synthesis, induction and deduction, monographic analysis, comparisons, methods of statistical analysis.

### **4. Findings**

International business involves the implementation of business relationships and business transactions by entities of two or more countries in order to profit. Therefore, in our opinion, the formation of the international marketing system should take into account the nature of business relationships between the enterprises of international business, the specifics of the social and labor sphere of different countries, migration processes, norms of international labor legislation and the peculiarities of the relationship between the subjects of the international labor market. As personnel marketing is a sphere of marketing, the basis of the system of international personnel marketing should be elements of marketing mix, adapted to HR-sphere of the enterprise.

The composition of marketing mix in literary sources varies from 4 to 12 elements. Most often scientists used in marketing, as well as in the marketing of personnel, *4 P model*. Thus, Paschuk L.V. (2011) among elements of the personnel marketing complex distinguishes four elements: goods (jobs); the price (wages and expenses of the enterprise for ensuring the work of each individual employee); sales (means of attracting staff); promotion (forming company image and employee loyalty). In our opinion, the most complete list is the 12 elements of marketing mix, but it needs adaptation for personnel marketing. The list of elements of HR-marketing-mix, adapted by the authors, is presented in table 2.

Table 2

The structure of HR-marketing mix "12 P"

Element	Interpretation in the HR-sphere
Product	Workforce
Price	Salary
Place	Vertical and horizontal movement of personnel, rotation
Promotion	Formation of the image of the employer
People	Consumers of marketing information about staff
Personnel	Human Resources for Personnel Marketing
Package	Corporate clothing, symbolism
Purchase	Methods and tools for attracting staff
Public Relations	Public information about staffing policies and staffing programs
Process	Process of marketing personnel
Physical Premises	Social responsibility of business
Profit	Facilitating staff growth in company profits

Source: Research result, 2018.

In literary sources, there are different approaches to the interpretation and definition of the structure of the personnel marketing system. Yes, Pashchuk L.V. (2009) defines a system of personnel marketing as a set of interrelated and interacting analytical, organizational, managerial and control subsystems aimed at achieving and mutually matching the interests of the staff and the employer, taking into account the influence of factors of the macro-, micro-marketing and internal environment of the enterprise. In the above definition, the purpose of the marketing of personnel is to ensure the simultaneous satisfaction of the interests of staff and as owners. This goal does not reflect the nature and purpose of personnel marketing.

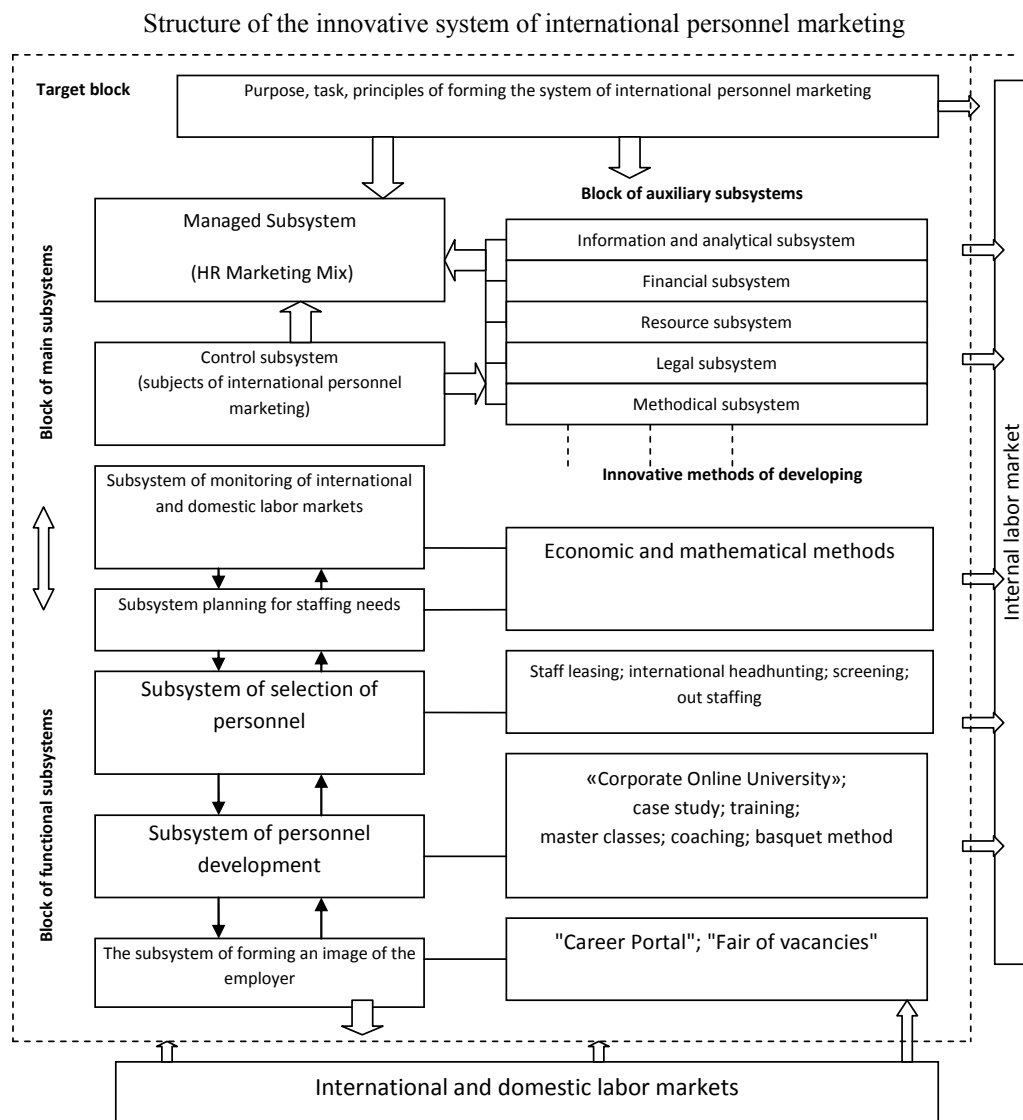
Thus, Tomilov V.V. and Semerkova L.N. (2009) argue that the personnel marketing is a combination of two subsystems: the manager (the personnel of the marketing of personnel) and the managed (objects of personnel marketing). In our opinion, such a structure is appropriate, but requires the introduction of additional subsystems, which would ensure the operation of control and managed subsystems.

Torianik J. I. (2010) considers the concept of personnel management on the basis of marketing, which is understood by the process of development, implementation and control of marketing programs in the field of personnel management, aimed at ensuring stability and satisfaction of the enterprise team and achieving on this basis the long-term goals of the enterprise. In this definition, the management of personnel marketing is limited to the process of development, implementation and control of marketing programs. Such an interpretation, as in our view is not good.

On the basis of analysis and generalization of literary sources, the authors suggest that the system of international personnel marketing is understood to mean a set of interconnected and interacting main and auxiliary subsystems, the functioning of which contributes to the formation of the appropriate quantitative and qualitative composition of the personnel of its development in the context of the strategic and tactical tasks of the enterprise in order to develop the image of the employer. The structure of the international personnel marketing

system is presented in fig. 1. In our opinion, it is expedient to allocate the target block, the main subsystems (*managed and control*), functional and auxiliary subsystems, which ensure the normal operation of the main subsystems, in the structure of the system of international marketing of the personnel.

Figure 1



Source: Research result, 2018



The purpose of forming the system of international personnel marketing is to promote the development of the HR brand of the international business enterprise, the tasks are: implementation of the system of monitoring of the international and domestic labor markets; increasing the effectiveness of personnel selection and development. The system of international personnel marketing, in our opinion, should be based on the principles of scientific, systematic, efficient, adaptive and substantiated. Based on the concept of "international personnel marketing" to the functional subsystems should include subsystems of monitoring of international and domestic labor markets, planning of staffing needs, personnel selection, personnel development and image of the employer. It is expedient to include in the auxiliary: information and analytical, resource, financial, legal and methodical subsystems.

Characteristics of auxiliary subsystems of international personnel marketing are presented in Table 3.

Table 3

Characteristics of auxiliary subsystems of international personnel marketing

Title of the subsystem	Feature
Information and analytical	Subsystem of information gathering about the domestic and international labor market, their analysis and evaluation of the labor resource situation
Resource	Subsystem aimed at providing marketers, HR managers with the necessary qualifications, material resources, software products necessary for the operation of the international personnel marketing system
Financial	Subsystem involves the development of budgets to finance marketing programs
Legal	Subsystem, which includes the base of normative-legal support of personnel work and legal support of social-labor relations of the enterprise
Methodical	Subsystem that is a set of methods of monitoring the labor market, planning and analyzing the quantitative and qualitative composition of personnel, as well as innovative tools and tools for the development of international personnel marketing

Source: Research result, 2018

A prerequisite for the effective functioning of the innovative system of international personnel marketing should be the monitoring of the labor market. Because the results of the labor market monitoring are the initial basis for planning the need for personnel and searching for the optimal sources of its satisfaction with the specifics of the development and functioning of national and international labor markets. The dynamics of unemployment rates in the world is presented in Table 4.

Ones of the leaders of unemployment are South Africa, Macedonia and Greece. In these countries, almost one-third of the economically active population aged 15-70 do not work, are looking for work and are ready to go to it within the next two weeks.

Table 4

The dynamics of unemployment in the countries of the world

Country	Unemployment rate, %			Country	Unemployment rate, %		
	2016 year	2017 year	Absolute deviation		2016 year	2017 year	Absolute deviation
South Africa	26.7	27.7	1.0	Sweden	7.0	6.8	-0.2
Macedonia	23.6	23.0	-0.6	Estonia	6.9	6.8	-0.1
Greece	23.8	21.4	-2.4	Canada	7.0	6.4	-0.6
Spain	19.6	17.4	-2.2	Bulgaria	7.7	6.3	-1.4
Armenia	18.8	18.2	-0.6	Australia	5.7	5.7	0.0
Croatia	15.0	10.8	-4.2	Austria	6.1	5.5	-0.6
Tunisia	14.0	15.2	1.2	Russia	5.5	5.2	-0.3
Iran	12.5	13.1	0.6	Switzerland	3.3	4.8	1.5
Brazil	11.3	12.9	1.6	China	4.0	4.7	0.7
Egypt	12.7	12.1	-0.6	USA	4.9	4.4	-0.5
Italy	11.7	11.3	-0.4	United Kingdom	4.9	4.3	-0.6
Turkey	10.8	11.3	0.5	South Korea	3.7	3.8	0.1
France	10.0	9.7	-0.3	Germany	4.2	3.7	-0.5
Ukraine	8.8	9.5	0.7	Japan	3.1	2.8	-0.3
Latvia	9.6	9.1	-0.5	Singapore	2.1	2.0	-0.1
Venezuela	21.2	8.1	-13.1	Belarus	1.0	0.5	-0.5
Lithuania	7.9	7.1	-0.8	Thailand	0.8	1.1	0.3

Source: Research result, 2018 (according to the data "Unemployment in the countries of the world in the years 1980-2016" (2016) and "Unemployment rate" (2017)

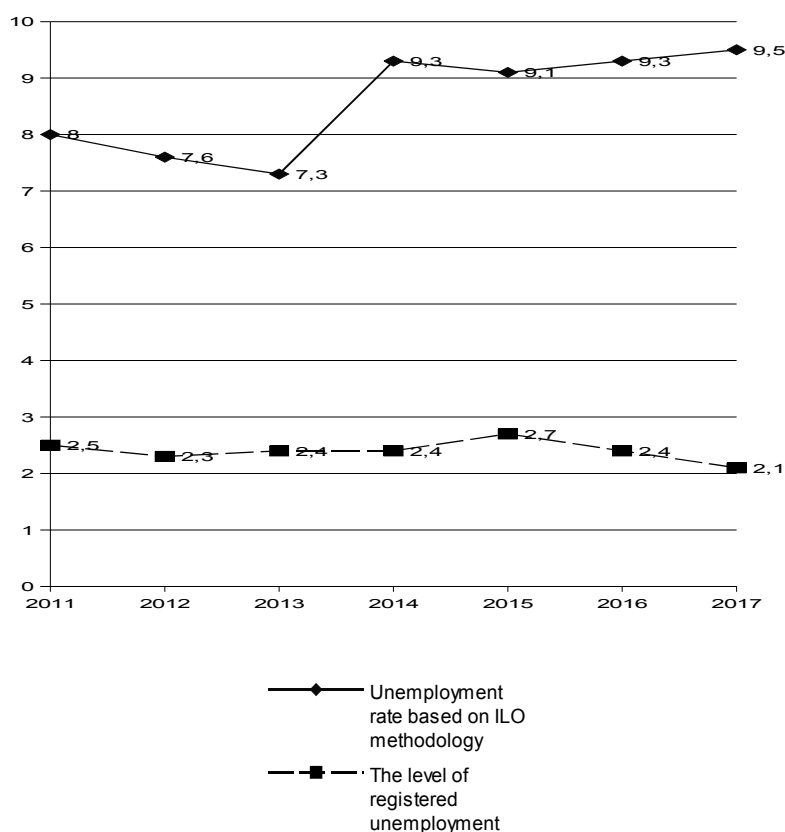
The unemployment rate according to the methodology of the ILO is higher than 5-6% in countries such as Spain, Armenia, Croatia, Tunisia, Iran, Brazil, Egypt, Italy, France, Ukraine, Latvia, Lithuania, Venezuela, Sweden, Estonia, Canada, and Bulgaria. These countries are not attractive in terms of employment prospects for both the local population and migrant workers. The most significant drop in unemployment was in Venezuela.

In Ukraine, the level of employment and unemployment, calculated according to the methodology of the International Labor Organization and according to the methodology of the State Statistics Service of Ukraine differ significantly (Fig. 2).

The reason for the significant differences in the level of unemployment, calculated by the International Labor Organization (ILO) and the State Statistics Service, is the methodology for calculating these indicators.

According to the ILO methodology, the level of unemployment is defined as the ratio of the number of unemployed people aged 15-70 to the number of economically active population aged 15-70 years. The level of registered unemployment is calculated in Ukraine as the ratio of the number of registered unemployed employment services to the number of economically active working-age population (16-60 years).

Figure 2  
Dynamics of unemployment in Ukraine (according to the official website of the State Statistics Service of Ukraine (2018))



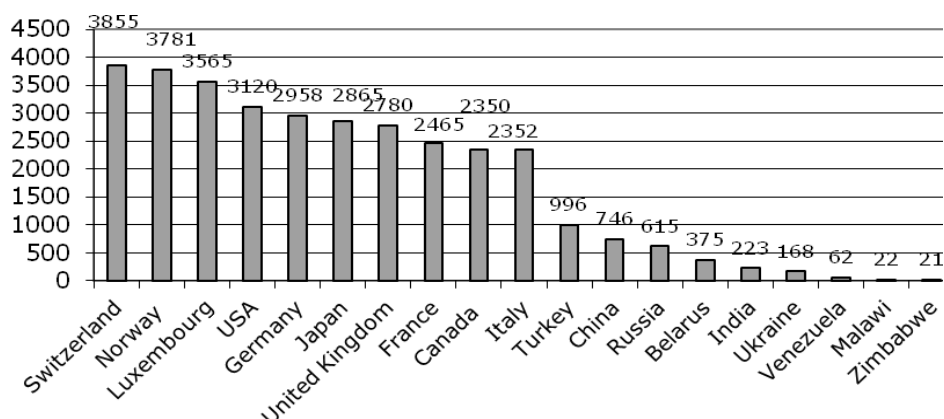
The International Labor Organization determines the number of unemployed on the basis of a survey of households in Ukraine, and the State Statistics Service of Ukraine as the number of only those unemployed who have official status. To monitor the labor market, it is expedient to use the information of the ILO. The registered unemployment rate can only be used to assess the performance of the State Employment Service and the planning of unemployment benefit costs.

An integral part of marketing personnel is the analysis of wages at the domestic and international labor markets.

The level of wages in some countries of the world is presented in Fig. 3.

Figure 3

Wages in the countries of the world (according to the site Investor's School (2017))



High-wage countries are the most attractive employment destination for migrant workers. Low-wage countries, including Ukraine and Venezuela, need to apply innovative methods of personnel marketing. This is due to the limited funding of human resources programs.

In our opinion, the introduction of innovative methods and tools into the system of international personnel marketing should be carried out using a methodical approach, which should include the sequence of stages:

- 1) analysis of the quantitative and qualitative composition of personnel and the identification of imbalances in the structure of staff;
- 2) diagnostics of the level of development of the existing system of personnel marketing to identify problem functional areas;
- 3) planning of innovative measures in the problem functional areas of the international personnel marketing system;
- 4) determination of conditions, organizational principles, resource and financial support necessary for the introduction of innovations;
- 5) development of the motivational mechanism necessary for the implementation of innovations;
- 6) determining the expected social, economic and organizational efficiency from the implementation of innovative measures;
- 7) phased introduction of innovative measures, methods and tools for international personnel marketing;
- 8) control for the implementation of innovative methods of international personnel marketing;

9) assessment and analysis of the results of the implementation of innovative measures.

Necessary prerequisites for innovation development of personnel marketing are: work with highly qualified personnel; availability of personnel creative abilities; development of creative thinking in the personnel; suitably organized recruitment system; presence of a motivational mechanism for the introduction of innovations.

Innovations can be: grocery (new products, services); technological (newest production technologies) and managerial (the newest methods, methods and tools of management influence).

## **5. Discussion**

In literary sources, managerial innovations in terms of personnel management are viewed as a whole without a division between staffing functions. Thus, Vergun V.A., Stupnitsky V.I. (2015) among the innovative methods of personnel management distinguish such as: "Corporate University", "Career Portal", "Virtual School", "Employee Social Card", gameplay. These innovative HR practices can also be applied to the international personnel marketing system. Hetman V.V. and Bilodid A.O. (2017) among the innovative methods of personnel development are distinguished: video training, distance learning, modular training, case studies, trainings, brainstorming, behavioral modeling, stoelting (motivational story), action training, coaching, master classes, basket-type, shadowing, secondment (a kind of "business trip"), buddying. The last four methods relate to an adaptation process. Among the innovative methods of providing business entities, the personnel distinguishes: headhunting, outstaffing, leasing, outsourcing, temporary staffing. These methods can also be applied to the system of international personnel marketing. On the basis of the analysis of literary sources, a list of innovative methods and tools that can be applied in the international personnel marketing system is systematized (Table 5).

The most important functional component of personnel marketing is the formation of qualitative and quantitative staffing (recruitment). In the field of providing international business with qualified personnel, it is proposed to use next innovative methods as: international headhunting, outstaffing, leasing, outsourcing, temporary staffing (temporary staffing). These methods can be applied in any international company, but the scope of their application may be limited the size of the enterprise, the field of activity, the availability of sources of funding necessary for the introduction of innovative methods of personnel marketing.

Table 5

Characteristics of innovative methods and tools for the development of international personnel marketing

Functional subsystems of international personnel marketing	Methods and tools for innovation development	Characteristics of methods and tools of innovation development
International Labor Market Monitoring and Staffing Planning	Economic and mathematical methods	Analysis of the influence of factors on the level of employment, unemployment, economic activity and forecasting trends in the development of domestic and international labor markets
	Trendspotting	Monitoring of new trends in the development of national and international labor markets
Selection of personnel (formation of qualitative and quantitative personnel)	International Headhunting	Qualitative selection of personnel by rewarding the specialists of the necessary qualification in other subjects of international business
	Staff leasing	Specific form of recruitment of personnel, which is to temporarily involve personnel of the enterprise-provider in the enterprise in order to eliminate inconsistencies between existing and necessary personnel.
	Outstaffing	Procedure for the removal of staff for the state of the customer-company and registration to the state of the enterprise-provider in order to reduce the costs of maintaining the staffing of the enterprise
	Screening	"Floor selection", which is carried out by recruiting agencies on formal grounds based on the resume
	On-line recruitment	Organization of preliminary recruitment and interviews online
	Temporary staffing	Selection of temporary staff for 1-3 months of employment. Sources of Search: Resume Database, Mass Media, Internet, Educational Institutions
	Freelance	Involvement of specialists from different countries on the conditions of free employment
	Co-working	Involvement of employees from different branches, representative offices, subsidiaries of international corporations to perform project tasks in a common territory or in one office.
	Networking	Formation of a network of partners and colleagues from among the employees of different branches, representations of international corporations to perform common tasks
Staff development	"Corporate Online University"	On-line education system, which includes distance learning, knowledge use, developments, work practices, instructions, advanced company experience, distance learning programs for business schools, centers
	Case study	Consideration of practical situations, modeling work on their solution, analysis of the results of solving problem situations
	Training	Actualization of theoretical knowledge and development of practical competences with the use of games, exercises,

		moderation
	Master classes	Form of professionally active education, during which a specialist in a certain field transmits the experience of applying in practice new technologies or new methods of work
	Coaching	Technology of psychological support of a career in personnel, which is to assist in the formulation and achievement of professional goals
	Basket method	Simulation of management situations in which staff from the human resource reserve serve as manager
	Gameplay (gamestorming)	The use of gaming techniques in work activities in order to develop the professional qualities of staff, the generation of new ideas
Formation of the image of the employer	Career Portal	Internet resource, which is a professional community integrated with social networks. The portal enables potential candidates for vacant positions to try themselves in web-based tests and web-based games. Get Employer Information. The employer is able to promote the development of HR-brand
	Job Fair	Participation in employer image events, demonstration of competitive advantages of the employer in the social and labor sphere at the offer of attractive vacancies

Source: Research result, 2018.

In our opinion, it is expedient to use the online recruitment as a preliminary stage of the interview with candidates for vacancies in international corporations with unbalanced branches, branches in the state of which there is no staff manager. Headhunting is a more costly method for searching staff, so its use is appropriate in attracting highly skilled professionals with their own portfolio in a particular area or extensive customer base. Temporary staffing should be used at enterprises with a seasonal nature of work. Staff leasing and outstaffing are applied in the absence of employers' ability to retain state staff and develop staff performing job functions that require occasional need.

With regard to the development of staff can be applied quite a large group of innovative methods. In our opinion, the most expedient to use are: "Corporate online university", case study, training, master classes, coaching, and basket-method gamming (game storming). Coaching, as a method of psychological support for the career development of an employee, is highly effective, but requires significant financial costs. In the international business of employers, it is convenient to use a tool such as "Corporate Online University" for staff development, especially when it comes to organizing training for staff in different affiliates and representative offices of international companies. Such a modern method of personnel development as game storming allows carrying out the labor process in the form of a game, stimulates the development of the creative potential of the personnel, avoids the monotony of work, and forms an atmosphere of healthy competition in the team.

In Ukraine, unlike Europe, the functions of forming an employer's image and managing a business career are usually not given attention. Ukrainian employers agree to perform these functions only at a low cost. In our opinion, it is advisable to use the "Career Portal" and

"Vacancies Fair" among innovative financially unprofitable methods and tools for forming the employer's image. The application of these innovative career management tools in international business will increase the awareness of staff about possible vacancies, career prospects, and requirements that need to be fulfilled to occupy a particular position. Effective career management is the key to increasing staff loyalty to the firm, improving the socio-psychological climate in the team, transparency of the career process, staff satisfaction with their own professional careers and work. All these benefits of effective business career management form a positive image of the employer in the international labor market.

Therefore, in the context of the crisis in the economy of a country or a subject of international business, in our opinion, it is expedient to apply low-budget innovative methods of personnel marketing. The use of cost-effective methods of personnel marketing should be justified and economically feasible.

The application of innovative methods and tools for personnel marketing allows for effective monitoring of the international labor market, the selection and development of personnel, the formation of the employer's business image, which will contribute to the formation of an optimal staffing and to increase its satisfaction with its own career and work in the enterprise.

## **6. Conclusions**

Thus, the scientific novelty of this study is:

- 1) clarification of the definition of the concept of "international personnel marketing" through the combination of functional, structural, target, process, systemic approaches and taking into account the peculiarities of the development of the social and labor sphere of enterprises of international business;
- 2) improvement of the approach to the formation of the system of international personnel marketing due to its construction in the context of innovative development of technology personnel and the allocation of basic, auxiliary and functional subsystems.

The prospect of further scientific research in this area is the possibility of forming an organizational and economic mechanism for managing personnel marketing at international business enterprises.

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## GEOGRAPHIC SUSTAINABILITY AND GEOGRAPHIC CONCENTRATION OF BULGARIAN EXPORT

*The paper presents results from a survey of geographic stability and the geographical concentration of Bulgarian export. An innovative approach has been used through the approbation of specially developed coefficients. The results show that Bulgarian export over the last fifteen years has been balanced in terms of its geographical structure. At the same time, it is highly sustainable concerning the main partner countries, and they remain unchanged over the whole period under review.*

*JEL: F14; F19*

### 1. Introduction

In the years after the establishment of the new structure of the Bulgarian economy (1995-2000), export becomes one of the leading factors for the economic growth of the country. A study proves that “in the commodity trade Bulgaria cannot rely on lasting competitive advantages” (Zlatinov, 2018). A question remains open – in this case how does Bulgaria realize its export – with episodic deals or long-lasting and stable relations with long-standing contractors? The answer to this question imposes studying Bulgaria’s commitment to its main trading partners. On the other hand, the answer to this question is also important at the firm level because it is considered that “exporting firms on equal other terms have a stronger market position than those selling only on the domestic market” (Tasseva, 2016). The current study aims to analyze Bulgaria’s established foreign trade relations, by studying two parameters – geographic concentration and geographic sustainability. For the stated goal, Bulgarian export for the period 2001-2017 is studied.

### 2. Geographic Concentration

Studying the commitment of certain economy with the economies of the other countries – main trade partners, is done using the geographic concentration of the export. Herfindahl-Hirschman Index (HHI) is used to calculate the foreign trade concentration. In economic

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theory and practice, it has been accepted as a conditional measure of market concentration. It can establish the existence of a monopoly or a competitive market. HHI is considered a measure of the extent to which a market is dominated by a small number of large firms and a large number of small firms, i.e. it shows the degree of concentration on a certain market. The authors prove that Herfindahl-Hirschman Index has certain weaknesses when used to study the foreign trade (Galabova, Nestorov, 2018). The authors suggest the use of a Geographic Concentration rate (GCr) of a group of goods. For the purposes of the current study the suggested rate is modified for application for not only for a group of goods but also for the entire export of a country. It is calculated as a rate, which is the share of the sum of the first five countries in the geographic distribution of the export or respectively import in the sum of the deals with all countries. Mathematically it is presented using the formula:

$$GCr = \frac{\sum_{i=1}^5 topD}{\sum_{i=1}^n D}, \quad (1)$$

where:

GCr - Geographic Concentration rate of export;

D – value of foreign trade deals with  $n$  countries;

top – members of a ranked row of deals.

The geographic concentration rate of export can be calculated for each separate studied time period, for example, a year. Its values change from 0 to 1. The lower the respective value, the lower the geographic concentration, in other words, diversification is achieved. On the contrary, the higher its value, the higher the geographic concentration. The scale suggested by Galabova and Nestorov (2018) for interpreting the values of the rate calculated for a group of commodities, can be used also for the results of the whole export (see Table 1).

Calculations for GCr of the Bulgarian export for the period 2001-2017 are presented on Figure 1.

Table 1

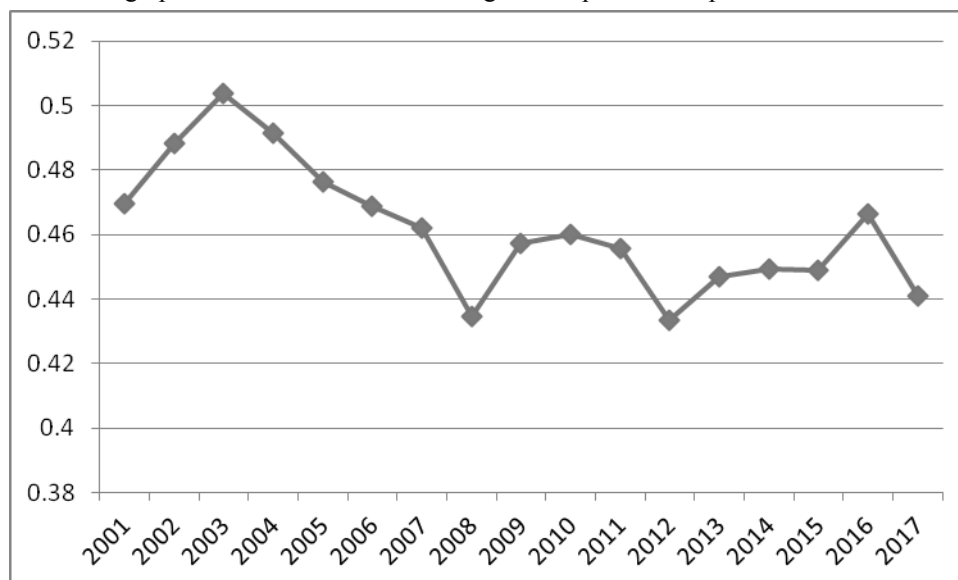
Interpretation of GCr values

GCr value	Interpretation
0.0 – 0.2	Highly diversified geographic structure
0.2 – 0.4	Diversified geographic structure
0.4 – 0.6	Balanced geographic structure
0.6 – 0.8	Concentrated geographic structure
0.8 – 1.0	Highly concentrated geographic structure

Source: Galabova, Nestorov, 2018.

Figure 1

Geographic Concentration rate of Bulgarian export for the period 2001-2017



Source: own calculations based on NSI data.

Figure 1 shows that the values of the geographic concentration rate for the studied period vary from 0.43 to 0.51. This corresponds to the share of the five leading export partners of Bulgaria. The variation is in a relatively not wide interval, which shows the absence of rapid processes. According to the proposed guarantees of interpretation, it can be assumed that Bulgarian export has a “balanced geographic structure”.

The interpretation of the indicator gives information about the degree of dependence of a country on its foreign trade partners and on their market situation, political, social and economic environment. It is proved that the greater degree of concentration is unfavorable because it shows a greater degree of dependence and commitment with fewer foreign trade partners and their trading conditions, and vice versa. Greater degree of diversification is rather favorable because it reflects on greater independence and lack of such strong commitment. It shows less vulnerability of the country to external shocks and cataclysms, which can significantly change the geographical distribution of foreign trade.

### 3. Geographic Sustainability

It is important the analysis of a country’s foreign trade relations to take also into account their sustainability over time. Sustainability in the economy can also be defined as “the ability of a system to maintain its basic quantitative and qualitative characteristics with a relatively small change of a parameter, originating from the external or internal

environment of the organization. A specific feature of economic sustainability is that it reflects the state of the economic system in market conditions and guarantees the purposefulness of its movement in the present and the foreseeable future” (Vojcheska, 2013). In order to measure the sustainability of foreign trade, Galabova and Nestorov introduce a foreign trade Geographical Sustainability rate of (GSr) for a group of commodities. In the current study, the rate was modified to be approbated to all export. The rate reflects the changes in the structure over time. Mathematically it is presented by the following formula (2):

$$GSr = \frac{\sum_{i=1}^5 \frac{C}{m}}{5}, \quad (2)$$

where:

GSr – Geographic Sustainability rate of export;

C – number of times the partner country has been on the first five places of the geographic structure by different periods;

m – number of studied periods.

Its values change from 0 to 1. The lower the value, the lower the sustainability of the partner countries in export, in other words, the geographic structure is dynamic. On the contrary, the higher the value of the rate, the higher the geographic concentration – the partner countries remain for a longer time. The scale suggested by Galabova and Nestorov (2018) for interpreting the values of the rate can be used for the whole export (see Table 2).

Table 2

Interpretation of the GSr values

GSr value	Interpretation
0.0 – 0.2	Highly dynamic geographic structure
0.2 – 0.4	Dynamic geographic structure
0.4 – 0.6	Balanced geographic structure
0.6 – 0.8	Sustainable geographic structure
0.8 – 1.0	Highly sustainable geographic structure

*Source: Galabova, Nestorov, 2018.*

Geographical Sustainability rate calculated for Bulgarian export for the period 2001-2017 amounts to 0.925. This corresponds to a “highly sustainable geographic structure”. Practically, the leading five partner countries in Bulgaria’s export have experienced almost no changes during the studied period. They are: Germany, Italy, Romania, Turkey, Greece. They remain unchanged through almost the whole studied period. It can be concluded that the established foreign trade relations are extremely stable.

Foreign trade theory and practice prove that the greater sustainability for a long period is a favorable development scenario because it shows relative stability and predictability. If

partner countries do not change significantly over the years, it can be argued that the foreign trade policy has a specific geographic focus. On the other hand, with a lesser degree of sustainability of the relations, there are significant changes in the foreign trade structure. If such changes are made in short periods, this speaks of a lack of stability and predictability of the policy. For these reasons, “sustainability of foreign trade relations is one of the important characteristics of foreign the trade” (Tassev, 2012). It should be also taken into consideration that “deepening and expanding of the foreign trade relations can be a key factor for finding the various perspectives for the Bulgarian economy, as well as an accelerator for its development” (Marinov, 2017).

#### **4. Conclusion**

Geographic concentration rate and geographical sustainability rate proposed for a group of commodities are approbated and can be successfully used for the whole export. Export sustainability can also be considered in terms of the structure of the exported commodities in terms of their renewing at the exporter – “green export”. Now there is no validated methodology for calculating such an indicator.

The study of Bulgarian export in the period 2001-2017 shows that it is balanced in terms of its geographic structure. In the different years, the leading five main partner countries form between 43 and 51% of Bulgaria’s total commodity export.

Even with established lasting “trends for globalization and integration of economic relations” (Galabova, 2018), Bulgaria’s export remains highly sustainable concerning the main partner countries. They remain without changes through almost the whole studied period.

A possible explanation could be found in the many Bulgarian firms with foreign ownership and particularly in their “sales” to the parent companies abroad.

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## RISK-ORIENTED APPROACH TO DETERMINING BANK'S CAPITAL SIZE ACCORDING TO REQUIREMENTS OF BASEL COMMITTEE ON BANKING SUPERVISION

*The article establishes that it is necessary to introduce capital requirements for the Basel Committee on Banking Supervision to improve the regulation of banking activities. The conducted experiment on calculation of the bank's capital for operational risk with different methods showed non-profitability of the results, which requires further improvement of the processes of changes in the banking regulation system based on the Basel regulations. According to the calculations, there is a certain difference between the amounts of necessary reserves for bank's operational risk. At the same time, using different methods of calculation, we can see various trends over the last three years.*

*JEL: C10; G32; G21; F65; K29*

### 1. Introduction

In conditions of continuous improvement of globalized financial procedures regulation, the questions arise about finding identical forms, regulatory methods and subjects of influence

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on the market of banking services. One of the areas is to determine the sources of banking regulation when conducting banking control.

## **2. Analysis of recent research**

Some questions regarding the economic content of banking regulation and control, state regulation of the banking system were considered by financial researchers I. Karcheva (Karcheva, 2016), L. Konopatska (Konopatska, 2012), S. Naumenkova (Konopatska, 2012) and etc.

Now the Basel Committee on Banking Supervision is an important factor that influence to legislation in Ukraine. It is relevant to determine the influence of the decisions of this authority on changes in the banking legislation of Ukraine.

The purpose of this paper is to establish directions for taking into account decisions of the Basel Committee on Banking Supervisions on the formation of bank's capital under operational risk.

## **3. Presentation of the main material**

Documents of the Basel Committee on Banking Supervision (BCBS), hereinafter referred as the Basel Committee) have a recommendatory nature for regulation of banking activities. Although scientists point out that the documents of the Basel Committee do not have a legal effect but they have binding power since the states are not obliged to implement decisions, but they try to make the most use of domestic legal regulation (Erpyliova, 2014).

The central place among the documents of the Basle Committee takes the International Convergence on Measurement and Capital Requirements, or Basel II, was adopted on June 26, 2004 , which substantially became an element of implementation of the Basic Principles of Effective Banking Supervision contained in the International Convergence of Capital Measurement and Capital Standards (1998), or Basel I, which is defined as the bank capital, with a minimum size set, and the division of funds (capital) of the bank into two levels foreseen, as well as same classification of assets in five categories of quality provided.

The priority of Basel II is to ensure capital adequacy, and all the requirements of this agreement are foreseen: banks must have procedures for assessing the overall capital adequacy of their risk, banking supervisors must verify and assess the definition of banks' adequacy of their domestic capital and their strategy in this area, and have the right to expect that banks will maintain a level of capital above the minimum regulatory standards; the banking supervisors should take preventive intervention in order to prevent a lowering of capital below the minimum level (Miroshnichenko, 2007).

The Basel II Regulations have been taken into account at the legislative level in the EU in accordance with Par. 37 of Directive 2006/48/EC on the commencement and pursuit of activities of credit institutions and in the current Directive 2013/36/EC of the European Parliament and of the Council of 26 June 2013 access to credit institutions and prudential

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supervision of the activities of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC , and therefore are mandatory for the EU states when they are introduced into national legislation. The provisions of Basel II are also taken into account in Regulation (EU) 575/2013 on special requirements for credit institutions and investment companies, amending Regulation (EC) No. 648/2012.

The above-mentioned of Basel II's core principles and components requires a more detailed analysis, as set in the example of a bank's performance.

In accordance with the recommendations of Basel II, there are three alternative methods for measuring the size of operational risk in terms of increasing complexity and sensitivity: Basic Indicator Approach (BIA), Standardized Approach (SA) and Advanced Measurement Approach (AMA).

The comparative characteristics of alternative methods for measuring the operational risk value are given in Table 1.

Table 1

Comparison of methods for calculating capital requirements under operational risk

Comparison Criterion	Basic Indicator Approach (BIA)	Standardized Approach (TSA)	Advanced Measurement Approaches (AMA)
The need for regulatory approval for use of the method	Not required	Not required	Necessary
The subject of determining the procedure for calculating capital for covering operational risk	Regulator	Regulator	Financial institutions
Availability of requirements for division into business lines	Missing	Exists	Exists
Lack of the possibility of reducing the capital requirement for the amount of operational risk insurance	Yes	Yes	No, under certain conditions
Availability of operational risk management requirements	Basic requirements	Basic requirements + additional for TSA	Basic requirements + quantitative requirements for AMA

As can be seen from Table 1, each of these approaches allows us to determine the capital needed to cover operational risk. The bank chooses the method of calculation independently. At the same time, banks that are active in international transactions, as well as banks with significant operational risk, are recommended to use a more complex option than the BIA.

The basic indicator method is the simplest, because the size of bank's operational risk is estimated with a single indicator – net income. The results of the bank's performance for

each of the last three years are used to calculate the value of the reserve capital (Kushnir, 2016).

When using the base indicator method, the amount of capital to cover operational risk is calculated using formula (1):

$$K_{BIA} = \alpha \times \sum_{i=1}^n \frac{GL_i}{n}, \quad (1)$$

where  $\alpha$  is a coefficient set by the Basel Committee. It reflects the sector-wide level of minimum regulatory capital requirements, now it is equal to 0.15 or 15%;

GLi is a gross income for each year over three years; (in the case of an annual loss it is assumed GLi=0);

n is the number of years for which GLi > 0 (n < 3).

Calculation of the amount of capital using the method of basic indicators to cover the operational risk of one of Ukrainian banks in dynamics is presented in Table 2.

Table 2  
Calculation of capital using the method of basic indicators to cover the bank's operational risk

Indicator	Value of the indicator for years, thousands UAH				
	2012	2013	2014	2015	2016
Interest incomes	18 153 983	22 246 140	29 185 014	13 202 933	33 086 316
Interest expenses	10 104 859	13 801 979	18 837 048	10 818 378	29 375 913
Net interest income	8 049 124	8 444 161	10 347 966	2 384 555	3 710 403
Commission incomes	3 781 131	3 611 719	3 912 756	1 355 284	10 923 672
Commission expenses	507 416	1 055 163	1 042 671	389 601	2 205 108
Net commission income	3 273 715	2 556 556	2 870 085	965 683	8 718 564
Result of trading operations	612 770	428 911	-1 151 826	-2 313 373	-27 854 165
Gross net income	9 169 310	9 928 235	10 238 811	460 783	-21 938 654
Average income	-	-	9 778 785	6 875 943	8 327 364
Capital for operational risk coverage, calculated on the basis of BIA method	-	-	1466817.8	1031391.5	1249104.64

Source: own calculation on the described data sample (SSSU 2018).

As shown in Table 2, it can be argued about the volatile dynamics of the amount of reserve deductions for covering operational risk. This is because in the 2012-2014 the bank received a much higher average income than in the next two years, which caused significant recommended reserves. In 2016, the bank received a gross net loss, so the average value of the indicator was taken not for the last three years, but for the two that were profitable. As a result, a recommendation was reached on a larger amount compared with 2015.

Consequently, in comparison with the other two approaches, the method of the Basic Indicators will determine the largest amount of capital reserve, and it is the least sensitive to risk, since it depends only on one aggregate indicator of the bank's activity, net annual

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income. That is why it is recommended to apply to those banks that are just beginning to create an operational risk management system and have a small number of activities.

The Standardized Approach is more complex and better reflects the real bank's risk. The risk factors of an asset in terms of activities are set by the Basel Committee and reflect the relationship between cases of operational risk and net income in individual areas within the banking sector (Table 3) (Kushnir, 2016).

Table 3

List of risk factors of the asset

Activity direction	Risk factor of the asset (β <sub>k</sub> ) %
Corporate finance	18
Trading and sales	18
Retail banking	12
Working with corporate clients	15
Payments and settlements	18
Agency services	15
Assets management	12
Conducting brokerage operations for clients	12

*Source: own calculation on the described data sample (SSSU 2018)*

As can be seen from Table 3, a bank needs to divide its activities into eight main areas, in each of which the minimum amount of capital reserve is defined as the product of net income from this type of activity to the corresponding risk factor of the asset.

The disadvantage of the Basic Indicators and Standardized Approaches is that they predict a linear dependence of the risk factor losses, whereas, as a rule, this is a nonlinear dependence. In addition, the risk factor varies under the influence of the business cycle (during the recession decreases, and on the rise it increases).

In accordance with the recommendations of the Basel Committee, the supervisor may allow the bank to use the AMA method if the bank believes that this method yields more correct results. The method of calculating capital under operational risk is the same as for standardized methodology (TSA), but includes only 2 types of activities: working with corporate clients and retail banking.

For these business processes, instead of gross net income, as a risk indicator, loans are used (average value over three years), multiplied by a factor of 0.035, and the value of β coefficients for these business processes remain the same as for Standardized methodology (Karcheva, 2016).

An Alternative Standardized Method (ASA) is simple enough. It is specified with activity and provides stable forecasts throughout the business cycle. In addition, for its calculation, there is necessary information in public financial statements of Ukrainian banks.

The deduction of capital for operational risk coverage by the ASA method for lending to businesses and individuals is calculated according to formula (2):

$$K_{ASA} = \beta_j \times m \times K_j, \quad (2)$$

where  $K_{ASA}$  is the amount of capital deductions to cover the operational risk for transactions with businesses and individuals;

$\beta_j$  is a coefficient for credit transactions with individuals and legal entities;

$m = 0,035$  is the coefficient established by the Basel Committee;

$K_j$  is the average value of loans issued over the last three years.

Calculation of the amount of capital using Alternative Standardized Method for covering the operational risk of the bank in dynamics is presented in Table 4.

Table 4

Calculation of capital by Alternative Standardized Method to cover the operational risk of the bank

Indicator	Value of the indicator for years, thousands UAH		
	2014	2015	2016
1	2	3	4
The amount of credit debts of businesses	139 212 152	151 705 002	34 968 793
Average value over three years	117 537 738	136 565 291	108 628 649
Taking into account coefficient of 0.15	17630660.68	20484793.59	16294297.3
The amount of credit debts of individuals	22 126 573	26 105 479	19 702 438
Average value over three years	21 666 432	24 000 475	22 644 830
Taking into account coefficient of 0.12	2599971.81	2880057.05	2717379.63
The amount of credit debts of businesses + The amount of credit debts of individuals (taking into account coefficients)	20230632.48	23364850.64	19011677
Taking into account coefficient of 0.035	708072.14	817769.77	665408.69
Capital for operational risk coverage, calculated using TSA method	708072.14	817769.77	665408.69

Source: own calculation on the described data sample (SSSU 2018).

As can be seen from Table 4, calculations made for the bank according to the Alternative Standardized Method showed that the capital requirement for covering operational risk in 2016 (665408.69 thousand UAH) is almost in two times less than the capital calculated on the basis of the Basic Indicators Method (1249104.64 thousand UAH).

According to the calculations, there is a certain difference between the amounts of necessary reserves for bank's operational risk. At the same time, using different methods of calculation, we can see various trends over the last three years.

Gross net income used in BIA and in SA is only an indicator of bank's exposure to operational risk (Karcheva, 2016).

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Low-profitability banks may underestimate capital requirements for operational risk using the VIA method, which has been observed in recent years in Ukraine, particularly in banks that cannot provide efficient assets and liabilities management. According to Basel II, operational risk should be taken into account, according to I. Karcheva (Karcheva, 2016), in calculating the regulatory capital adequacy ratio.

The approaches discussed measure operational risk with varying degrees of sensitivity, which can be effectively controlled only if it is identified, measured, evaluated and managed properly.

Along with these measurement methods, the Basel Committee has developed operational risk management principles, according to which a bank must have a clearly defined function of operational risk management and a subdivision responsible for creation and implementation of risk management system. This system should be included in the daily risk bank's management and should be the subject of reports and periodic audits.

The expansion of the banking risk spectrum led to the need to analyze not only operational risk, which was taken into account in the Basel Accord, but also market and currency risks. Improving the risk minimization tools by banks revealed a discrepancy between the level of capital demanded by regulators and the level of economic capital reserved by banks for specific bank's portfolios.

The document "International Convergence of Calculation of Equity and Equity Capital Requirements"<sup>6</sup> is based on three main provisions:

- the bank's capital consists of the principal and the additional ones;
- the main criterion of the bank's capital adequacy to provide reliable protection against financial risks is the ratio of the bank's capital to assets weighted by the risk factor (it is based on the calculation of the value of assets weighted at risk, taken a credit risk, that is, the risk of default by the counterparty bank, and all assets the bank is classified and credited to a certain category and weighted by the risk factor in accordance with the established scale of coefficients);
- the ratio of the bank's capital to the assets weighted by the risk factor must be no less than 8%.

The main provisions of the "International Convergence of Calculation of Equity and Equity Capital Requirements" direct supervisors to assess capital adequacy from an individual approach to a bank, taking into account the specifics of risks, excluding a single approach. This paper reflects the concept of a stable functioning of the banking system through supervisory interaction, high-level banking management and market discipline, with the main role assigned to the assessment of banking risks.

Principal novelty of Basel II implies (Miroshnichenko, 2007) the creation of a risk-sensitive capital accounting system based on risk assessment carried out by banks independently.

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<sup>6</sup> <https://www.bis.org/bcbs/membership.htm>.

Parallel operating support components serve as the basis of the new regulatory requirements of the Basel Committee:

- minimum requirements for the bank's equity;
- regulatory control;
- adherence to market discipline.

In our opinion, among the absolutely important components, the first component affects the stabilization of banking activity most. It contains approaches and methods for calculating capital adequacy taking into account credit, market and operational risks, using both external sources of risk assessment and internal risk measurement systems. Furthermore, the normative value of the indicator of capital adequacy remained unchanged, 8%. Basel II provides several alternative approaches to quantifying each of the risks.

The Basel Accord presumes preserving the method for calculating the minimum requirements for the bank's equity capital, which was introduced in 1988, but the risk assessment process has changed: from now, credit, market and operational risks will be taken into account, using a wider list of econometric models, technical methods, and risk reduction tools. Thus, the calculation of the equity capital adequacy ratio includes the following parameters (3)<sup>7</sup>:

$$K = \frac{EC}{CR+MR+TR} \geq 8\% K_{ASA} = \beta_1 \times m \times K_1; \quad (3)$$

where  $EC$  is equity capital;

$CR$  is a credit risk;

$MR$  is a market risk;

$TR$  is a transaction risk.

Since the size of the bank's operational risk coverage, calculated by two different methods, had significant differences (almost doubling), it is possible to determine which method of calculation is the best.

Calculation of the ratio of equity capital with the method of basic indicators, taking into account the volumes of operational risk is shown in Table 5.

As can be seen from Table 5, when calculating the operational risk reserve volume using the benchmark indicators during 2014-2016, the capital adequacy ratios were met, i.e. the figure was more than 8%. At the same time, it is worth paying attention to the negative dynamics of the last three years as a sharp decrease in the calculated indicator.

Calculation of the equity capital adequacy ratio by the alternative standardized method taking into account the operational risk volumes is shown in Table 6.

<sup>7</sup> <http://eur-lex.europa.eu/legal-content/EN/NOT/?uri=CELEX:32013L0036&qid=1464258114451>

Table 5  
Calculation of the ratio of equity capital with the method of basic indicators, taking into account the volumes of operational risk

Indicator	The value of the indicator over the years		
	2014	2015	2016
Equity capital	22696.36	27487.22	12664.42
Regulatory capital	20311.00	22696.00	3135.80
Deductions for credit risk	210.17	13298.65	133989.75
Deductions for market risk	101.56	113.48	15.68
Deductions for operational risk	1466.82	1031.39	1249.10
Equity capital adequacy ratio, %	1276.12	190.31	9.36

Source: own calculation on the described data sample (SSSU 2018).

Table 6  
Calculation of the equity capital adequacy ratio by the alternative standardized method taking into account the operational risk volumes

Indicator	The value of the indicator over the years		
	2014	2015	2016
Equity capital	22696.36	27487.22	12664.42
Regulatory capital	20311.00	22696.00	3135.80
Deductions for credit risk	210.17	13298.65	133989.75
Deductions for market risk	101.56	113.48	15.68
Deductions for operational risk	708.07214	817.76977	665.40869
Equity capital adequacy ratio, %	2225.57	193.17	9.40

Source: own calculation on the described data sample (SSSU 2018).

As can be seen from Table 6, when calculating the operational risk reserve volumes according to the alternative standardized method during 2014-2016, capital adequacy ratios (above 8%) were also fulfilled.

According to the calculations, there is a significant difference between the amount of required reserves for the Bank's operational risk by the ASA and VIA method. The requirement for capital to cover the operational risk of the bank in 2016 differed by almost twice in two calculated methods.

However, the calculations of the equity capital adequacy ratio based on the operational risk volumes by the alternative standardized method and by the base indicator method differ by only 0.04%.

Consequently, based on the data obtained, it can be concluded that, in order to manage operational risk, banks can independently choose either of the two methods of calculation, since the differences as a result are almost not observed.

Basel II requirements require currency risk to be taken into account. According to Basel II, if the volume of transactions in foreign currency is insignificant (if the gross foreign exchange position does not exceed 100% of the third-tier capital and the net foreign



currency position does not exceed 2% of that capital), the bank may not make capital available to cover currency risk.<sup>8</sup>

The third-tier capital belongs to the bank's regulatory capital and is a short-term subordinated debt. Third-tier capital is not an obligatory component of regulatory capital, unlike the capital of the first and second tiers, but may be an alternative source of banking risks and losses.

The bank's foreign currency position (as defined by the National Bank of Ukraine) is the ratio of requirements and obligations of the bank in each foreign currency and in each bank metal. Since banks can not influence the exchange rate (it is established either by the market or by the national regulator), the only tool for managing this type of risk is to control currency positions.

The definition of the need to allocate capital to cover currency risk is presented in Table 7. All volume of subordinated debt was taken for the volume of the capital of level 3.

Table 7  
Calculation of the need for the bank to allocate capital to cover foreign currency risk

Indicator	The value of the indicator over the years		
	2014	2015	2016
Bank's active operations in foreign currency	81362.14	112518.52	29932.6
Bank's passive operations in foreign currency	89857.55	121280.6	104516.89
Currency position	-8495.41	-8762.01	-74584.29
Third-tier capital	5351.6	10690.63	96.54
The ratio of the currency position to the third-tier capital, %	-158.74	-81.96	-77253.34

*Source: own calculation on the described data sample (SSSU 2018).*

As can be seen from Table 7, the open currency position of the bank was observed during the last three years, while the ratio of the currency position to the capital of level 3 substantially exceeded 2%. In this regard, the amount of reserve deductions can be calculated as 0.5% of the amount of regulatory capital, based on the source.<sup>9</sup>

Introduction of new Basel requirements in Ukraine requires constant and careful monitoring of banks' activities by highly skilled and experienced specialists. In domestic banking institutions, preparatory work is underway to implement a risk management system. As for approaches to the assessment of capital adequacy, a simplified approach may be used in the Ukrainian banking sector. As for the supervisory procedure for assessing capital adequacy and market discipline, these conceptual provisions of the Basel Accord will be taken unconditionally.

An example of taking into account the requirements of the Basel Committee regarding capital is the adaptation of the legislation of European countries. Thus, Erin Pentz claims that among the individual financial institutions in the EU there are more than 15 largest banks in the world. In particular, fifteen out of twenty nine SIBs are in the EU member

<sup>8</sup> <https://www.bis.org/publ/bcbs128.htm>.

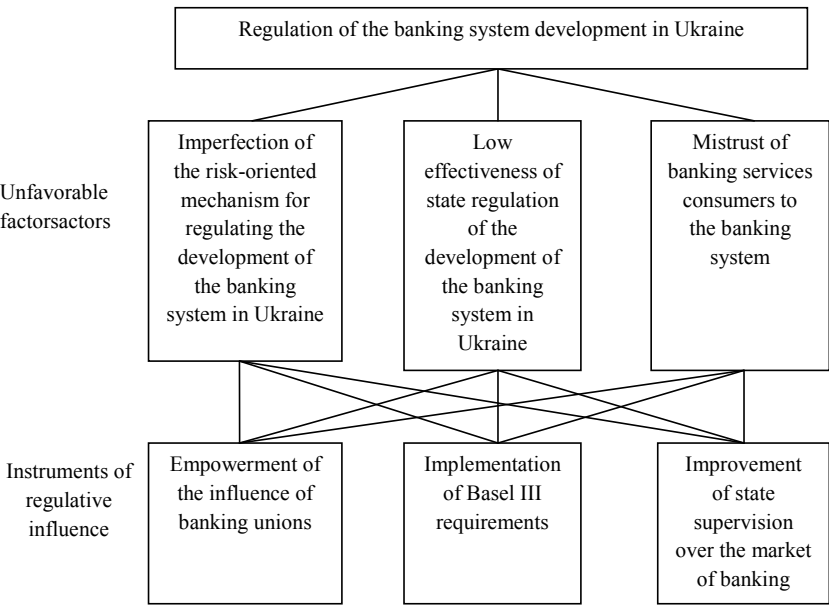
<sup>9</sup> <https://www.bis.org/publ/bcbsca.htm>.

states. However, the EU does not consist exclusively of large financial institutions, since there are more than 8000 small banks in Europe accounting for a quarter of the total volume of bank assets in the EU<sup>10</sup>, and the possibility of the economic crisis will affect other member countries on a chain-of-principle basis. As a result of the potential consequences of bank failures, EU governments have recognized the urgent need to provide funding to the private sector despite the fact that such actions violate the traditional EU policy.

In order to determine the priorities of regulatory instruments to influence the development of the banking system in Ukraine, the authors suggested using the Analytic Hierarchy Process by T. Saaty (Saaty, 2004), which is a tool of system analysis. Unlike other methods, T. Saaty's method for analyzing the hierarchy involves calculating the priorities of alternative solutions to the main goal. The best alternative is considered as the highest priority value. The main advantage of this method is the ability to solve a complex decision-making problem.

In order to assess the priority of regulatory instruments for the development of the banking system in Ukraine using the hierarchy analysis method T. Saaty (Saaty, 2004), a model to regulate the development of the banking system in Ukraine (Figure 1) was developed.

Figure 1  
Regulation model of the banking system development in Ukraine



Source: own on the described data sample (SSSU 2018)

<sup>10</sup> <http://elibrary.law.psu.edu/cgi/viewcontent.cgi?article=1072&context=jlia>

As shown in Figure 1, the model of regulation of the development of the banking system in Ukraine is three-tier and includes the goal of regulating the development of the banking system in Ukraine; adverse factors and regulatory instruments.

The hierarchical model allows to determine pair-wise comparison of priority instruments of regulatory influence on compensation of adverse factors (Pukala, 2017) (imperfection of the risk-oriented mechanism of regulation of the development of the banking system in Ukraine, low efficiency of state regulation of the development of the banking system in Ukraine, distrust of consumers of banking services to the banking system) (Table 8).

Table 8

Identification of priority instruments of regulatory impact on the banking system development in Ukraine

Regulatory impact tools	Imperfection of risk-oriented mechanism for regulating the development of the banking system in Ukraine	Low effectiveness of state regulation of the development of the banking system in Ukraine	Mistrust of banking services consumers to the banking system	Priority	Rank
	0,584	0,281	0,135		
Empowerment of the influence of banking unions	0,135	0,105	0,584	0,187	3
Implementation of Basel III requirements	0,584	0,258	0,135	0,432	1
Improvement of state supervision over the market of banking services	0,281	0,637	0,281	0,381	2

*Source: Pukala, 2017.*

As shown in Tab. 8, the adverse factors have the following priority: the imperfection of the risk-oriented mechanism for regulating the development of the banking system in Ukraine is 0.584, the low efficiency of the state regulatory system for the development of the banking system in Ukraine is 0.281, and the mistrust of the banking services consumers to the banking system is 0.135, respectively.

It has been established that the regulatory influence instruments have the following priority: strengthening the influence of banking unions is 0,187, the requirements of Basel III is 0,432, and improvement of state supervision of the banking services market is 0,381.

Thus, the implementation of Basel III requirements is a priority regulatory influence on the development of the banking system in Ukraine.

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The Basel Committee on Banking Supervision is continuously monitoring the state of adoption of the Basel III Standards. The researchers therewith note some of the negative results of such a globalized regulation. Firstly, there is a risk that the impact of Basel III will be diluted by the changes at the national level as exemplified by the EU, in the member states making a decision to follow the implementation of the Basle III rules. Switzerland has intensified the recommendations of Basel III, but, acting ahead of Basel III's final recommendations, Swiss banks may face a lack of competitiveness.<sup>11</sup> As for the Ukrainian legislation, similar requirements to the capital of banks are regulated in the Instruction on the procedure for banking regulations in Ukraine, approved by the Resolution of the Board of the National Bank of Ukraine as of 28 August 2001, No. 368 (hereinafter referred to as Instruction No. 368). Thus, in this Instruction, similar norms are defined as tier I capital adequacy ratio (N3) (tier 1 capital under Basel III), which should be not less than 7% (since 1 January 2019), regulatory (adequacy) capital adequacy ratio (N2), which corresponds to the capital ratio in the EU and is defined as the ratio of regulatory capital to total assets and certain off-balance sheet instruments weighted with the degree of credit risk after their reduction in the prescribed manner and for operating banks to be at least 10%.

Moreover, in accordance with Paragraph 129 Basel III, the capital conservation buffer is formed over the normative value of fixed capital and is set at 2.5%. In Ukraine, in accordance with Instruction No. 368, a similar stock buffer (capital conservation) is introduced from 1 January 2020 and gradually increases to 0.62% to 2.5% by 1 January 2023.

Basel Committee documents called Basel III consist of International Foundations for Assessing Liquidity Risk, Standards and Monitoring<sup>12</sup>; Common Regulatory Basis for Enhancing Banking Resilience and Banking Systems.<sup>13</sup> The adoption of Basel III is aimed at addressing the crisis phenomena that arose in 2008. In order to address market problems identified by the crisis, the Basel Committee proposed the reform of an international regulatory framework to strengthen the banking level or microprudential regulation, which would enhance the sustainability of a particular financial institution during periods of stress. Reforms are macroprudentially focussed on managing system-wide risks that can be created in the banking sector and their cyclical gains. These micro and macroprudential approaches to supervision are interconnected, since with greater stability at the individual level of the bank the risk of system-wide shocks is reduced.<sup>14</sup> Basel III seeks to increase the required capital adequacy ratios compared to Basel II, which provide stricter risk assessment criteria, as well as to increase liquidity.

Basel III innovations also include a dynamic reserve, which will operate under the scheme of accumulation of funds in the phase of credit boom and loss during the crisis while not putting pressure on profitability and equity. The previous system provided for the creation

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<sup>11</sup> <http://elibrary.law.psu.edu/cgi/viewcontent.cgi?article=1072&context=jlia>

<sup>12</sup> <https://www.bis.org/publ/bcbs188.pdf>

<sup>13</sup> <http://www.bis.org/publ/bcbs189.pdf>

<sup>14</sup> <https://www.bis.org/publ/bcbs189.pdf>.

of reserves for possible losses during the default, which inevitably worsened the already difficult position of the bank (Kushnir, 2016).

As a result, according to O. Ivanytska, the basic provisions of capital and liquidity standards, according to Basel III, include a higher requirement for a minimum capital of the first order, a new capital conservation buffer, a countercyclical buffer, a capital ratio to borrowed funds, the minimum level of the aggregate coefficient of capital adequacy.<sup>15</sup> Thus, in Art. 26 (EU) 575/2013, tier one capital includes: (a) equity instruments subject to the requirements of Articles 28, 29 of this Regulation; (b) paid-in capital in excess of par value from the issue of instruments specified in Par. a of Art. 26 of this Regulation; (c) retained income; (d) accumulated other total revenue; (e) other reserves; (f) general reserves for bank risks. The additional level 1 capital consists of the following elements: (a) of the level 1 supplementary capital instruments that do not relate to equity instruments of level 1 or level 2; (b) issue proceeds from the issue of instruments specified in paragraph “a” of Article 51 of this Regulation. According to Art. 62 tier 2 capital consists of the following elements: (a) from instruments and subordinated loans provided for in Article 63 of this Regulation; (b) issue proceeds from the issue of instruments specified in paragraph a of Article 62 of this Regulation; taking into account the adjustment requirements as well for the credit risk factor provided for in this article.

The listed documents of the Basel Committee systemically improve, depending on the sequence of their adoption, components of banking supervision and regulation. As noted by three such traditional components are: Enhanced Minimum Capital & Liquidity Requirements; Enhanced Supervisory Review Process for Firm – Wide Risk Management and Capital Planning; Enhanced Disclosure & Market Discipline”.<sup>16</sup>

As for the banking system of Ukraine, the Basel Accords are, firstly, necessary for carrying out transactions in international markets, and, secondly, in the event of the introduction of their requirements into NBU’s normative acts namely.

What concerns modernization of the requirements of the Basel Committee, according to the Association of Ukrainian Credit and Banking Union (UKBU), the fulfillment of the regulatory capital adequacy ratio is more significant than the compliance with the minimum statutory capital, as provided in Basel III (Konopatska, 2012).

## Conclusions

Program documents for development of the banking system in the context of the formation of Ukrainian economy should be adopted at the level of laws with a clear regulation of the powers of state authorities responsible for implementation of the statutory provisions.

The Basel Capital Accord is a powerful and complex project, the successful implementation of which requires special training of both supervisors and banking institutions. Most of

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<sup>15</sup> <https://www.bis.org/publ/bcbs128.htm>.

<sup>16</sup> <http://repository.law.umich.edu/mjil/vol36/iss1/2>.

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Basel regulations are quite complex, so their full application in banking practice in Ukraine requires gradual reformation.

Basel II provides three alternative methods to measure operational risk, each of which has its orientation: the base indicator method determines the largest amount of capital reserve and is the least sensitive to risk, calculation of the coefficient of equity capital adequacy, taking into account operational risk volumes by the alternative standardized method and according to the basic indicators method there are no significant differences.

Moreover, there is some inconsistency in these approaches, which requires the transition to Basel III, which according to the calculations carried out by the authors will have a priority regulatory influence on the development of the banking system in Ukraine.

The implementation of recommendations of the Basel Committee in Ukraine is an element of the competitiveness of the banking system, since the Basel Capital Accord has modern approaches to banking regulation and supervision, the main purpose of which is to ensure the capital adequacy of banks and to improve the risk management system that will contribute to its sustainability.

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## THE REMIGRATION: CAUSES AND SUSTAINABILITY (THE BULGARIAN CASE)<sup>2</sup>

*The paper deals with the causes and sustainability of remigration, carried out by the Bulgarian migrants. It is focused upon the returnees' own interpretations of the reasons behind their migratory behavior and the subjective meaning of their migratory movements. Comparisons are made between the motives for departure, return and re-departure as components of the overall migration trajectories. The return is looked upon in the overall context of mobility either as a split moment within it, or as a final point. Diverse economic and non-economic motives for return are identified. The relationship between the sustainability of return and the causes of initial migration and subsequent remigration is analyzed.*

*JEL: A14; F22; J61*

The paper is based on information received within the framework of the research project "Return Migrants: Segmentation and Stratification of Economic Mobility", lead by the author.<sup>3</sup> It adopts the idea, that the traditional migration movement between "sending" and "receiving" countries is being transformed into various forms of multi-directional and permanent mobility. The report seeks a more nuanced explanation of both the causes of the fluid trajectories of modern international mobility ("departure – return – new departure") and the sustainability of the return.

### Reasons for initial migration

The understanding of causes for migratory movements is central to the theoretical interpretations and empirical studies of migration (Massey, Arango, Hugo, Kouauci, Pellegrino, Taylor, 1993). The reasons for going abroad, return and new remigration vary

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and range from individual and family reasons to macroeconomic, social and political ones that are related to the situation in host and home countries.

The obtained empirical data<sup>4</sup> supports the conclusion that economic reasons are leading to the initial departure, but social and family motives dominate the remigration process. Almost three-quarters of those returning to Bulgaria (73%) point to motives of an economic nature as the main reason behind their initial departure. They are mainly related to the triad "job-income-living standard": "to get higher payment" (33.1%); "I was unemployed in Bulgaria" (10.8%); "to find a better job" (10.1%); "to have a higher living standard" (8.8%).

The reasons for emigration are rather complex with 86.7% of the returning migrants pointing to the second motive and 69.7% to the third. Components of the motivational triad "job-income-living standard" again dominate among the three main reasons for initial departure – seeking for higher payment (69.0), finding a better job (38.4%) or any kind of job (19.5%), higher living standard (27.8%). Family reasons for migration are second in importance: "to support my family or other relatives in Bulgaria" (32.0%), "to join parents and/or relatives" (19.0%), "to accompany spouse, partner, parents, children" (7.0%), "marriage/partnership" (0.8%). Every tenth has pointed to an education related motive – "to provide better education/future to my children" (6.3%) and "to receive the desired education" (4.0%).

### **Reasons for return**

The reasons for return are complex and are not associated with just one cause. King (King, 2000) distinguishes four main types of reasons for return:

1. Economic reasons. They relate to the possibility of receiving higher incomes, finding a better job, opportunities for professional realization, worsening of the economic situation in the host country, starting a business and/or investing in the country of origin and others.
2. Political reasons that also examine a wide range of possibilities: discriminatory attitude towards migrants and violations of their rights, implementation of active national return policies, voluntary return for participation in the political life, forced expulsions, etc.
3. Social reasons are no less diverse: difficulties in adapting and integrating in the host country, homeland nostalgia, involvement in public initiatives and projects, desire to contribute to the country, etc.
4. Family reasons related to the cycle of individual and family life and relationships such as: care for elderly or sick parents; search for a partner and/or marriage; desire to raise the children at home and/or receiving education in their native language, with the help of the parents; return after retirement and others.

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<sup>4</sup> All data cited in the report are obtained by a survey of returned migrants within the research project "Return Migrants: Segmentation and Stratification of Economic Mobility" carried out in 2018 among Bulgarian citizens (18+) who have worked at least once abroad for a minimum period of three months during the last 10 years (2008-2017)

There are significant discrepancies between the reasons for return and those for departure (Table 1). Family motives are among the three most important reasons for remigration: "affection for the family and my relatives in Bulgaria" (55.9%), "to raise and/or educate the children" (15.7%), "to care for an elderly or sick relative" (13.9%), "to marry in Bulgaria and live here" (5.5%), "retirement" (3.8%).

The role of social motives is also important both in terms of the growing attractiveness of the home country (pull factors) but also the role of push factors in the host country. Among the pull factors to Bulgaria, the most significant is the "home nostalgia" (25.5%) and among the push factors – the difficult adaptation in the host country (16.2%) and the reluctance to live abroad (15.9%). They are supplemented by reasons such as uncertainty for immigrants in the country of residence (10.3%), inability to legalize stay in the host country (5.5%), intolerance/discrimination in the country of residence (5.5%).

Economic reasons for return play a less significant role as compared to their importance for the initial departure. About 40% of respondents do not mention an economic motive for remigration. Among the economically motivated returnees, the share of the seasonal workers group is almost one third (32.0%). Almost equal is the share (about 40% of the respondents) of returnees facing problems in the host country, and those who see better economic opportunities in Bulgaria.

Table 1  
Main reasons for initial migration and for return (% of all respondents)

Reasons for initial departure			Reasons for return		
<i>Three main economic reasons</i>	<i>Main reason</i>	<i>Among the three main reasons</i>	<i>Three main economic reasons</i>	<i>Main reason</i>	<i>Among the three main reasons</i>
To get higher payment	33.1	69.0	My job was seasonal/temporary	22.7	32.0
To find a better job	10.4	38.4	I expect living conditions in Bulgaria to improve	8.3	18.9
To have higher living standard	8.8	27.8	I lost my job/I was not able to find a job in the host country	6.5	12.7
<i>Three main family related reasons</i>	<i>Main reason</i>	<i>Among the three main reasons</i>	<i>Three main family related reasons</i>	<i>Main reason</i>	<i>Among the three main reasons</i>
To join parents and/or relatives	14.7	19.0	Affection for the family and my relatives in Bulgaria	34.9	55.8
To accompany spouse, partner, parents, children	4.3	7.0	To care for an elderly or sick relative	8.3	13.9
To support my family or other relatives in Bulgaria	4.1	32.0	To raise and/or educate the children	5.5	15.7

The "negative" economic motivation associated with push factors in the host country is due to reasons such as: "it is difficult to find legal employment (with official contract and

insurance) in the country of residence" (13.4%), "I lost my job/I was not able to find a job in the host country"(12.7%), "not worth it – higher incomes but higher spending in the country of residence"(10.8%), "I paid high taxes and social security contributions in the country of residence"(2.8%).

The economic attractiveness of Bulgaria is manifested in optimistic attitudes and several groups of positive motives for return: "I expect living conditions in Bulgaria to improve" (18.9%), "professional realization in Bulgaria" (8.6%), "opportunities for better job/business in Bulgaria"(7.1%), "to develop my own business here/to invest here"(5.3%).

For a specific event that affected the decision to return report 32% of the people surveyed. This event is primarily related to the need to take care of a family member (a parent, a child, a spouse, a relative) because of their worsened health or the need for special care. A common cause of return is also the deteriorated own health condition. The decision to return to Bulgaria is usually taken alone (53%) or together with the family (37%).

Over 90% of the respondents were not influenced by any specific policy measures implemented by the Bulgarian government. More than half (58%) of the surveyed have not needed any support after their return. The others needed the greatest support in terms of finding a job (25%), financial support (9%), psychological support (9%), housing support (4%), support for children education (1.3%). Zareva (2018: 79) also concludes that strategic goal to encourage the return of Bulgarian migrants has not been supported by specific measures and activities and tangible effect has not yet been achieved.

### **Reasons for subsequent migration**

A summary of the three most important reasons for subsequent migration among respondents who are willing to emigrate again is presented in Table 2.

The reasons for subsequent emigration are complex and similar to those for initial emigration. The great majority (86.0%) of returning migrants wishing to emigrate again point to a second, and 70.9% – to a third motive for leaving the country. Components of the motivation triad "job-income-living standard" also dominate the willingness to leave again among the three main reasons for leaving the country – a desire for higher pay (64.6%), striving for a higher standard of living (44.8%), finding a better job (20.2%) or any job (10.7%). More than half of those willing to emigrate again (55%) refer to economic motives as the main reason for departure: "getting a higher payment" (32.5%); "I am unemployed in Bulgaria" (2.5%); "to find a better job" (5.8%); "to have higher living standard" (14%).

Table 2

Reasons for subsequent migration  
(% of those willing to emigrate again temporarily or permanently)

	First place	Second place	Third place	Total
To join parents and/or relatives	11.1	2.4	1.2	14.7
To accompany spouse, partner, parents, children	3.3	0.4	1.2	4.9
Marriage/partnership	2.1	0.8	1.6	4.5
To acquire foreign citizenship for me and my family	0	0	0.4	0.4
To continue my education	0.8	0.8	0	1.6
To provide better education/future for my children	8.6	5.6	3.7	17.9
To have a higher living standard	14.0	22.2	8.6	44.8
To get higher payment	32.5	23.0	9.1	64.6
To find a better job	5.8	7.8	6.6	20.2
For better professional realization	4.1	4.5	9.1	17.7
To develop my own business	1.6	0.4	0.8	2.8
To support my family or other relatives in Bulgaria	4.1	8.2	9.1	21.4
Business trip	0.8	0	0.4	1.2
I am unemployed in Bulgaria	2.5	2.9	5.3	10.7
I have seasonal / temporary work abroad	2.9	4.5	1.2	8.6
Other reasons	5.3	2.9	2.5	10.7
No response	0.4	14.0	39.1	53.5

The second most important reasons for emigration are the family reasons: "to support my family or other relatives in Bulgaria" (21.4%), "to join parents and/or relatives" (14.7%), "to accompany my husband, partner, parents, children" (4.9%), "marriage/ partnership" (4.5%). Nearly every fifth pointed an education-related motif – "to provide better education/future to my children" (17.9%) and "to continue education" (1.6%).

The empirical data obtained supports the conclusion that economic reasons are leading both in the initial and the subsequent exits of the country, but social and family reasons dominate the remigration. Similar results from a qualitative study have been reported by Bakalova, Misheva (2018).

### Sustainability of return

It is appropriate to interpret migration in the context of the overall life and migration cycle of returnees. Accordingly, several typical categories of migrants are distinguished, for which return has different meanings and is ambiguously assessed – such as success, failure or temporary condition. This subjective interpretation also affects the desire to remain within the country of origin or to remigrate temporarily or permanently.

Depending on the sustainability of return, several categories of migrants are usually identified:

- a) migrants permanently returned to the country of origin with the idea of remaining there for the rest of their lives;
- b) temporarily "returning" migrants who are planning to leave again;
- c) "circular migrants", who alternate between periods of stay abroad and remaining home.

According to the migrants' initial intentions, several categories are distinguished (King, 2000):

- "Migrants with a purpose" who are leaving their home country with the intention to return and who actually return. They have specific plans and return after achieving the goal placed behind their mobility (education, earning a certain amount of money, buying property, performing specific activities/tasks, etc.).
- Migrants with the intention of permanent emigration who nevertheless return. Reasons for remigration could be external and coercive, personal or family, favorable changes in the country of origin or deterioration of the situation in the destination country.
- Migrants who intend to stay abroad temporarily and who do not return (for example, students who remain in the host country or labour migrants who have not planned but have decided to stay permanently in the host country).
- Migrants who are leaving with the intention of not returning.

Empirical evidence confirms the existence of a relation between migrants' initial projects and the time horizon of return (Mintchev, Boshnakov, 2018, p. 56-62), but this relation shall not be read in absolute terms as some considerable discrepancies are registered between departure intentions and actual migratory behavior (Table 3).

Table 3

Initial migration projects and return sustainability (%)

	Initial intention- permanently	Initial intention- temporarily	No specific intention	Total
I would like to stay in Bulgaria	42.4	63.6	51.8	59.7
I would like to leave again permanently	36.4	7.1	20.5	12.1
I would like to leave again temporarily	21.2	29.4	27.7	28.2

Based upon the empirical data, several conclusions concerning the returning migrants' dilemma of "staying or going back" can be drawn:

First, returning migrants, who intend to remain permanently in Bulgaria prevail – their share is 59.7%. The share of returning migrants with the intention of remaining permanently in Bulgaria is the highest among those who were initially oriented to temporary emigration – 63.6%. Among those intending to leave forever, this share is by 21.2 percentage points lower (42.4%), and among those who did not have clear migration plans – by 11.8 percentage points lower (51.8%). However, it is noticeable that the original migration projects are subject to reconsideration and do not explicitly define subsequent migratory behavior.

Second, the stay in Bulgaria is only a phase of mobility for 28.2% of returning migrants who intend to leave again, but temporarily and without seeking to settle permanently abroad. The share of returnees who have seasonal employment is 22.7%. Attitudes to new temporary migration remain relatively stable among returning migrants, irrespective of their original projects. Their share ranges between 21.2% for people oriented towards permanent leave and 29.4% – towards temporary migration.

Third, the category of returnees who intend to emigrate permanently is 12.1%. The strongest desire for new and final emigration is registered among returning migrants who, still at the first migration, intend to leave the country permanently (36.4%). The most likely explanatory hypothesis for their return is the failure so far in the implementation of their migration plans or the emergence of specific circumstances that have imposed temporary residence in Bulgaria. For almost a third of the returnees (31.5%), remigration is caused by some objective economic, family or personal circumstances (migrant or relatives' disease, care for elderly parents, children or grandchildren, loss of work, termination or expiration of employment contract, expiry of a visa or a legal stay permit, etc.).

Forth, the category of "successful migrants" who have had specific plans (education, earning a specific amount of money, buying property, performing a specific activity/task, etc.) and return after their goals completion is markedly visible. Achieving the goals, which provoke initial migration, has been pointed as a motive for return by 40.7% of the remigrants (as the first reason – 21.2%, second – 12.9% and third – 6.6%). Almost three-quarters of the surveyed returnees (74.5%) respond positively to the question: "Did you manage to achieve the goals behind your decision to migrate?".

The data reaffirms the existence of a significant group of migrants who are not oriented towards an irrevocable exit from the country, but instrumentalize migration as a means of achieving certain goals ("migrants with a purpose", according to the King's above-mentioned typology). They largely represent the contingent of migrants who are likely to return to Bulgaria after accomplishing upward social and economic mobility.

## **Conclusions**

Several conclusions can be drawn regarding the reasons and the sustainability of the remigration carried out by Bulgarian migrants:

Firstly, return increasingly becomes only a moment or phase of the migratory movements that can not be interpreted as one-way or final. At the same time, although many migrants prefer short-term, circular or temporary mobility, the majority of surveyed returnees express a desire for remaining permanently in Bulgaria.

Secondly, there are significant differences in motivation when it comes to initial migration and returns. The main reasons for the initial departure are mostly of an economic character and are closely related to the motivational set "jobs – income – living standard". Among the reasons for return, the family motivations are the most important – affection for the family in Bulgaria, desire to be with children and participate in their raising and education, care duties towards older or sick relatives and others. The social and emotional motives are also

relevant, both in terms of pull factors (mainly defined as “nostalgia”) and of push factors in the host country (such as difficulties in adaptation and the reluctance to live abroad).

Thirdly, significant is the share of "successful migrants" who have had specific plans and have returned after their accomplishment. Almost three-quarters of the returning migrants perceive themselves as having succeeded in achieving the goals that motivated their departure. For them, the undertaken mobility bears a positive personal meaning, leads to an upward social and economic mobility and increases the likelihood for a permanent return to Bulgaria.

Fourthly, the return has not been motivated by the governmental policies, which seem to be ineffective. Adequate policies for return and reintegration into the public, economic and political life of returnees still have to be developed and implemented.

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## FUTURE PLANS OF BULGARIAN CIRCULAR MIGRANTS: EMPIRICAL EVIDENCE FROM BUS TRAVELERS

*The paper provides evidence about the future plans of Bulgarian migrants that use regular bus lines to travel to the European destination countries. The analysis utilizes data from a questionnaire survey conducted in 2018 among 305 migrants interviewed at the major nodes of the international bus transport infrastructure in Bulgaria. The future plans of these migrants are focused mainly on: (i) continuing their life in both home and host countries or (ii) searching for options to stay abroad for a longer period. In the same time, non-negligible shares of respondents (iii) still hesitate about their future plans or (iv) have expressed intentions to stay permanently in Bulgaria. Using multinomial logistic regression model, a set of variables that reflect: (a) socio-demographic status, and (b) the migration experience have been tested for potential significant effects on the choice reflecting the individual future plans of respondents.*  
JEL: F22; C35; J15

### Introduction

Circular migration is not a new phenomenon concerning the international migration of Bulgarian citizens since the start of the social and economic transformation in the early 1990s. The debate about the impact of short-term labor migration on the domestic labor market is not only academic but has also various political dimensions, e.g. economic, demographic, social, etc. There is still not a clear definition of circularity and in many cases an individual can be identified as either circular or return migrant depending on the implemented criteria.

Generally, economists argue that a more liberal regime of intra-EU labor mobility can potentially uphold the efficiency of the common EU labor market at a degree even higher than the liberalization of capital and product markets. Notwithstanding the adverse demographic trends and the voices for emphasizing a “demand-driven” European immigration policy regarding the non-EU incomers, the processes of temporary intra-EU labor migration still attract a high interest from both researchers and policymakers (Schneider & Wiesbrock, 2011). Engbersen et al. (2017) discuss the recent trends in the

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intra-EU mobility following the EU enlargements in 2004 and 2007 that induced new migration flows from Central and Eastern Europe (CEE). The analysis reveals that the current migration regime has induced a substantial diversity and complexity of contemporary intra-EU labor migration. Nevertheless, labor migrants from the new EU members from CEE are mostly involved in a temporary kind of labor mobility, however, often aspiring to achieve a long-term – or at least mid-term – settlement in Western or Northern Europe.

Indeed, the spread of the phenomenon during the last few decades still keeps the debate in Europe concerning the potential benefit of the circular labor mobility which focuses the interest of EU migration policies (Geddes, 2015). This definitely requires a collection of relevant information to support a knowledge-based decision making at EU level that can legitimate the respective institutional roles. In this respect, numerous researchers have focused their attention on the typology of labor migration with a special emphasis on CEE source countries. Using empirical data, Engbersen et al. (2013) have developed such a typology concerning migrants from CEE in respect of their attachment to (i) the home and (ii) the host country. Analyzing data about Polish, Bulgarian, and Romanian migrants hosted in the Netherlands these authors identified a diversity of temporary migrant types, e.g. (a) weak attachments to the destination country; (b) transnationals having strong attachments to both host and home country; (c) low-committed individuals with weak attachments to both countries; (d) individuals expressing weak attachments to the home country (potential settlers). In this respect, other authors emphasize on the need for designing policies specific to the different types of mobility taking into account the consequences of circular migration for the social welfare of the migrants and their families. Although there is no doubt that short-term migration supports the subsistence and helps to minimize welfare risks, the long-term pattern seems to have a much higher potential to substantially improve the economic situation of those involved in intra-EU mobility (Skeldon, 2012). In this line, Doornik (2013) discusses the extent to which circular mobility could in effect substitute any practiced “guest worker” schemes in light of the fact that EU labor market demand grows regarding both the highly skilled and the unskilled segment. What concerns the latter, such demand could be satisfied by schemes facilitating an effective circular intra-EU migration especially supported by the European Commission.

### **Survey evidence about short-term mobility: A short review**

Along with the expanded intra-EU migration policy interests in temporary migration, research work has been focused intensely on the circular migration drawing from the revealed potential benefits to any party involved in it, including the host and the home country, notwithstanding the participating migrants themselves. Leading authors on the economics of short-term migration discuss the advantages of circular movement of labour “back and forth” between the destination and sending countries (Constant et al., 2013). It is not surprising that such conclusions are supported by numerous studies indicating a mixture of effects.

In this respect, evidence for temporary labour mobility is provided by many studies of Polish and Romanian international migration as far as the population scale of these countries dominates the phenomenon in its CEE dimension. For example, by studying the migration of healthcare and eldercare workers since the full EU membership of Poland Goździak (2016) shows that Polish migration “*has become ‘liquid’ and has often taken on a form of ‘pendulum’ or ‘circular’ migration and, in some cases, transnational commuting*”. It is especially valid for the residents of border settlements that have more opportunities for short-distance traveling and even commuting to the host country cities located close to the border; this is however not the case with far destinations that are not suitable for circular labour migration. In the same time, a similar situation emerges also at the Polish-Ukrainian border due to a temporary migration regime promoted by Poland. Based on a study of this case Górny (2017) suggests a typology of temporary migrants by analyzing the interactions between the individual characteristics of the short-term migrants and their mobility patterns – it is shown that the majority of migrants are circulars practicing either regular or sporadic temporary cross-border moves.

Short-term mobility is also well known practice of the migrants from the Balkan sending countries. Various studies are focused on the migration inflows to Greece as the closest destination job market for more than 20 years. Sintès (2007) summarizes the main features of the Balkan workers' mobility to Greece where they succeeded to find “*low-paid, unattractive jobs rejected by nationals*”. The evidence from that period showed that guest employees originate mainly from Albania (57%) and in much lower extent from Bulgaria (5%) and Romania (3%), with a predominantly seasonal character of their mobility (getting jobs for few months per year) highly dependent on informal migration networks. Balkan short-term mobility happens in a substantial extent out of the regulated employment channels which have been studied recently by Didier and Nesturi (2018). These authors develop a model of the individual choice of unauthorized migration evaluated empirically on the basis of data from interviews with Albanian return migrants. This analysis shows that unauthorized mobility happens predominantly in a circular mode and is performed mainly by young and male individuals (prone to risk-taking) typically without family and/or social duties.

Numerous studies on the international mobility of Bulgarian citizens explored the phenomenon that boosted since the start of the social transformations at the end of the 1980s. The country passed through several periods each of which contributed to the external migration of Bulgarians, albeit in different ways, e.g. economic and international trade collapse during the market reforms of the early transition period (1990-1995); bank system and hyperinflation crisis (1996-1997), introduction of the currency board agreement and macroeconomic stabilization (1998-2000), abolishment of the Schengen visa regime for Bulgarians and EU accession period (2001-2006), and the period of full EU membership since year 2007 (including a 7-years-long initial restriction period for Bulgarians on the labour markets of several EU member states). In a comprehensive study of IOM Guentcheva et al. (2003) present a review of the available information about the international migration of Bulgarian citizens that gives a hint about a tendency of domination of the temporary (e.g. seasonal) over permanent migrations, identifying Greece, Spain, Italy, Germany, and The Netherlands as most preferred destination. At the start of the EU accession period, the research revealed the search for better-paid jobs as a major

motive for outmigration of Bulgarians as well as the main sectors of employment of the seasonal migrants, namely agriculture, housekeeping, domestic care, construction, tourism (i.e. hotels and restaurants), etc.

A highly informative review of research on Bulgarian external migration is provided by Mancheva and Troeva (2011) in relation to issues of gender, intercultural interactions, religion, and transnational families' occasions. When considering the option for a return, however, major barriers to the integration of the migrants into the Bulgarian labour market are identified. In this respect, Zareva (2018b) presents evidence regarding some effects of the return of Bulgarian migrants evaluated on the basis of representative sample survey considering the work status, employment by economic activities and qualifications, and comparison of the labour market status prior to departure and after the return to the home country. In a migration policies context, Zareva (2018a) provides an analytical overview of Bulgaria's migration policy intended to promote and sustain the return of Bulgarian migrants.

Mintchev (2009, 2016a) presents rich empirical evidence from a series of representative sample surveys concerning the profiles of Bulgarian migrants interviewed at home during periods of return as well as their inclination towards new migration moves. On the contrary, Markova (2010) and Kovacheva (2011) discuss findings concerning the experience of Bulgarians interviewed during their visits abroad. A variety of evidence regarding the short-term movement of Bulgarians after the EU integration of the country is provided by numerous studies. Ricci (2015) confirms that since the start of the EU accession period the southern host countries (not only Greece but also Italy and Spain) became popular destinations for Bulgarian migrants – both permanent and temporary – characterized by intensified social- and work-related integration, particularly in agriculture and service sectors. Viruela and Marcu (2015) analyze the shifts in individual strategies of Eastern European immigrants in Spain since the start of the global economic crisis. Their analysis is based on in-depth interviews with 64 citizens of Romania and Bulgaria residing in Spain, along with interviews with family members and returnees at the home countries. The study reveals that both internal and transnational geographical mobility of the Romanian and Bulgarian migrants emerges as a response to the worsening of the Spanish labour market conditions – particularly, options for circular migration, return to the home country, or a move to a third country. In the same time, some evidence about seasonal unskilled labour migration from Bulgaria is provided regarding the employment of Roma pickers in the Swedish berry industry (Mešić and Woolfson, 2015). After describing the living and working experience of these migrants the authors derive challenges for the European labour market originating from a possible erosion of labour regulations and standards.

Very few studies are focused on external migration that utilizes international bus lines routes. Mihailov (2016) provides empirical evidence from a sample questionnaire survey of Bulgarian migrants travelling to Switzerland by two transportation means: airplanes and busses. In a search for indications about any divergence of the profiles of Bulgarian migrants that use the two options the author shows how approaching the individuals from different social strata – one of them allocated predominantly at the airport and the other at the bus station respectively – can reveal diverse patterns of migration concerning the networking models, education, and employment abroad. In a more focused study Mintchev

(2016b) presents a variety of results from a sample questionnaire survey of Bulgarians that use bus lines to travel from Bulgaria to Germany in 2012. Analyzing data from about 800 face-to-face interviews with passengers leaving from major cities of the country (Sofia, Plovdiv, Varna, Ruse, Stara Zagora, Pazardjik, Kardjali, and Haskovo) two main profiles are delineated: those residing permanently or temporary in Germany. For example, temporary migrants express a much clearer intentions regarding their future moves, namely, to retain in short-term circulation (over 70% of the respondents from this category).

The latter study provided important indications about the incidence of the case of circular labour migration that utilizes international bus routes.

There is no doubt that short-term mobility could be an important alternative for job seekers from CEE as compared to emigration with a settlement purpose. The current study contributes to the existing literature on Bulgarian labour migration by providing empirical evidence about a major set of determinants of the intended future moves of Bulgarian migrants travelling by bus lines.

## **Data source**

The current empirical study utilizes data from a sample questionnaire survey conducted among Bulgarian travelers that use international bus lines for their trips abroad (more details in Mintchev et al., 2019). The sample is selected on target locations – major bus stations for international lines, mainly to Central and Western European final destinations. Three main strata are defined: travelers that use one of the main international bus stations located in the cities of Sofia (capital), Plovdiv, and Varna. These locations provide bus lines for the vast majority of travelers that use such type of transportation means (i.e. points of concentration of transport flows). At the first stage, a random selection of busses (nests) has been performed using the list of buses departing from each location during the survey period (4 weeks). At the second stage, from each nest, few respondents are selected randomly and invited for an interview. The circumstances of such fieldwork do not allow a long duration of the interview, so a specifically developed short questionnaire<sup>2</sup> has been utilized.

The planned sample size was 300, however, 305 interviews have been successfully conducted in the period April-May 2018 – 205 in Sofia, 58 in Plovdiv, and 48 in Varna. The unit is defined as: (i) individual of 18 or higher age; (ii) who has been at least once abroad; (iii) for a period of at least 3 months; (iv) during the last 10 years period: 2008-2017; (v) with a purpose of work or study abroad; and (vi) at the moment of the survey departs to foreign country by an international bus line. During the last stay abroad, the vast majority of respondents declared to have worked as employees (279); minor groups

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<sup>2</sup> Team executing a research project under the Contract DN05/6-14.12.2016 “Return Migrants: Segmentation and Stratification of Economic Mobility” financially supported by the National Research Fund. Ministry of Education and Science, Republic of Bulgaria (joint team of the University of National and World Economy and the Economic Research Institute of the Bulgarian Academy of Sciences).

indicate to have been self-employed (11), students (13), taking care for relatives (1) and non-responded (1). When asked for the type of labour contract which they had during their last stay abroad, almost half (49%) of those that have worked declared a temporary contract, 32% a permanent job contract, and 15% no formal contract. As a main destination countries of the last visit have been reported: Germany (35%), Austria (18%), Greece (15%), Czech Republic (7%), etc. On this basis, the analysis further is restricted to the major subsample of 290 labour migrants (employees and self-employed/family firm workers) that has provided data for the analysis in the current study.

### Research framework

The goal of this analysis is to identify the main characteristics of the travelers using international bus lines that significantly correlate with a systematical choice of one or another alternative for the individual plans for her/his future. Appropriate variables have been constructed for each of these characteristics in order to incorporate them into a multivariate response model. In order to test for significance of the effect of each variable on a net basis, i.e. other things equal, a multinomial logistic regression model is adopted in the current study. This model has been estimated in the following nonlinear form:

$$\text{Ln} \left( \frac{\pi[Y = j]}{\pi[Y = 1]} \right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k + \varepsilon \quad (1)$$

and in its estimated forms:

$$\text{Ln} \left( \frac{p[Y = j]}{p[Y = 1]} \right) = b_0 + b_1 X_1 + b_2 X_2 + \dots + b_k X_k \quad (2)$$

$$\frac{p[Y = j]}{p[Y = 1]} = e^{b_0 + b_1 X_1 + b_2 X_2 + \dots + b_k X_k} \quad (3)$$

$$\frac{p[Y = j]}{p[Y = 1]} = e^{b_0} (e^{b_1})^{X_1} (e^{b_2})^{X_2} \dots (e^{b_k})^{X_k} \quad (4)$$

The estimates  $b_0, b_1, b_2, \dots, b_k$  of the model parameters  $\beta_0, \beta_1, \beta_2, \dots, \beta_k$  are obtained by the maximum likelihood estimation method using the sample data. The dependent variable in equations (3) and (4) is the odds ratio of the probabilities for an individual to choose alternative “j” against alternative “1” (the latter selected as a reference category of respondents). Equations (1) and (2) are in the form with a log-odds ratio as a dependent variable modelled as a linear function of the independent variables.

The reference category for this study is the subsample of respondents that have clearly expressed a wish to stay in Bulgaria (i.e. “stayers”). The categories contrasted to the reference one are:

- j=2 “My intentions are to live both in Bulgaria and abroad” (i.e. “circulars / temporary migrants” or just “circulars”);

- j=3 “My intentions are to stay for a long time or permanently abroad” (i.e. “permanent migrants” or “settlers”);
- j=4 “No particular intentions / plans for the future” (i.e. “hesitators”).

Estimation of this model requires a dependent variable that partitions the sample into mutually exclusive subsamples – four in this case. All quantitative independent variables (age, number of children; a number of visits abroad during the last 10 years; length of the last visit abroad) have been transformed into categorical using fixed numerical values or appropriate intervals.

Table 1

Variables used in the analysis

Variables	Variable values	N	%
Future intentions (dependent variable)	1= Stay in Bulgaria (reference cat.)	38	13.4
	2= Circulate between BG and abroad	101	35.7
	3= Stay predominantly abroad	71	25.1
	4= No clear intentions	73	25.8
Independent variables			
Gender	Female	112	39.6
	Male (base group)	171	60.4
Age group	1) Age 19-30	87	30.7
	2) Age 31-45	111	39.2
	3) Age over 45 (base group)	85	30.0
Marital status	Married/Cohabiting	167	59.0
	Single/Divorced/Widow(er) (base gr.)	116	41.0
Children in the family	Yes	114	40.3
	No (base group)	169	59.7
Ethnical group	Minority	51	18.0
	Bulgarian (base group)	232	82.0
Educational level	1) Basic or lower	49	17.3
	2) Secondary general	74	26.1
	3) Secondary vocational	84	29.7
	4) Higher (base group)	76	26.9
Number of visits abroad	1	117	41.3
	2	69	24.4
	3	50	17.7
	4 or more (base group)	47	16.6
Length of last visit abroad	1) 3-12 months	104	36.7
	2) 1 to 3 years	112	39.6
	3) Over 3 years (base group)	67	23.7
Remitting	1) Regular	110	38.9
	2) Occasional	107	37.8
	3) No remitting (base group)	66	23.3
Attachment to family / friends	Yes	166	58.7
	No (base group)	117	41.3
Valid observations (included in the estimation)		283	100.0
Total observations (7 missing observations)		290	

The frequency distributions of the sample by each variable is presented in Table 1. It is obvious that the largest share of the labour migrants travelling by international bus lines (36%) have a clear goal to circulate between Bulgaria and a foreign host country. Yet, one of each eight respondents is allocated to the reference category – i.e. those expressing a wish to cancel the international mobility and to settle down in Bulgaria. However, one-quarter of the labor migrants sample expresses an intention to leave Bulgaria at least for a long period, most likely to leave for good.

The socio-demographic profile of this sample consists of 6 variables. The frequency distributions by these attributes show that the majority of the labour migrants which use international bus lines are predominantly men (60%), married or cohabitating (59%), without children (60%). They are relatively equally distributed by age, with a highest share of those aged 31-45 (39%), and with expected distribution by ethnicity (18% in summary for the traditional minority groups). The educational level of the labour migrants is however quite dispersed – the majority (56%) is held by secondary educated respondents (30% with professional qualification), along with 37% having higher education; still, each one of six have reached just basic or even lower educational degree.

Four variables comprise the set of features reflecting the migration experience of the respondents – those assumed as relevant concerning the formation of the future plans of the labour migrants. It can be seen that the majority of these individuals has a very modest experience in international mobility – 41% have travelled just once for a period of at least 3 months during the last 10 years; additionally, one quarter have been only twice abroad (and 18% three times abroad) for such periods. Only one of six respondents declare a higher number of visits to a host country (4 or more). Another important variable is the length of the last visit abroad – that should reflect another dimension of the migrant's recent experience. The majority of respondents here (over three quarters) is split between short-term (3-12 months) and medium-term periods (1 to 3 years); yet, about one-quarter of the sample is comprised from individuals that in the last time have been abroad for quite a long period (over 3 years).

It is important here to explore an assumed link between the remitting inclination of the labour migrant and her/his future plans. This can be plausibly tested as far as a large subsample of individuals (39%) declares a regular practice of remitting money to Bulgaria during their last visit abroad. Still, another 38% indicate occasional remitting practice, including the act of bringing money with their return home. In this line of reasoning, an important aspect related to the future plans of these migrants is the psychological attachment to family members or close friends that live in Bulgaria – an attitude expressed by the majority of respondents (59%).

### **Empirical results**

Table 2 presents the results from the log-likelihood tests regarding the estimated multinomial logistic regression model. The overall significance of the model (Final-Sig<0.001) shows that the included independent variables, taken as a whole, succeed to

differentiate between the three categories of interest and the reference category (stayers) at a negligible level of risk (less than 0.1%).

Table 2

Likelihood ratio tests of the multinomial regression model

Effect	-2 Log Likelihood*	Chi-Square	df	Sig.
Gender	518,984	2,432	3	,488
Age group	545,526	28,974	6	,000
Marital status	521,619	5,067	3	,167
Children in the family	520,480	3,928	3	,269
Ethnic group	522,686	6,134	3	,105
Educational level	548,369	31,817	9	,000
Number of visits abroad	531,883	15,331	9	,082
Length of last visit abroad	529,616	13,064	6	,042
Remitting to Bulgaria	535,765	19,213	6	,004
Attachment to family/friends	529,648	13,096	3	,004
Overall model:				
Intercept only	716,768			
Final	516,552	200,216	51	,000

\*Note: The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Significant effects are observed at 0.1% level of significance for two socio-demographic variables (“age” and “educational level”) and four migration experience variables – “length of the last visit abroad”, “remitting to Bulgaria”, “psychological attachment to family/friends in Bulgaria”, and “number of visits abroad (the latter at 10% level of significance). The estimated parameters of each dummy variable separately for each response category compared to the reference category are reported in tables 3.1, 3.2, and 3.3.

When comparing the largest target category (circular migrants) with the reference one (stayers) several predictor variables show significant effects on the odds ratio, i.e. the odds of choosing to circulate over the odds of choosing to stay in Bulgaria (table 3.1). At 5% level of significance, practically all socio-demographic variables reveal no effects on the odds ratio, except educational level – for respondents with secondary vocational education (especially, secondary vocational) relative to those with higher education, the relative chance for preferring to circulate than to stay would be expected to increase by a factor of 13 (given all other variables are held constant); in other words, migrants with vocational education are much more likely than higher educated individuals to choose to circulate between home and abroad over choosing to stay in Bulgaria. A similar effect is observed also for the secondary general educated respondents, albeit with somewhat lower effect on the odds ratio (8.8).



Table 3.1

Parameter estimates of the multinomial regression model  
Response category: Circulate between Bulgaria and abroad\*

	B	Std.Err.	Wald	df	Sig.	Exp(B)
Intercept	-1,557	1,059	2,163	1	,141	
[gender=1]	,384	,588	,426	1	,514	1,468
[gender=2]	**	.	.	0	.	.
[agegr=1]	1,341	,928	2,088	1	,148	3,823
[agegr=2]	1,241	,738	2,828	1	,093	3,461
[agegr=3]	**	.	.	0	.	.
[marital=1]	-1,086	,630	2,974	1	,085	,337
[marital=2]	**	.	.	0	.	.
[children=1]	,131	,730	,032	1	,857	1,140
[children=2]	**	.	.	0	.	.
[ethnic=1]	1,105	,925	1,427	1	,232	3,020
[ethnic=2]	**	.	.	0	.	.
[educ=1]	1,263	1,001	1,592	1	,207	3,538
[educ=2]	2,175	,715	9,263	1	,002	8,801
[educ=3]	2,579	,645	15,962	1	,000	13,181
[educ=4]	**	.	.	0	.	.
[num_visits=1]	-1,230	,679	3,284	1	,070	,292
[num_visits=2]	-,219	,846	,067	1	,796	,803
[num_visits=3]	,157	1,002	,025	1	,875	1,170
[num_visits=4]	**	.	.	0	.	.
[length_last=1]	1,629	,637	6,535	1	,011	5,101
[length_last=2]	1,477	,662	4,973	1	,026	4,381
[length_last=3]	**	.	.	0	.	.
[remit=1]	,476	,761	,392	1	,531	1,610
[remit=2]	1,379	,832	2,747	1	,097	3,972
[remit=3]	**	.	.	0	.	.
[familyatt=1]	-,632	,568	1,238	1	,266	,532
[familyatt=2]	**	.	.	0	.	.

Notes: \* The reference category is: Stay in Bulgaria.

\*\* This parameter is set to zero because it is redundant.

Yet, one particular marginally significant result (at 10% level of risk) deserves noting – namely the parameter estimate for the “marriage/cohabitation” status. This estimate is negative leading to an odds ratio for the predictor less than 1 ( $\text{Exp}[B]=0.337$ ) which shows that having a family acts as a “hold down” factor for the respondents when considering the two alternatives (i.e. rather staying than circulating).

Among the variables related to migration experience, the most distinct effect is observed for the length of stay during the last visit abroad. Here the base group (third) consists of those with the longest periods of stay (over 3 years). Other things equal, for respondents with shortest periods of the last stay abroad (especially, up to 1 year) the odds ratio for choosing to circulate than to stay in Bulgaria is about 5 time higher than this ratio for the base group (in other words, migrants with short-term period of the last visit abroad are

more likely to choose to circulate between home and abroad over to stay in Bulgaria, than individuals with much longer periods of the last stay abroad). The estimate of this parameter for the second group – those with a medium term of the last visit abroad (1-3 years) – is not much different from the first group: about 4.4 times. Both effects are statistically significant at 5% level. Another result supporting the one for the length of stay is found regarding the variable “number of visits abroad”, albeit at 10% risk – here those migrants having least experience (just 1 visit abroad) are much less likely to choose circulating than staying, as compared to those with a largest experience (4 or more visits up to now). This confirms the conclusion that having already experience in periodic short-term relocations to foreign host countries induces an inclination to continue the same way.

Another migration experience variable deserves a notice, namely the remitting behavior of the individuals. In this respect, there is no indication of any difference between those who used to remit on a regular basis and those who did not remit at all, concerning the choice of circulation against staying home. However, at a marginal risk of 10% a slight evidence is observed for group 2 – those remitting “occasionally” (mainly, carrying the money during their arrivals) – to be more likely to opt to circulate between home and abroad over to stay in Bulgaria, than the base group individuals (group 3 – not remitting). This seems rational as far as regular remitting behavior is expected mainly from long (or medium) term migrants. As expected, having a stronger psychological attachment to the family and close friends in Bulgaria does not concern the preference for circular mobility, when compared to the option for staying home.

Table 3.2 presents the results from the comparison of the “permanent migrants” with the reference category (stayers), after taking into account the circulation choice. Few predictor variables have significant effects on the odds ratio, i.e. the odds of choosing to stay permanently abroad over the odds of choosing to stay home. As expected, the strongest effects (at 1% level of significance) are found regarding the age – for the youngest respondents (up to age 30) relative to the oldest, the relative chance for the preference to settle abroad than to stay in Bulgaria would be expected to increase by a factor of 15, given all other variables are held constant. Unexpectedly, even a stronger effect is observed for those aged 31-40 (a divergence of the odds ratios almost 20). In other words, migrants of lower ages are much more likely than mature migrants to choose a longer period of stay abroad, including to emigrate for good, over choosing to stay in Bulgaria.

Almost all other socio-demographic variables, as well as migration experience, reveal no effects on the odds ratio for this target category. The only exclusions observed at 5% level of significance are: (a) marital status – those having families are more likely to opt to stay in Bulgaria over to leave for a long term, than the base group of singles and divorced; (b) remittance behavior – those who used to remit regularly (during their former visits abroad) are more inclined to choose to stay in Bulgaria over a long term move, than the base group of non-remitters. Here a hypothesis emerges that such individuals might have “completed” the task for providing funds from abroad, and/or any eventual permanent migration is rather not “remittance-oriented”.

Table 3.2

Parameter estimates of the multinomial regression model  
Response category: Stay predominantly abroad\*

	B	Std.Err.	Wald	df	Sig.	Exp(B)
Intercept	,320	1,048	,093	1	,760	
[gender=1]	,855	,606	1,989	1	,158	2,351
[gender=2]	**	.	.	0	.	.
[agegr=1]	2,691	,929	8,390	1	,004	14,752
[agegr=2]	2,987	,781	14,609	1	,000	19,819
[agegr=3]	**	.	.	0	.	.
[marital=1]	-1,424	,655	4,722	1	,030	,241
[marital=2]	**	.	.	0	.	.
[children=1]	-,688	,760	,820	1	,365	,502
[children=2]	**	.	.	0	.	.
[ethnic=1]	-,940	1,204	,609	1	,435	,391
[ethnic=2]	**	.	.	0	.	.
[educ=1]	,668	1,074	,387	1	,534	1,951
[educ=2]	,303	,739	,168	1	,682	1,353
[educ=3]	1,000	,656	2,325	1	,127	2,719
[educ=4]	**	.	.	0	.	.
[num_visits=1]	-,247	,769	,104	1	,748	,781
[num_visits=2]	,535	,944	,321	1	,571	1,708
[num_visits=3]	1,252	1,072	1,365	1	,243	3,498
[num_visits=4]	**	.	.	0	.	.
[length_last=1]	,198	,669	,088	1	,767	1,219
[length_last=2]	,080	,679	,014	1	,906	1,084
[length_last=3]	**	.	.	0	.	.
[remit=1]	-1,605	,763	4,433	1	,035	,201
[remit=2]	,025	,804	,001	1	,976	1,025
[remit=3]	**	.	.	0	.	.
[familyatt=1]	-,814	,586	1,932	1	,165	,443
[familyatt=2]	**	.	.	0	.	.

Notes: \* The reference category is: Stay in Bulgaria.

\*\* This parameter is set to zero because it is redundant.

Regarding the willingness for a long-term move, some expected attributes did not show any significant effect out of the bus travelers' survey. For example, the necessity for caring for children, ethnical group, or educational level does not seem to stimulate or restrain the inclination to migrate permanently. Intriguingly, the feeling of attachment to home, family, and friends does not show any hold down effect neither. In contrast, this attachment shows a significant effect in the estimated model for the "hesitating" migrants as compared to stayers (table 3.3). As a whole, the results are similar to those for the permanent migrants, with the attachment to family/friends as a major exclusion – it is found as a "source of hesitation" here at 1% level of significance.

Table 3.3

Parameter estimates of the multinomial regression model  
Response category: No clear intentions \*

	B	Std.Err.	Wald	df	Sig.	Exp(B)
Intercept	-2,409	1,225	3,866	1	,049	
[gender=1]	,404	,634	,405	1	,525	1,497
[gender=2]	**	.	.	0	.	.
[agegr=1]	3,032	,974	9,691	1	,002	20,749
[agegr=2]	3,033	,802	14,283	1	,000	20,755
[agegr=3]	**	.	.	0	.	.
[marital=1]	-1,045	,673	2,413	1	,120	,352
[marital=2]	**	.	.	0	.	.
[children=1]	-,784	,756	1,075	1	,300	,457
[children=2]	**	.	.	0	.	.
[ethnic=1]	,498	1,016	,241	1	,624	1,646
[ethnic=2]	**	.	.	0	.	.
[educ=1]	1,346	1,060	1,611	1	,204	3,840
[educ=2]	2,032	,743	7,478	1	,006	7,626
[educ=3]	1,940	,688	7,943	1	,005	6,959
[educ=4]	**	.	.	0	.	.
[num_visits=1]	,263	,839	,098	1	,754	1,301
[num_visits=2]	1,100	,995	1,224	1	,269	3,005
[num_visits=3]	2,182	1,109	3,875	1	,049	8,866
[num_visits=4]	**	.	.	0	.	.
[length_last=1]	1,168	,695	2,823	1	,093	3,216
[length_last=2]	1,135	,704	2,600	1	,107	3,111
[length_last=3]	**	.	.	0	.	.
[remit=1]	,208	,775	,072	1	,788	1,232
[remit=2]	,706	,847	,695	1	,405	2,026
[remit=3]	**	.	.	0	.	.
[familyatt=1]	-1,697	,582	8,492	1	,004	,183
[familyatt=2]	**	.	.	0	.	.

Notes: \* The reference category is: Stay in Bulgaria.

\*\* This parameter is set to zero because it is redundant.

An interesting result can be indicated regarding the length of stay abroad, albeit at 10% level of risk – for the migrants with the shortest period of stay (up to 1 year) relative to those with the longest period (over 3 years), the relative chance for deeming a possible future move than to staying in Bulgaria would be expected to increase about 3 times, all other variables held constant. However, a much more noticeable effect is observed regarding the educational level. When considering to stay in Bulgaria, the migrants with both secondary general and vocational education clearly tend to hesitate more about new migration moves in the future, than higher educated individuals. On the other hand, the lowest educated migrants cannot be distinguished from the highest educated ones in this respect.

## Conclusion

There is no doubt that short-term labour mobility in Europe, especially in the new EU member states of CEE, gains popularity and increasing public interest. In relation to this, the intensified concentration and focus of the governmental agencies on the issues of short-term migration management is understandable. Whatever the steps are to be taken in this line, informed choices should be made having in mind the fact that circular migration has become a distinctive pattern of mobility. This can be reasonably owed not only to traditionally operating migration networks but also to an expanded implementation of temporary and seasonal labour mobility schemes.

Based on a specifically focused survey among bus travelers from Bulgaria to major European destinations this article provides empirical evidence about several personal features that contribute to the formation of a willingness to circulate between home and host countries. In this respect, if circular migration is to be put in the focus of migration policies, it needs to be clearly distinguished, as a complex socio-economic phenomenon, from the other types of international mobility of the population, especially as a typical form of temporary labour migration. The evidence provided about a specific segment of Bulgarian international migrants, i.e. traveling by major bus lines to European destinations, could be of particular interest for such policy analysis. The standpoint shared here considers the circular migration as having a substantial potential to provide sources of subsistence and even some development in many settlements located in depressed regions of the sending country.

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## PARTICIPATION OF RETURNING MIGRANTS IN THE LABOUR MARKET IN BULGARIA

*The paper is focused on the issue of returning migrants and their participation in the labour market in Bulgaria. The study is based on data of a representative survey, conducted in 2017 under the project “Returning migrants: segmentation and stratification of economic mobility”. The analysis covers two main aspects of the subject: 1) age and education of the respondents as characteristics for inclusion in the labour market and their labour status at the time of the investigation; 2) comparison between the type of employment (by economic activity, qualification, type of labour contract, etc.) abroad and in Bulgaria after the return, outlining peculiarities, disparities and consequences. Some essential problems for the participation of migrants in the labour market in Bulgaria are described.*

*Key words: returning migrants, labour market*

*JEL: J62; J24*

There are different fundamental and applied studies, trying to explain the nature, factors and effects from external migration. Part of them concerns return migration – the return of migrants to the origin country and their reintegration into the social and economic life therein. Various aspects of this issue have been studied: factors, influencing the decision to return to home-country, reasons and motives to return, process of returning – taking a decision, preparation of return, reintegration into the homeland.

The results from some of these studies show that many of the migrants have difficulties with their reintegration, including finding a job after their return home. The participation of returnees in the labour market depends on a number of factors, including on the educational and professional profile of these people, on the skills they acquired abroad, on the demand for such skills and qualification in the labour market in their home countries. An important matter in this respect is connected to (re)integration policies in the respective states.<sup>2</sup>

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<sup>2</sup> It should be mentioned that according to some representative surveys in Bulgaria the main causes for initial migration are the economic ones, while those for return are predominantly non-economic. Probably this is the reason why the prevailing share of the returnees does not have a pre-arranged job upon their return to Bulgaria. Such a situation requires more active and wide-ranging reintegration policies.

In Bulgaria the issue of return migration has been studied more profoundly during the last decade.<sup>3</sup> Various aspects of the return and reintegration of migrants have been investigated. The insufficiency of official statistical information necessitates the conduction of empirical surveys. Some of the last results of such research works are published, for example, in: Nonchev and Hristova, 2018; Bakalova and Misheva, 2018; Mintchev and Boshnakov, 2006, 2018; Zareva, 2016, 2018; etc.

According to the data from the last Census of the Bulgarian population from 2011, for the period 1990-2011 two thirds of the migrants are economically active persons (65,7%), of which 54,2% – employed and 11,5% – unemployed. About one third (31,9%) of them are with higher education and less than one fifth (18,7%) – with primary or lower.

The results from a representative survey, conducted in Bulgaria in 2013 (published in: Richter and others, 2017) among the population of the age group 15-65 years, demonstrate changes in the economic activity of the returnees after their return in Bulgaria compared to that abroad – the share of the employed decreases and that of the unemployed significantly increases, i.e. not a small part of the Bulgarian migrants have difficulties to participate in the labour market in Bulgaria after their return.

Such a conclusion can be made also on the basis of the data from a representative national survey, carried out in 2018 among the population aged 18-65 years in the framework of the project “Measures for overcoming the demographic crisis in the Republic of Bulgaria”<sup>4</sup> – over a quarter of the respondents (25,8%) claim that they have had problems to find a job and nearly 11% – with the recognition of their length of service and social security rights. It should be mentioned that 62,6% of the persons who have left the country for more than three months are specialists with secondary vocational and higher education. About 20% of the people with higher education also state that they have had difficulties to find a job in Bulgaria after their return, as well as 39% of those with primary or lower education. These peculiarities could be explained by the economic areas where the migrants have been employed abroad and also, of course, by the characteristics of the labour market in Bulgaria. The not well-developed reintegration policies in the country contribute to this phenomenon, too.

This paper presents some of the results of an analysis of data from a representative survey among returning migrants to Bulgaria of the age group 18 years and over<sup>5</sup>, conducted in 2017<sup>6</sup>, as another empirical evidence for the possibilities and prospect of migrants to

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<sup>3</sup> Some of the Bulgarian researchers in the field of migration are: A. Krasteva, V. Ivanova, Y. Kaltchev, V. Mintchev, A. Nonchev, V. Boshnakov, R. Rangelova, M. Micheva and others.

<sup>4</sup> The project was concluded in connection with the fulfilment of assigned tasks under a Council of Ministers Decree by several institutes at the Bulgarian academy of sciences; the leading one is the Institute for population and human studies. The author of this paper was part of the team.

<sup>5</sup> Bulgarian citizens, who have worked abroad for at least three months during the period 2008-2017. The target group does not include persons, returning to Bulgaria for a short period of time.

<sup>6</sup> The survey was conducted in 2017 under the project “Returning migrants: segmentation and stratification of economic mobility”, financed by the Scientific Research Fund. Details about the survey sample could be found in Nonchev and Hristova, 2018. The author of this paper was part of the project team.

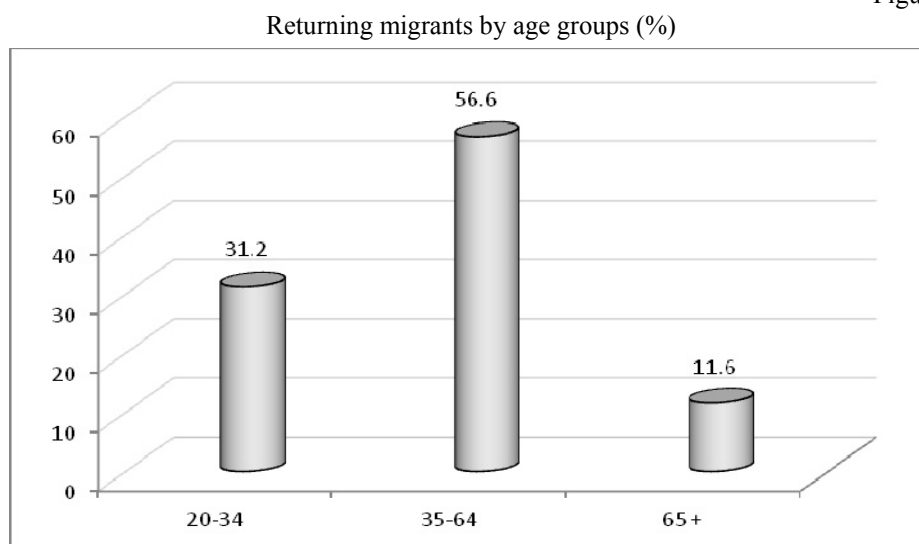


participate in the labour market. They outline the profiles of these migrants by age and education, as characteristics for inclusion in the labour market, and their labour status at the time of the investigation. A characteristic of the returnee's employment abroad and in Bulgaria, after their return, is made, outlining peculiarities, disparities and consequences. Some of the important problems with the participation of the returning migrants in the labour market in Bulgaria are drawn.

### **Age, education and labour status of returning migrants**

Age, as well as education, is one of the main characteristics, concerning the participation of an individual in the labour market. According to the results from the survey, the main part of the people who have stayed abroad for more than three months are economically active, working-age persons, of the age group 20-64 years (87,8%). Nearly one-third of the migrants are under 35 years of age (31,2%) and about 12% are above working age (65 years and over) (Figure 1).

Figure 1



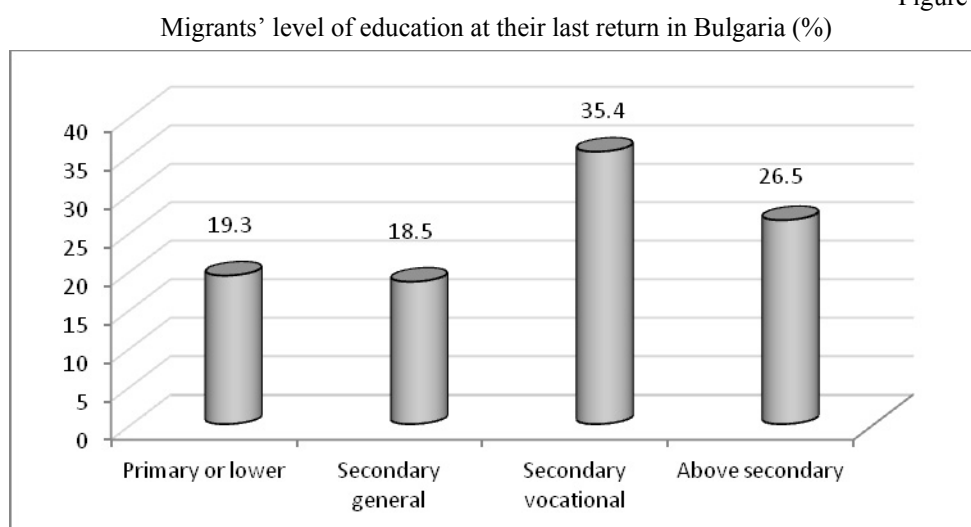
The main reasons for migration, pointed out by the respondents, could explain to a great extent such an age structure of the migrants. Getting a higher payment and finding a better job are the most common answers to the question about the reasons for their initial migration – respectively 69% and 38.4% of all respondents. The unemployment in Bulgaria is a reason for 19.5%. About 4% mention the receiving of the desired education and 19% – joining parents or relatives.

These goals correspond to the economic activity of the migrants before their initial departure from the country – around 60% were employed and nearly 28% – unemployed. The share of the students was 7%.

People with a different level of education have been abroad, but the predominant part are the well-educated. Nearly two-thirds of the returnees are specialists with secondary vocational and higher education. The share of low-educated persons is less than one fifth (Figure 2).

The educational structure has slightly changed compared to that of the migrants before their first departure abroad when 60% of them were with secondary vocational and higher education, 20% with secondary general and 19,5% with primary or lower. Some of the returnees have studied being beyond borders.

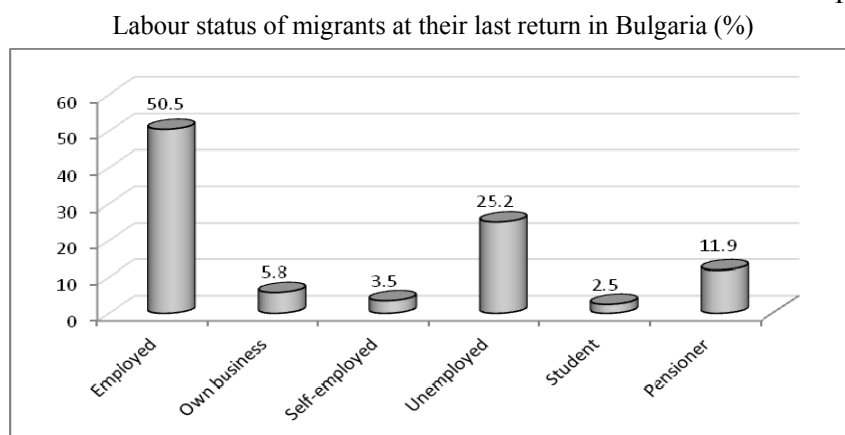
Figure 2



The prevailing share of the returnees are well-educated, working-age persons, not a small percentage of which – under 35 years of age. With such age and educational structures, more than 25% of them are unemployed at the time of the investigation, and about 60% – employed. The share of students is 2.5% and of pensioners around 12% (Figure 3).

The main incentives to go abroad, according to the respondents, are the economic ones. In the first place, they mention: higher payment, better job and higher living standard abroad, and lack of jobs in Bulgaria. With such motives for migration, the predominant part of economically active migrants is reasonable. Younger people are more flexible and well-educated persons – more demanded in the labour market, which explains to a certain extent their high share among migrants. Despite this, many of them remain unemployed after their return in Bulgaria.

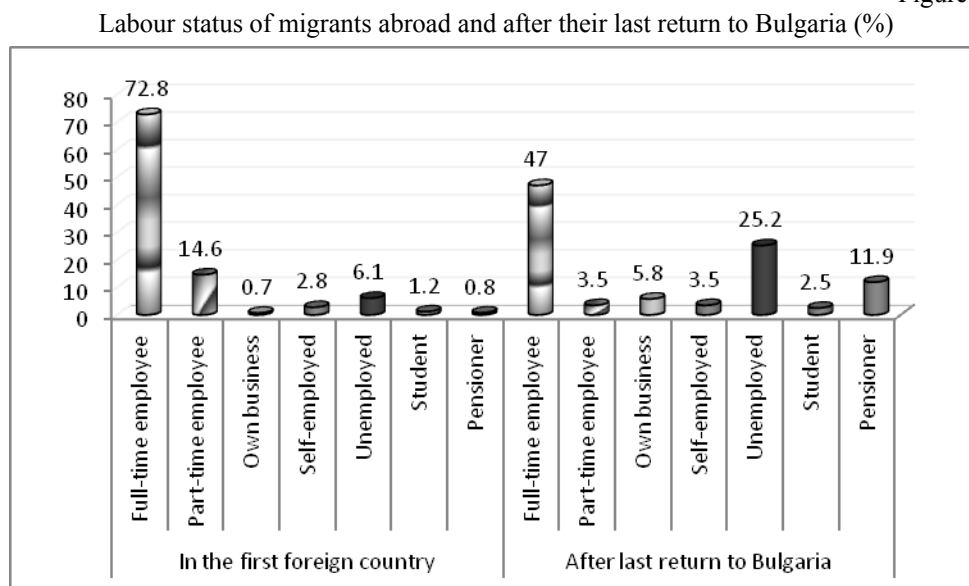
Figure 3



#### Employment of migrants abroad and in Bulgaria after their return

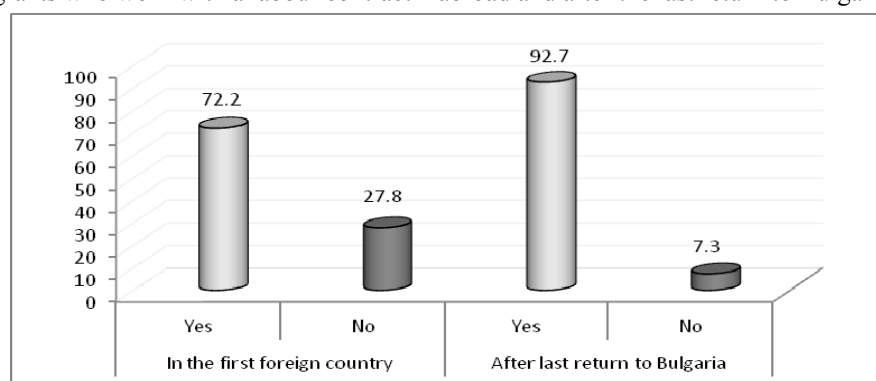
Being abroad, 90% of migrants have been employed while after their return to Bulgaria – only about 60%. The share of unemployed migrants abroad is several times lower than that of the unemployed respondents in Bulgaria. The percentage of pensioners, however, is also much higher (Figure 4). These figures demonstrate that many of the returnees have problems to find a job after their return to Bulgaria and another part retire on a pension or come back to the country after going on pension abroad.

Figure 4



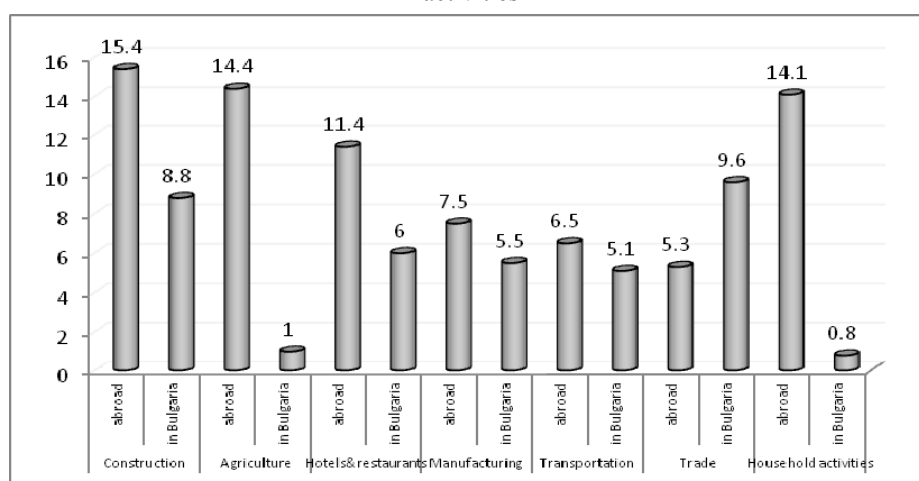
The higher employment abroad could be partly explained by migrants' work in the grey economy of the receiving country. The share of those who have worked abroad without a labour contract is high (nearly 28%) – higher than the respective share in Bulgaria by more than twenty percentage points (Figure 5). However, the difficulties to find a job in Bulgaria make part of the returnees to work without a labour contract in this country, too.

Figure 5  
Migrants who work with a labour contract – abroad and after the last return to Bulgaria (%)



Another specificity of migrants' employment is that there are discrepancies between economic activities of their employment abroad and in Bulgaria. Bigger are the shares of the employed abroad in construction, agriculture, hotels and restaurants, and especially in household activities (such as adult, children or ill persons care against payment) (Figure 6).

Figure 6  
Employment of migrants abroad and after their last return to Bulgaria by economic activities



Women work mainly in household activities (30.7), as well as in agriculture and hotels and restaurants (15% each), while men – in construction (27.9%), agriculture (13.9%), transport and manufacturing (10.9% each).

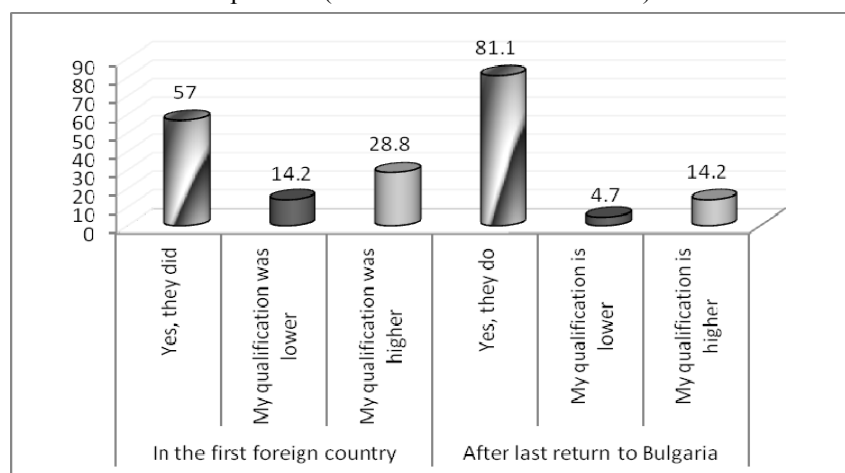
Significantly higher is the employment of migrants abroad compared to that before their first departure and after the return to Bulgaria in: household activities (14.1% of the returnees have been employed in such activities abroad, 0.3% before the departure and 0.8% after the return), agriculture (respectively 14.4%, 2% and 1%), construction (15.4%, 8.1% and 8.8%) and hotels and restaurants (11.4%, 5.5% and 6%).

Being abroad many of the migrants have worked as low-qualified staff. More than a quarter (28.8%) of the respondents claim that they were overqualified for the position they have been hired (Figure 7). Especially high are the shares of those who have worked in the area of household activities (49.4%) and in agriculture and tourism (34.8%).

Two times smaller is the percentage of those who believe that they are overqualified for the position they are hired in Bulgaria. Still, 14% of the returnees consider that their qualification is higher than the required for the workplace they occupy, which is another indicator for the difficulties they meet to find an appropriate job.

Figure 7

In your opinion, did the qualification and skills you possess match the work you performed / perform (% of those who have worked)



The discrepancy between acquired qualification and occupied position is one of the reasons why nearly one-third of the migrants state that they have not acquired any qualifications and skills abroad – 26.4% haven't acquired skills and 1.2% have even lost.

At the same time, almost half of them (49.8%) have learned a foreign language, 6.8% have increased their qualification and 10% believe that they have learned to work better. The acquisition of skills and knowledge beyond borders creates possibilities for these persons to find easier a job at home. At the same time, it increases the chances for future realization of

returnees again beyond borders – 40% of the respondents claim that they would like to go abroad anew (temporarily or permanently).

The mismatch between acquired qualification and held position abroad implies a decrease or even loss of qualification and skills of migrants, which, on its turn, implies difficulty in their integration into the labour market in Bulgaria.

Problems for the participation of returnees in the labour market are created also by the fact that they have no pre-arranged job upon their return to Bulgaria. Nearly three-quarters of them (73%) did not have offers for appropriate employment prior to their return. This phenomenon depends, on the one hand, upon the activity of migrants in searching for a job, and, on the other, upon the level of development of the (re)integration policies and the activities of the respective authorities in the country.

Another possibility for the migrants to be included in the labour market is to start own business. However, 37.7% of them claim that they do not have savings from their stay abroad. Those who have savings intend to use them (or have already used) mainly for current consumption and only a small part use the savings for business start-up (Table 1).

Table 1

For what do you intend to use or have already used your savings? (%)

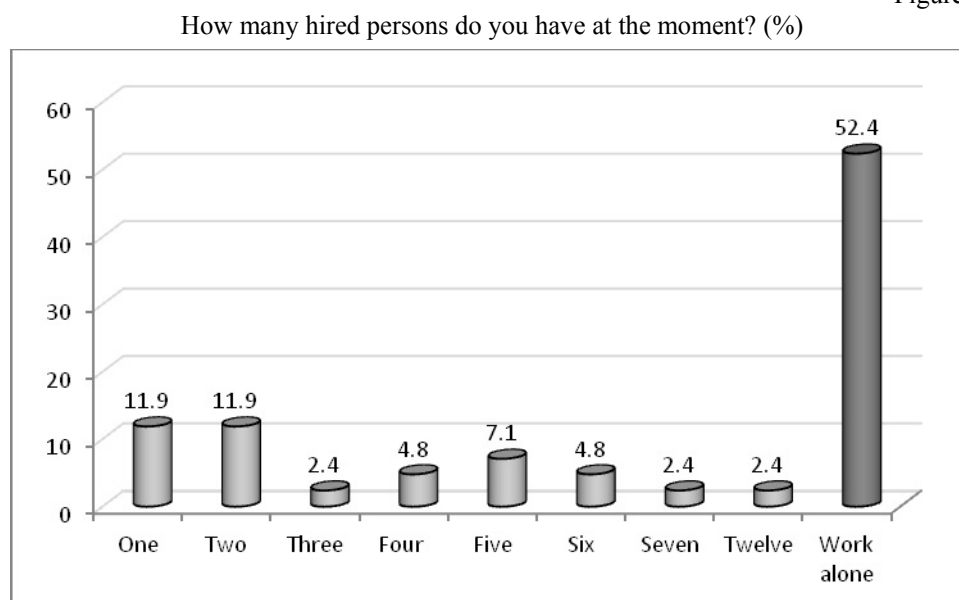
To repair the home I live in	42.4
To buy a home	12.4
To support financially my relatives	10.9
I have not used my savings	9.7
To refund an old loan (in Bulgaria)	3.5
To start own business	3.2

More than a half (56.1%) of the respondents state that their wages in the country of residence were lower than those of the local people (at the same sector of employment and position), especially persons who have worked in agriculture (73.6%), construction (70%) and household activities (65.9%), the economic areas where the biggest shares of migrants have been occupied. This could be a reason why some of them could not save money abroad or the savings are not enough to start a bigger business in Bulgaria.

The business the returnees start is mainly a small one (family business). The prevailing part of them work alone, without any hired persons, and a quarter – have hired one or two persons only (Figure 8).

Because of the existing disparities between the economic areas of employment of migrants abroad and in Bulgaria, loss of qualification abroad, lack of a pre-arranged job, discrepancies between acquired qualification and demand on the labour market in Bulgaria, as well as of some other reasons, more than one fifth (21.9%) of the respondents claim that they need assistance to find a job upon their return to Bulgaria.

Figure 8



Since more than 70% of the returnees possess an apartment or a house in Bulgaria, the prevailing part of them do not need housing assistance, but 9% declare that they need financial assistance, and 6.5% – psychological, upon return.

In this respect, the policies for (re)integration of migrants into the economic and social life in the country are very important. The legislation in the area of equal opportunities and anti-discrimination is well-developed, complying with the European standards, however there are substantial challenges for the integration of returnees which require the development and implementation of adequate policies. The efforts should be aimed at: assistance in finding a job (individual work according to the needs of migrants by the labour offices; appropriate training, if necessary; recognition of qualifications gained abroad; increased flexibility in the labour market and improved interaction between the administration and the employers; etc.), starting own business (administrative assistance; professional advice for business plan development; mentoring; training; credit facilities; etc), solving housing problems, involving children in education, provision of socio-psychological support, etc.

In order to have lasting effects, the policies and measures applied should not be conjunctural, but long-term.

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## THE CONCEPT OF THE OWNERSHIP IN THE LATE 'SOCIALIST' POLITICAL ECONOMY

*This paper investigates the collision between the unquestionable requirement to preserve and maintain the solitary existence of the **all-people socialist ownership** and the need to provide a certain, though limited, **independence** for the enterprises. The seemingly simple practical issue, eventually appeared as a complex contradictory knot of both theoretical and practical problems, which implicated a lot of attempts for their overcoming in the different socialist countries, continuing up to the end of 1980s, i.e. to the last days before the system break-down. The paper here focuses on the experience in Soviet Union and, particularly, in Bulgaria.*

*JEL: B14; B24; G34; L22; P26; P31*

### 1. Introduction

The reasons for break-down of the socialism as a political and economic system is an interesting and revealing problem, and its analysis might help for a better understanding the fundamentals an economic system is built upon. However, the ongoing research on the matter concentrates more or less, in the circle of functional problems – the economic inefficiency, the lack of political freedom, the exhausted resources in the military contest with the West, the technological gap and so on. Limited attention is paid on the institutional problems encountered by the socialist system. Such an approach is understandable, provided its coherency with the general institutional neglect, rooted in the mainstream economics. Nevertheless, though less visible, the problems created by institutional controversies of the socialist economic system were not less damaging. And, what is worse, the system runs into them, virtually, at every stage of its development. In the centre of those controversies lays the dogma of the *all-people socialist ownership* – an institution, brought to life in order to crowd out and overcome the 'exploitative' forms of the ownership, and first of all – the capitalist one. Once the dogma has been implemented, its promulgators started to face various practical and theoretical problems.

The paper presented investigates the collision between the unquestionable requirement to preserve and maintain the solitary existence of the single approved form of ownership and the need to provide a certain independence of management of the socialist enterprises. The

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collision initially seeming quite simple, practical issue, eventually appeared as a complex contradictory knot of both theoretical and practical problems. A lot of attempts were initiated for their overcoming in the various socialist countries, continuing up to the end of 80's of the last century, i.e. virtually to the very last days before the system broke down. This paper focuses on the experience in Soviet Union and, particularly, in Bulgaria.

## **2. The dogma**

*Socialist Political Economy (SPE)* emerged with the development of the new economy and society after the socialist revolution. Though, the societies differed from country to country and the theory tends to reveal certain country-specifics, it was deeply rooted in the Marxian writings and predictions for the socialist society. They were scarce, even sketchy in many aspects, which imposed the necessity to develop many theoretical and practical problems *ad hoc*. Nevertheless, the main aspects remained more or less unchanged, becoming later even unchangeable and establishing this way the core of the socialist theory.

Marxian labour value theory drove its author to the point of rejection the capitalist ownership, and even the private ownership in general, in a search of a society of an economic equality for everybody. Marx's reasoning is not much sophisticated – private appropriation of the results from the labour creates exploitation of one part of the society by another one. That contradicts the gross *socialization* of the modern production, a process involving complex participation of large masses of people. The core of that contradiction is the institute of the private capitalist property. Hence, its ultimate resolution must be abolishment of the private property on the means of production or, rather, its *socialization* – making it available to the whole society.

That is an oversimplified interpretation, of course, but it represents correctly, on my opinion, the origins of the concept of the '*most-socialised*', *single socialist 'all-people' ownership*, installed as a cornerstone of the *Socialist Political Economy (SPE)*. Later, a great number of *socialist* economic categories, laws, principles, practical approaches and mechanisms were developed from this fundamental principle. Fortunately, they were derived secondarily from it, which secured for them a chance for further precision. For example, this was the case of some economic laws which were *adopted* to refer just to the first ('*lower*') stage of the socialism, and differed from others – specific for to the second ('*higher*') one.

But, that was not the case for the concept of *socialist ownership*, the first pillar of the Socialist Political Economy. It obtained a sacred status and was dogmatised. More precisely, the fundamental dogma in SPE was not the all-people ownership itself, but rather the unacceptability and incompatibility of the private property with the socialist economic system. In fact, the Socialist Political Economy offered a lot of discussions and 'developments' about the forms of manifestation, 'totality' and 'maturity' of the single all-people property. What was not to be questioned, was the denial of the right of existence of the private property on the means of production.

With few exceptions, almost everything was supposed to belong to the ultimate sovereign, *The People* – all production means, the land, the natural resources etc. In the few cases when some "privacy" was undeniable e.g. over the personal belongings, cars, homes (the last two not everywhere in the socialist world) – it was referred as to a "personal", but not private, property and could not be used in any economic way, i.e. for production, by its owners.

The only (partial) exception was done for the collective or so-called co-operative property, which has been tolerated in the agriculture, again, not in an equal degree, in all the socialist countries. Even where it was applied on a large scale, it has not any specific economic significance, since its principal, the collective, could not sell the land, liquidate or change the sort of production. Thus, the *ultimate owner* of the collective property, practically, was no different than the one of all-people property.

The second pillar of socialist political economy, the abolishment of the so-called *commodity-monetary* relations (a euphemism for market)<sup>2</sup> was not that successful in obtaining the sacred, or dogmatic, status. It is, also, rooted in Marx writings. Since, the capitalist production process is broken into a myriad of private processes along the private ownership over the production means used in those processes, the products turn into commodities, through the arbitration of money. Said in other words, while being privately produced, the products need a socialising assessment, and the latter is possible through a monetary evaluation of their commodity form. Once the society abolishes the private property, the products of everybody becomes directly socialised and do not need the commodity-monetary form for its recognition. Shortly, the socialist society requires *abolishment of the money* too.

As it is well known, that point was not dogmatised, simply, because it could not be realised, though attempts were made in the 20's of the last century. More precisely, what was dogmatised was that the commodity-monetary relations will be preserved under the *lower (socialist)* stage of the system, temporarily, and with serious qualifications. Qualifications concerned the limited field of application and the specific way of manifestation within the socialist economy, i.e. they were subordinated to the ultimate rule of the plan etc. Nevertheless, the monetary relations were involved in, and played not the last role in the "systemic" problems of the socialism.

### 3. Dogma confronts the reality

As mentioned, both pillars in the socialist political economy dogma originated in Marx. As a matter of fact he concentrated on the critiques of the existent society and outlined very scarcely what was supposed to be the next, 'socialist', society. This becomes apparent soon after the revolution in Russia when the capitalist ownership was cancelled, and the problem

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<sup>2</sup> The English terms referring to the socialist economics categories are those offered by *A Dictionary of Political Economy*, an official issue of the Progress Publishers, Moscow, 1985, and seldom meet the modern economics terms, but they keep the original ideological meaning, which is necessary for the correct historical understanding of the analyzed system of economic thought.

of how to get out from the anarchy emerged. The "Red-Army attack on the capital", according to Lenin terminology, "expropriating landlords and bourgeoisie... is accepted as a beginning of the restriction and 'overcoming' of the money in Russia", (World history, 1990: vol. 4, p.36). The process achieves full scale during the time of so-called *war-communism*. Its economic policy<sup>3</sup> includes confiscation of the agricultural products, their direct distribution, para-military organisation of labour and this is *de facto* a large scale attempt to abandon the use of the money. The disastrous results arrived soon. Almost full destruction of the trade, drastic fall in the production, famine in the rural areas, shrinking of the population etc., were the major 'visible hand' changing first the practice and then the theory of socialist economy about the role of the money.

*The New Economic Policy (NEP)* proclaimed in 1920's in Russia recognised, among the other things, the unavoidability of the monetary connection in the socialist economy, at least for a period; trade, banks, even private initiative become important elements of this policy. However, this was always seen as a practical, temporary solution and nothing else: "Commodity-monetary relations, capitalist economic forms are *just means* for achieving of certain goals" (World history, 1990, vol. 4: p. 75) (*italics mine P.T.*). The irony here is that the goals were development of the production and raising the living standard, but that is a different story.

Recognition of the unavoidability of the money lays down the starting point of the most serious contradiction of the socialist societies. It emerges as a practical solution, which immediately confronts with the theoretical dogma creating subsequently contradictions in the theory itself. This clash could be traced over the whole history of all socialist societies and one can say that the latter is a history of the attempts to solve this problem. Although, the true nature of this contradiction is not in the theory. In fact, the theory, at least as presented by Marx, correctly predicts that destruction of the private property needs abolishment of the money as well. The problem is an ontological one and may be described as an *institutional incompatibility*. On the one hand, destroying the institute of the private property is destroying of the discrete organisation of the production. If all the production processes in an economy have a single (ultimate) owner there is only one residual claimant, i.e. only one profit centre in the whole economy. On the other hand, if one wants to have each production process measured by its efficiency, i.e. by the prices of produced commodities, or, to say it other way, if one wants to have benefits compared with costs, (s)he needs autonomous, economically discrete production processes and hence, multiple residual claimants and profit-centres.

The controversy revealed here, may seem unimportant, but this perception is misleading. Further below, the practical problems created by this contradiction are shown, and it is pointed out how far they were reaching sometimes, causing ideological threats for the ruling '*nomenklatura*'.

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<sup>3</sup> It is important to note that it is not just a wrong practice, led under war pressure by Lenin, but a process finding ideological and theoretical support in the writings of the whole Soviet leadership of that time – N. Bukharin, J. Larin, V. Smirnov, Osinskij among the famous ones (World history, 1990: vol. 4. p. 45) – and which, eventually, was fixed in the Russian Communist Party Program from 1919.

Given the dilemma, the socialist theory had a complicated problem, which needed a serious re-examination of the original assumptions, if it is to be resolved. Failing to recognise the problem, theory loses its explanative power and becomes dogma. This was, the actual case, with the *socialist political economy*. It failed to rethink its postulates, thus masking the real nature of the ontological problems, creating sophistic theoretical problems and fake solutions.

Nonetheless, the very process of fruitless search is interesting and may be instructive, if the orthodox economics is being revised from a non-orthodox economic point of view.

#### **4. Practical Dimensions of the Problem and the Attempts for its Resolving**

In practice, the problem manifests by the magnitude and forms of control over the economic agents. If the monetary relations are restricted beyond of a certain point, the economic incentives get so weaken that this threatens the very functioning of the system. When they are released as a necessary reactive measure, the economic incentive allows the local economic agents to sneak out of the grip of the centralised control of the bureaucrats, playing a role of the principals of the all-people ownership. Then comes another tightening of the policy, followed by another release and so on.

That model might be seen functioning in the most clear way after launching the NEP. It gave a strong chance to the capitalist economic forms and the elite soon realised that through releasing, even partially, the monetary relations they lose the economic control. "... (NEP) led to the rebirth of the capitalist tendencies, activating the old one and emerging of a new bourgeoisie in both the cities and villages", (World history, 1990: vol.4 p.76).

Perhaps the lack of experience how to deal with this problem allowed the private initiative to go so far away under the NEP, and maybe this made the followed reaction so sharp. Stalin's repressions not only to the capitalists, but also to the peasants, are a striking example of that reaction. Those are the times of the most direct control over the industry, of the most restricted monetary relations, i.e. of the most need of non-economic pressure over the economic agents in order to make them complying with the central plan. The WWII might be responsible, this period of rigid restrictions to be so long, though the reasons are much more perplex.

Either way, at the beginning of the 1960's, another period of slight liberalisation of the economic life followed. Thereafter, the paper focuses on the Bulgarian experience, but the historical turns in all major European socialist counties follow generally the same pattern.

Without much theoretical trouble, after taking some party decision in the 1960's begins an experiment providing the socialist enterprises with relatively large rights for economic action. They are required to take care about the expenditures in production and are allowed to strive for profit (and even to retain part of it). Also, directors of the units are authorised with a certain number of competencies for taking economic decisions, which go even beyond the limited framework of the operational management. In Bulgaria, this process went that far, that one of the companies grew quickly, diversified its commercial activities strongly and with an aggressive and free policy, effectively resembled the corporations of

western type. The followed reaction, coincided with the Czechoslovakian intervention, thus disguising somehow its economical nature. However, the severity of the punishment imposed to the persons involved, indicates on the real reason.

Nevertheless, that attempt to restrict the economic freedom of the units, and the role of the money and price mechanism, was not so rigid and comprehensive. In fact, a new wave of reforms started in the 1970's. This time the efforts to increase economic incentives in the socialist companies aimed to raise the *profit-centre* higher in the corporate hierarchy – from the single enterprises or companies to a kind of conglomerate formations, called sometimes associations, corporations, productive complexes, trusts (in Soviet Union) or combines (in GDR). Sometimes they approximated, in size, the whole industries, e.g. *National Transport Complex* in Bulgaria. It was then, when the biggest Bulgarian forklift producer *Balkancar* acquired larger size in production and capital than the General Motors.

The reasoning for these experiments, also, seems quite simple. At that time, it was apparent that the direct management based just on the numbers set in the central plan and the complete ignorance of the price mechanism is already impossible. There were, also, some attempts, for theoretical justification of those practices. Since, softening the control over the companies was still unacceptable (at least, beyond a certain point), allowance of larger freedom for the *commodity-monetary relations* at high hierarchy level seemed the correct decision, since the number of the real *profit-centres* were so few, that a direct party control over their managers was quite feasible.

Not surprisingly, this policy failed again – simply because the objective, economically justified profit-centres were to be set at a much lower level in the structure of corporate hierarchy and the economic units, which were supposed to play this role, needed much more larger bunch of rights to perform successfully.

What followed was the most serious attempt to find a way to ensure economically efficient production at a company level and to preserve at the same time the all-people ownership dogma. An attempt to preserve the right for the government to determine what is produced, who produces it, how it is distributed, how high to be the profit, how it to be allocated etc. In the first half of the 1980's in Bulgaria, again with the communist party decision, it was launched the so-called, "*new economic approach and mechanism*" for governance of the national economy. By the time, they were applied several different approaches for theoretical reasoning, and a serious amount of experience was accumulated on the system for workers self-management in Yugoslavia.

The process, again, involved providing more freedom for the companies, and after a point, it included also, a creation of diversified banking system, introducing legal forms of the economic agents analogous, or resembling, those in the market economies. The process had never been finished, or actually, it founded its final form in the real market structures, after the political breakdown of the socialist system. The analysis of this process is interesting by itself and a lot of instructive points could be found in it, concerning the economic consequences of the *transition period*. Particularly, it might shed light on the transfer of political into economic power of the governing elite in those countries etc., but this is beyond our analysis here.

At a certain stage in this wave of reforms, the company's employees, including the management (named the labour collective) were proclaimed to be '*stopanin*' of the company's property. The term, lacking a particular scientific meaning, could be translated roughly in English as '*a steward*', but latter must be used with a number of qualifications. The idea here is, the identification and assignment to the term, a bunch of economic rights resembling those usually associated with the ownership. Although, the real purpose of such a peculiar definition of property rights, was to limit and scale down the scope of rights associated usually with the ownership. At that point of the analysis, it is necessary to track the historical development of the theoretical views about the socialist ownership.

## 5. Theoretical Aspect of the Institutional Contradiction

As mentioned, the original belief of founding fathers of *socialism* was, that in a society without private property on means of production, there is no room for monetary connection between the separate production units. The system was supposed to be regulated directly by the central planning. When it appeared impossible and money becomes tolerated, (but never fully accepted), the autonomy *needed* by the economic agents, became a major issue of the Socialist Political Economy. As revealed above, the practice never hesitated to try and find different solutions, i.e. to grant more or less authority to the enterprises or companies for taking economic decisions. Although, the less efficient were the attempts, the more needed become some theoretical background for those experiments.

### 5.1. *Khozraschet*

This concept never got a single meaning. It was changing all the time according to the changes in the economic views of the governing elite, though there was a set of features generally associated with it. And they were very different from the original meaning. Originally, the concept was launched in 1921 by Lenin in his projects on New Economic Policy (Lenin, 1970, vol. 44). There, the concept carries out the willingness to overcome the economic crises at any price, and its definition is derived from the opposite option – to make the socialist companies working as capitalist, though keeping their socialistic nature. "The state enterprises have to transfer to so-called *khozraschet*, i.e. in essence, to a great extent on commercial and capitalist principles" (Lenin, 1970, vol. 44: p. 342). Accordingly, the concept is associated mostly with control and accountability of the political power over the managers of the enterprises, in order to ensure them complying with the directives. Hence, the economic rights assigned to the production units at the first stage had not an elaborate specific meaning. Permitted was everything, which was not forbidden exclusively and the monetary relations were free to develop as much as they can.

It was much later, during the second wave of the 1960's, when the concept was elaborated further. By that time, it was clear that there were specific functions and rights which must be assigned to the company, if it is to take use of the monetary relations.

According to some authors, it should include: '1) autonomy of the socialist enterprise, managerial and operational, 2) material incentive and responsibility, 3) monetary control'

(Dictionary, 1985: p.69). Others were more specific – '*khozraschet*' includes self-payment and self-financing, i.e. the company is supposed to have such a pricing of its products, that to be able to pay the expenditure and even to get some profit for financing its development and enlargement (Abalkin, 1971).

At the same time, it was emphasised that the autonomy is 'accepted' (Kozlov, 1985: p.514), and that the company has an *immediate* goal (profit), and an *ultimate* one (satisfying the needs of the people); the latter higher than the former, of course, (Arroyo, 1985). If this is to be understood correctly – the company is allowed to make profit as long as it is approved by the plan, if the plan sets the prices of its products lower than needed for profit, the company shall take those prices and work on lost; the plan will take care for it, at the next stage.

Of course, those economic functions of the company were accepted by some and opposed by others. Sometimes profit was allowed partially, sometimes it was excluded completely depending on the views how deep and how far should the companies' autonomy go.

The problems with such a 'theory' are obvious – it is very often arbitrary, and follows the turns of the policy. Having these obstacles, the theory made an attempt for a *different approach*, during the next period of softening of the governance of economic enterprises.

## *5.2. The duality ownership-possession*

Somewhere in the 1980's a group of scholars, mainly Bulgarian, tried another approach for resolving the contradiction between the all-people ownership over the economic units and the need for their independence, caused by the *monetary* form of their production process. Disappointed from the impossibility to outline correctly and definitely the circle of economic rights inherent to the socialist enterprises they tried **to revise** the ownership dogma. Of course, not directly, and of course, not generally – just what was needed to make the system working, without abandoning of the socialist paradigm.

The idea was, while keeping untouched the dogmatic principle that all producing assets should stay in the domain of the state, i.e. of the party and governmental bureaucrats, to identify a set of rights *inherent* to the economic units by their very nature. This way it will provide for assignment those rights, once and forever, to the companies and will place the latter out of the subjective, political, intrusion. Essentially, this was an attempt to keep for the owner just the ultimate right for strategic decisions, and to entrust all the other functions to the management.

One may notice, that behind the idea hides the old Roman principle of decomposing the ownership to three rights – right to use the object (*ius utendi*), right to use its fruits (*ius fruendi*) and the power of the alienation (*ius abutendi*). Shortly, that principle was summarized that way: "According to the Roman concept of the ownership, a person can give away some of his rights without giving up legal ownership..." (Furobotn and Richter, 1997: p. 79).

However, there was a serious difficulty with this principle. While, it is applicable for a rights over private (dispersed) ownership, the *Socialist Political Economy* had to deal with



a single subject of the ownership; thus, the right alienation was simply unthinkable within this system. This way the real analogue of that system, could be found in the systems with the all-mighty sovereigns – *the feudalism*. According to common understanding, the land, there, is owned ultimately by the king, who makes parts of it available to his tenants, granting them just possession over a certain pitch of the land.

Another origin of this idea could be found in Marx, who analysing the early forms of common ownership concludes that where all the ownership belongs to the whole society (*the commune*), the individuals are just *possessors* of it, and even further they might possess, as long as they are *members* of the commune and vice versa, by becoming such a member he obtains the right of possession, Marx, (1975, vol. 46 (1)).

Within this framework, the *late* Socialist Political economy postulated the concept about *the owner and the 'stopanin'*. As noted above the latter could widely be translated with the English steward, but the real economic function assigned to is as of *possessor* of certain means of production.

Thus, according to the stated reasoning, the socialist ownership may exist just as an ultimate right of the state, the separate enterprises function like *possessors* of the means of production and the labour collective is a socialistic subject of this possession (Arroyo, 1986).

Unfortunately, here another inconsistency could be found – who actually is the subject of the possession, the collective or the company itself? The fact is, that this question was not resolved. On the one hand, proclaiming the labour collective as *possessor*, i.e. not only the workers but the managers as well, meant to introduce the Yugoslav model indirectly.

Though the latter was practically successful, (at least in 1960'-70'), it was ideologically unacceptable at that time in most of the European socialist countries. On the other hand, the enterprise within the socialist economy hardly could obtain the needed full independent status in order to function as an active economic subject. Indeed, proclaiming them as *possessors* does not mean anything different from saying that they should work on *khozraschet*, thus closing the circle. The history did not provide time to see the actual resolution of this inconsistency, but undoubtedly it would be in favor of the collective. In fact, in Bulgaria a number of laws were changed and the process of entrusting the rights of possessors to the various collectives had begun.

## Conclusion

What is important here, is that at a certain level of development of the contradiction, more or less openly was recognised that the dogma of the *single, inseparable, all-people* socialist ownership could not remain unchanged, since it contradicts severely the functioning of the modern economic system, whose complex and diversified character needs monetary form for realisation of the connections between its structural economic units. I am tempted to see this eventual development like a break-down of the dogma by the science, but it is much more likely to be a system self-guarding act, done under the pressure of the practice.

That long-lasting internal conflict within the socialist systems shows clearly, that there was an important connection between the private property and the price mechanism, to use the modern economic terms. Simply said, it is a proof that the institutions matter not just because they impose transaction costs of the economic agents, but because without them, i.e. without the structural organisation based on an autonomous character of its elements, the price mechanism could not work. That is to say, that the demand and supply could determine the prices ensuring this way functioning of the whole system, but also that they could do it because the production is structured in countless different companies separated by the boundaries of the private property.

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## **CORPORATE GOVERNANCE OF STATE-OWNED ENTERPRISES: THE CASE OF HEALTHCARE ESTABLISHMENTS IN BULGARIA**

*The aim of the survey is to present the current situation of state ownership and its governance in Bulgaria. As a basis for good practices, the guidelines for corporate governance of state-owned enterprises by the Organization for Economic Cooperation and Development (2015) are used. The survey includes 65 healthcare establishments with concentrated state ownership.*

*The results of the survey show that the joint stock company and the sole ownership are preferred by the state due to their opportunity for control over the management of ownership. Regardless of the declared objectives of the state policy on social orientation of the healthcare sector, the data indicate that the priority of the healthcare establishments are mainly the financial results. The practices of corporate governance of state-owned enterprises are formed by three external factors: concentrated state ownership, social functions of state-owned enterprises, and the importance of healthcare for economic development.*

*JEL: G34; H51; I18*

### **Introduction**

In 2012 at the session of the WHO Regional Committee for Europe is approved a new health policy framework “Health 2020: A European policy framework and strategy for the 21st century”. The new point is the pursuit of a transformation from a state-centered to a collaborative model in which governance is produced collectively between a wide range of state and societal actors, including ministries, parliaments, agencies, authorities, commissions, businesses, citizens, community groups, foundations and the mass media. Unlike the classical concept, the new framework provides for the introduction of requirements to ensure accountability for the results of stakeholders, as well as transparency on current health policies. Notwithstanding the new moments, however, the role and responsibility of the state to protect and improve the health and well-being of people is retain (Houbenova-Delissivkova, 2012).

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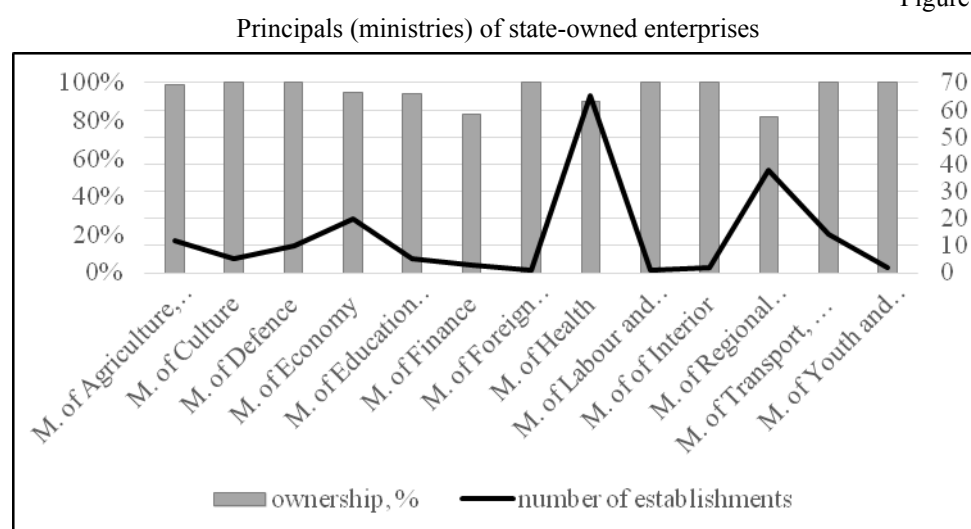
<sup>1</sup> Miroslav Nedelchev, Economic Research Institute, Bulgarian Academy of Sciences, e-mail: [mknedelchev@abv.bg](mailto:mknedelchev@abv.bg).

### Corporate governance of state-owned enterprises in the new reality

The new reality puts on the agenda the need to adapt corporate governance in a number of sectors, including in the field of healthcare, to the good practices. In this context, having regard to the effects of global financial crisis, the G20 countries, together with the Organization for Economic Cooperation and Development, decided to take action to modernize the guidelines for corporate governance of state-owned enterprises (Keremidchiev, 2016), for ensuring their effective, transparent and accountable functioning (Organisation for Economic Co-operation and Development, 2015).

The state ownership in Bulgaria is managed and controlled on a sector principle by relevant ministry. At the end of 2018 in Bulgaria the existing enterprises with state ownership more than 50% of equity are 178 and 13 ministries are majority shareholders or sole owners. The largest number of enterprises (65) has the Ministry of Health, which owns on average 90% of the ownership of enterprises. Such dependence is also observed in other ministries-principals – in increase the number of enterprises is decrease the share in their ownership (Figure 1).

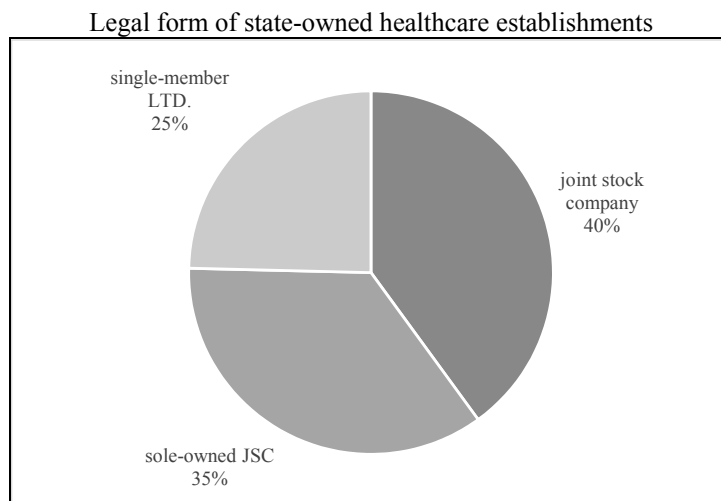
Figure 1



Source: Ministries' websites, September 2018.

State ownership is presented depending on the legal form of enterprises. The study found that in the case of healthcare establishments the joint stock company was the most preferred form, given the greater opportunities for control over the management of ownership (Figure 2). Most of the enterprises are sole owned and in other cases are co-owned by municipalities, mainly due to similar social functions of the state and municipalities.

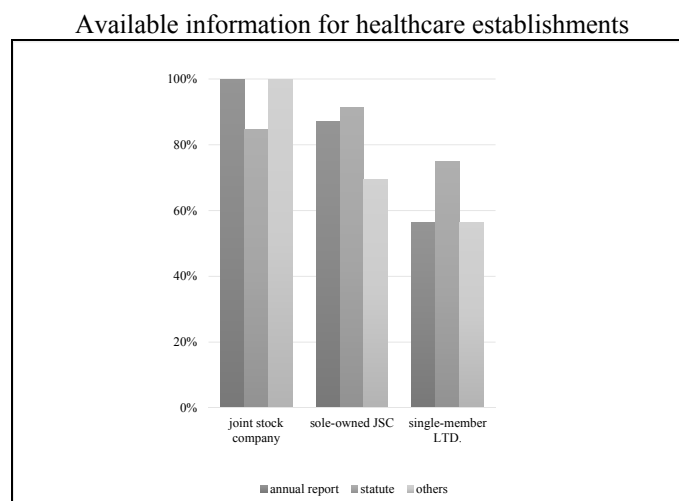
Figure 2



Source: Website of Ministry of Health, September 2018.

The sources of information when presenting the practices of corporate governance of state-owned enterprises are their annual reports and statutes, and some other documents (minutes of meetings of the board of directors, proposals of the principal, requests from minority shareholders for inclusion of additional points in the daily order of the general meeting, etc.). With regard to the legal form, the joint-stock companies are with most available information have, followed by single-member joint-stock companies and single-member limited liability companies (Figure 3).

Figure 3



Source: Commercial register at Registry agency, September 2018.

## **Corporate governance of state-owned healthcare establishments in Bulgaria under the Guidelines of Organization for Economic Cooperation and Development**

### *I. Rationales for state ownership*

In 2016, the Ministry of Health adopts the Action Plan for Implementation of National Health Strategy 2020 and defines as a priority „... the development of a fair, sustainable and effective health system, oriented towards quality and results...“ (Ministry of Health, 2016). To achieve this subject, a policy is needed to ensure the financial sustainability of the healthcare system based on improving financial performance by increasing employer's healthcare contributions as well as introducing measures to support the National Revenue Agency the collection of health insurance contributions.

State-owned enterprises have more than one objective, which is why they should be considered for both their economic efficiency and social efficiency. In this respect, our survey shows that most often the objective of individual healthcare establishments are properly set and are related to the improvement of medical services. At micro-level in small number of cases the objectives are justified by the understanding that healthcare is a tool to reduce negatives of transition period and to mitigate the effects of the global financial crisis, for example to attract and retain doctors in Bulgaria and re-establishing confidence in healthcare establishments regardless of their indebtedness (Nedelcheva, 2017).

### *II. The state's role as an owner*

In Bulgaria, the laws provide every ministry to perform both functions at the same time - to own and to control. The principal (the Minister) appoint managers for three years. The terms and procedure for conducting the competition are approved by an ordinance of the Minister of Health. In the event of deterioration in financial performance and non-performance of economic indicators set out in the management or controlling contracts, the general meeting of shareholders may terminate the contract with the manager before the expiry of its term (*ad nutum*).

In order to achieve the main objective of state-owned enterprises to provide public goods, a leading factor is the remuneration of executive directors. Unlike private companies, managers of state-owned enterprises do not receive any additional remuneration when the share price increases. In Bulgaria, the state, as a majority owner, determines the composition of boards, including their remuneration. The composition of the board of directors is fixed – the number of its members is three members for sole-owned joint stock companies and five members for co-owned joint stock companies. Unlike other employees, managers can be released from their position without prior notice. The salary of executive directors is in line with the financial results achieved and for members of board the salary is in the range of 280 to 400% of average reporting monthly gross salary for particular healthcare establishment. The salary of board members shall be paid for a full year, and in the event that there is a change of board member during the year, no remuneration is paid for both the old and new member of the board. No remuneration shall be paid to members of the board who are representatives of the Ministry of Health in accordance with the

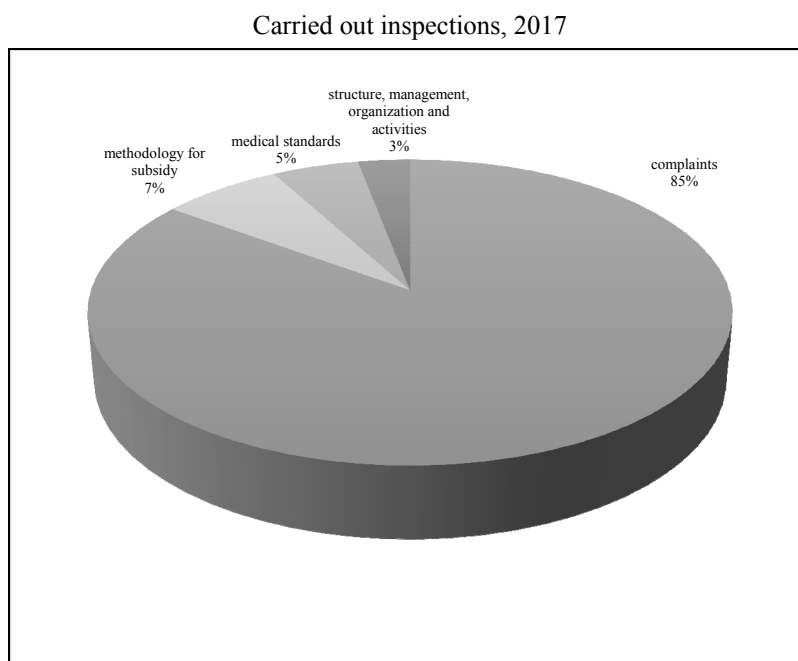
provisions of the Civil Service Act. In the case of single-owned joint-stock companies, the members of board provide a warranty for their management through a promissory note and, in the case of co-owned joint stock companies, in cash.

In Bulgarian practice, state-owned healthcare establishments - joint-stock companies have a statutory one-tier system of management. The number of board members is three for single-member joint-stock companies and five members for co-owned joint-stock companies. The usual number of meetings of boards for one-year ranges is from seven to 36, with a minimum number provided under the Commercial Law four meetings per year. Healthcare establishment managers are responsible for identifying the objectives, identifying the risks to achieving them, and introducing adequate and effective financial management systems, accounting policies and information provision.

The state, as a majority shareholder, determines the auditors, including their remuneration. In state-owned establishments, as opposed to the private sector, the auditors perform only audit but not advisory services (Tsvetanova, 2014). As a good practice, we should regard regular disclosure of auditor remuneration, which is usually between BGN 3,000 and BGN 6,000 (approximately EUR 1,500 and EUR 3,000) with VAT.

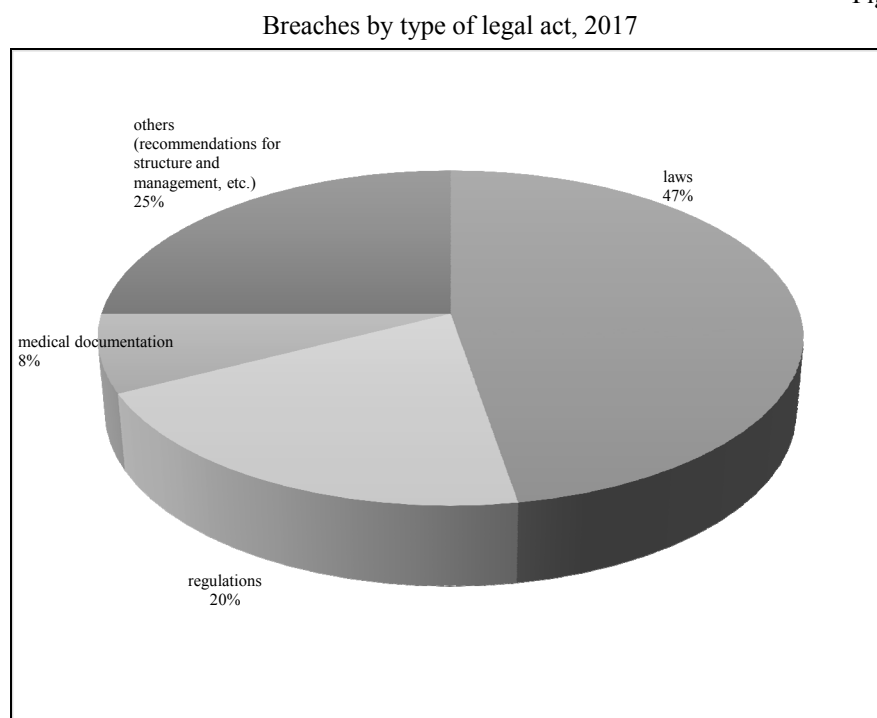
The Medical Audit Executive Agency carries out checks on the compliance of structure, management, activity and organization of medical services in healthcare establishments. In 2017, the share of carried out inspections on state ownership management is small (3%) (Figure 4), but has large proportion in the breaches found (25%) (Figure 5).

Figure 4



*Source: Medical Audit Executive Agency, 2018*

Figure 5



Source: Medical Audit Executive Agency, 2018

### III. State-owned enterprises in the marketplace

All state-owned healthcare establishments are included in a list of companies, which not subject for privatization. Since 2002, only the Privatization agency has the right to change the list.

In Bulgaria, the Ministry of Health performs two roles: as an owner and a supervisor. A number of competent authorities are entitled to exercise control over state-owned enterprises: the Medical Audit Executive Agency, the Medicines Executive Agency and the National Council on Prices and Reimbursement of Medicinal Products. At the same time, the Ministry of Health has real opportunity to exercise its power beyond the objective of quality health care - for example, to address the negative financial results of healthcare establishments, many of which are a result of delayed payments to suppliers in the sphere of these sub-delegated agencies. Another possibility of intervention is related to the health insurance system and the indebtedness of healthcare establishments due to activities affecting persons without a status in the healthcare system due to delayed contributions or lack thereof.



#### *IV. Equitable treatment of shareholders and other investors*

In Bulgaria, the statutes of all state-owned enterprises declare that minority shareholders have a right to convene an extraordinary general meeting of shareholders if they collect at least 5% of the capital for this purpose. It is common practice for them to take advantage of their right to include new items on the agenda of the general meeting of shareholders.

The survey found that, in most cases, state-owned enterprises did not submit a declaration on corporate governance practices under the guidelines by OECD or under the recommendations of National Corporate Governance Code, referring to a letter of Financial Supervision Commission No. 93-00-1486 of 03.02.2017. In just one case, a professionally prepared corporate governance statement is presented (Hospital Tsar Ferdinand I, Iskrets), and in another one case – a good corporate governance program (Specialized Hospitals for Rehabilitation – National Complex, Sofia).

For the protection of shareholders' rights, there are two cases:

- In the case of capital increase with in-kind contributions, such as expensive equipment or real estate, only the share of contributing shareholder is increased.
- For shareholders who participate with proxies at general meeting of shareholders, the meeting expenses are borne by proxies themselves. In case of personal participation by principal, the meeting expenses are borne by the entity.

#### *V. Stakeholder relations and responsible business*

In Bulgaria, for the first half of 2018, the Minister of Health issued 257 acts with which exercised the rights of the state in governance of state-owned enterprises with over 50% state participation in equity (Ministry of Health, 2018). At the initiative of the Minister (the Principal), have been conducted eight extraordinary general meetings of shareholders in healthcare establishments.

The incomes from state ownership are included in non-tax revenue, together with revenue from government fees and penalties. For the first half of 2018 an amount of BGN 2.8 million (approximately EUR 1.4 million) were collected as incomes from state ownership or 14.7% of all revenues (Ministry of Health, 2018).

#### *VI. Disclosure and transparency*

In Bulgaria, the state-owned enterprises publish annual reports endorsed by external auditors. In most cases, the financial results are presented based on International Accounting Standards, which allows carrying out a comparative analysis both outside state ownership and outside of Bulgaria. The annual financial statements are published in the Commercial Register at Registry Agency. For public disclosure of performance by state-owned enterprises, the National Audit Office carried out planned audits. For 2016, only six state-owned enterprises did not submit their annual reports to the Ministry of Health (Bulgarian National Audit Office, 2018).

## **Conclusions and recommendations**

State-owned enterprises, unlike the private sector, are established to perform social functions and contribute to generating public goods while positive financial results remain in the background (Nedelchev, 2004). The effects of state-owned enterprises are difficult to evaluate, and a prolonged period is required for their performance and reporting. Due to this fact, the degree of economic development of a country can be judged on the governance of state ownership. For the healthcare sector, an additional factor in the dilemma of two objectives should be taken in mind the difference in their time frame – the financial results are annually while public goods – long-termed and permanent.

The new reality puts the need to update the guidelines for good corporate governance practices of state-owned enterprises. The effects of the global financial crisis and the trends in demographic development are the main factors to be taken into account when managing state-owned enterprises. In this sense, the recommended nature of OECD Guidelines contributes to their widespread application and to the creation of a basis for comparative analyzes across sectors and countries.

Bulgaria's new priorities, related to OECD membership and to the Euro area, determine the importance of our survey. Modern corporate governance practices in state-owned healthcare establishments are primarily aimed at achieving financial results rather than generating public goods. Our survey has a pioneering character and the data can be used in future developments on the chosen topic, for example in other sectors of the Bulgarian economy. It would be interesting and beneficial to repeat the same study after a certain point in time in order to establish the dynamics of good practices.

The data from our survey find that the leading role in corporate governance of state-owned enterprises in Bulgaria has the external environment in the face of international organizations – it is clear that good practices in Bulgaria are mainly the result of recommendations by international organizations with the leading position of the Organisation for Economic Co-operation and Development. National practices are adapting to global changes, while policies continue to reflect the transient nature of the economy. For the Bulgarian reality, the main factors of the external environment in formation of practices of corporate governance of state-owned enterprises are the concentrated ownership of the state, the social orientation of state ownership and the importance of healthcare for economic development.

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## BULGARIAN FIRMS AS ENGINE OF CORPORATE SOCIAL RESPONSIBILITY

*CSR has a great importance for assessing the impact of business on society in global, European and national context. It is a complex and multidisciplinary conception it explores the institutional prerequisites for responsible activities of companies and their impact on its stakeholders. This publication systematizes new economic theories in the theoretical field, describes CSR core principle and international CSR Standards and gives empirical information on their application in Bulgarian firms. Recommendations are given for the CSR development guidelines according to European requirements.*

*JEL: M14*

### 1. Theoretical Background of Corporate Social Responsibility

Concern about the impact of business on society is a global one. The expectations of numerous stakeholders as to the impact of private enterprises to society are increasing. International Guidelines, International and National Standards and company codes are being developed in order to increase the rate of Corporate Social Disclosure and Reporting. All this confirms the relevance of this theoretical direction in economic science. In spite of the rich economic literature in this area, and so far no universal CSR definition has been established.

One of the reasons is that contemporary CSR Agenda is very dynamic and includes ever new guidelines such as the fight against poverty, measures against social exclusion and human and business rights violation, biodiversity conservation and climate change. CSR is a very flexible concept predetermined by increase demand from society and development creating favourable conditions for economic, social and environmental impacts of business operations and their responses to multi-stakeholders. Therefore CSR is also considered as a source of competitive advantages.

Another reason is that different terms are used to represent of a CSR phenomenon-corporate social performance, corporate social disclosure, corporate social sustainability. The CSR definition has undergone substantial modifications over time and it is still evolving along with society and stakeholders expectation. It is generally agreed that CSR is

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constituting actions whereby enterprises integrate societal concerns into their corporate business strategies and operations, including economic, social and environmental concerns. As minimum CSR Standard to observing of enterprises can be established compliance with national law norm. CSR goes beyond that barrier and covers volunteer activities beyond the legal norms. In this context, CSR is not only corporate philanthropy or strict compliance with the law.

Leading international institution offers the following CSR definition.

According to OECD CSR private initiatives should be targeting to reach of public goals. The following definition is proposed – CSR as a business in society is “to yield adequate returns to owners of capitals by identifying and developing promising investment opportunities and, in the process, to provide jobs and to produce goods and services that consumers want to buy” (OECD, 2001, p.7).

Analyzing Performance Standards on Environmental and Social Sustainability, International Financial Corporation (IFC) determines CSR as “dynamic and continuous process initiated and supported by management, and involves engagement between the client, workers, local communities and other stakeholders.” (IFC, 2012, p. 5).

World Economic Forum adopts the following notion. “Business that are able to enhance their net positive contributions to society are more likely to earn the trust of stakeholders and secure their licence to operate in society. A business leader has to think about how to solve the societal challenges of today, because if we do not solve them, we will not have a business.” (WEF, 2016, p. 5).

Guideline for the German Sustainability Code categorically proves the thesis, that “the company discloses how the socially and economically relevant stakeholders are identified and integrated into the sustainability process (Guidance for SMEs, 2014, p. 34).

The Triad of Organizations Sustainability, IFC and ETHOS defining the components of corporate sustainability describes three main dimensions “people, planet profits’ or “social, economic and environmental and, points out engagement with stakeholders as a core of CSR.” (SustainAbility, IFC, ETHOS, 2002, p. 7-8).

Account Ability Organization believes that CSR is Stakeholder Engagement and “fundamental accountability mechanism, since it obligates an organisation to involve stakeholders in identifying, understanding and responding to sustainability issues and concerns, and to report, explain and answer to stakeholders for decisions, actions and performance.” (AccountAbility, 2015, p. 5).

Despite the various CSR definitions, there are many common features:

- CSR and corporate sustainability are perceived as synonyms
- Inseparable relationship between CSR and Stakeholder Engagement
- CSR reflects in numerous benefits for individual companies and society
- There is a consensus on global norms for business conduct

- CSR requires effective management practice
- Companies integrate concerns – social and ecological – to their interaction with their stakeholders on a voluntary basis
- CSR is an interface between business and society.

The academic theoretical review further deepens the analysis of CSR. Although the specificity, the institutional approach to CSR and Corporate Governance (CG) has many common characteristics. Institutional domain requires unity between actively functioning institutions and formal or informal norms, values, rules, regulations and standards.

In both cases the dominance of the agency theory is overcome and an emphasis has been placed on satisfying of stakeholder interests. The new CSR Agenda in CG context exceeds the main function of CSR as an instrument for shareholder value maximization and sets as requirement the achievement of a balance between different corporate stakeholders.

Between contemporary CSR and CG there are not conflicts regarding to protection of shareholders against managerial abuse on the result of separation of ownership and control and information asymmetry, guarantee of residual control rights, delegation of control to Board of Directors, remuneration and bonus schemes to forcing managers to act according to shareholders interests.

Without denying all this, CSR sets new higher goals to the fulfilment of analogous fiduciary duty towards all the stakeholders of firms and not just to owners. So the fiduciary relationship applies in a wide variety of relationship. The stakeholders are primary subjects, as long as they possess specific investments in the firm without which the firm can not exist- human capital, social capital, environmental capital. This group of stakeholder influence direct on the value of firms but also back – depend upon to meet their needs. Furthermore, different group stakeholders undergo the external effects – positive or negative – from transactions performed by the firm even if they do not directly participate in the transaction. In this context, the firm owes fiduciary duties to all its stakeholders, including the owners.

According to Campbell, the institutional determinants of CSR suggest that “firms are embedded in a broad set of the political, economic, cultural institution that affect their behaviour.” (Campbell, 2007, p. 948). According the author corporations must not do harm their stakeholders – investors, employees, customers, suppliers or the local community within they operate. If corporations do harm to their stakeholders they must brought to their attention. The thesis of Campbell is that this is a definition that sets a minimum behavioural standard with respect to the relationship of corporation to its stakeholders, below which corporate behaviour becomes socially irresponsible.

Can be graded five degrees of Stakeholder Engagement. The lowest grades are inactive and reactive degrees, when decision making ignore stakeholders interests. In the proactive and interactive forms, the management seeks to take account of specific interests of different group of stakeholders (Keremidchiev, 2016; Tchipev, 2012). The sustainable degree means rising of Stakeholder Engagements to the level of Strategic Management.

USA model of CSR is characteristic of liberal market economies and is distinguished by individualism, incentivizing responsive actors, including isolated actors and philanthropy as the main tool of responsibility. This model can be defined as a business in society prevailing corporate strategies, corporate policies and programs. All incentives and opportunities are embedded by the expectation and claims of a different group of stakeholders in corporations. In this sense this model is explicit.

European CSR model, including Bulgarian model, is applicable to coordinated market economies and is characterized with collectivism, solidarity, partnership governance, governance and private policy providing obligations and associated actors. European companies function in unity with a formal and informal institution for interests of society. In their business operations can apply values, norms and rules. Engine of the model is societal consensus on the legitimate expectation of all multi-stakeholders in society. This CSR model may be defined as implicit.

In both models CSR provides to companies license to operate. The concept of earning a Social License to Operate (SLO) is very common and identifies with business risk management. Emphasis is placed on business successful and corporate sustainability than just legal and regulatory compliance. The idea is the business to earn the support of the community and society in which it operates. There is no universal definition, but SLO can mean ongoing acceptance by the people who live and work in the area of impact influence of any business activity. SLO is improved risk management and can contribute to resolving conflicts. It is possible grading of three levels of SLO- acceptance (determine legitimacy boundary), approval (credibility boundary) and full identification (co-management of business and united front against critics). Under legitimacy, boundary are possible shutdowns, boycotts (IFC, 2014, p.17).

SLO contributes to the understanding of business of local context, to building relationship base on trust and transparency, to establish an early grievance instrument for conflict management, to avoid social risks and to create value for local communities.

High form of applications of CSR principles are international CSR Standards.

## **2. International CSR Standards And Their Application In Bulgarian Firms**

The application of the universal principles of CSR as part of CG in practice is carried out through international CSR as the most important standards. The international CSR standards are similar to international CG Standards. They are intended to help companies evaluate and improve the institutional values, norms and rules of CSR to put into practice the corporate sustainability in economic, social and ecological dimension however through soft law mechanism. These Standards aim to provide a flexible reference for corporate subjects to develop their own corporate responsible strategies. To remain your competitive advantages companies need to add international established world norm.

As soft law tool, international CSR Standards skillfully complement national legislation and corporate regulation – self-regulation and co-regulation. All this presupposes voluntary observance of the standards and their not training as strong law or state regulation.

At the same time when CSR international standards are used as a national approved and suggest further regulatory provisions, compliance and sanction, their status in terms of can be more defined.

The International CSR Standards are not binding and do not aim at detailed recommendations to national legislation. Through them defines the strategic goals and the methods for their achievement. The various aspects laid down in the standards contribute to recognizing the interests of employees and other stakeholders. They are an important role for long-term success and firm performance of the company.

These Standards are additional warranty against opportunity behavior of managers which may negatively affect on ex-ante and ex-post rights of stakeholders.

The international CSR Standards are a useful tool to improve their own social responsible activity in companies. They are used as an effective benchmark for relevant company decision making processes and their environmental, anti-corruption and ethical behavior in practice. So that companies can respond to the new societal demands and new opportunity for corporate sustainability and growth.

The implementation of international CSR Standards is of great importance for affirming the confidence of investors. It serves an additional guarantee for the security of their assets. In this context, they achieving of objectives with respect to the trust of shareholders and to capital value creation, too. Flexible implementation standards as international landmarks convincing investors that their rights are fully protected.

They perceive compliance with international universal rules as secure protection for infringement of their ownership rights and avoiding significant litigation costs.

International CSR Standards must design corporate activity to serve of public interests.

Another important point is that the stock market also requires transposition of international CSR Standards in order to provide companies with the performance of the high social and ecological requirements of the international capital market.

Implementation of world recognized standards is very current from the point of view of cross-border cooperation. It is very important for equal treatment for foreign and domestic shareholders which is important for creating a favorable environment for foreign direct investment.

International CSR Standards raise social capital in companies and form the basis of social audit (Dimitrova, Stefanov, Peycheva).

The empirical data shows that 37 % (11 companies) of Bulgarian joint – stock companies have CSR Performance Section of their website<sup>2</sup>, CSR Overview – 30% (9 companies)<sup>3</sup> and CSR contact – 3% (1 company)<sup>4</sup>.

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<sup>2</sup> Enemona” AD, „Euroterra” AD, „Industrialen Holding” AD, „Sviloza” AD, „Sofarma” AD, „Stara planina Holding”AD, „Bulgartabak” AD,” Fond Nedvigimi imoti”AD, „Spidi” AD, „Monbat” AD, „Eltos” AD.



However, the survey results show that companies do not assess the importance of instrument as Stakeholder map. Only one of the managers of the 30 surveyed enterprises declares that a Stakeholder map was developed and effectively implemented in his company. The positive experience of “Industry Holding” needs to be thoroughly studied and widely disseminated.

30% of the manager (9 companies)<sup>5</sup> confirms that companies have developed their own CSR corporate policies and strategies.

13% of companies (3 firms)<sup>6</sup> provide public CSR information and 40% of Directors for relationship with investors (12 firms)<sup>7</sup> has a stable connection with social media.

50% (15 firms) has developed ethical codes.

OECD Guidelines for Multinational Enterprises (2011), UN Global Compact and Social Accountability 8000 are main international recognizes CSR Standards.

Bulgarian companies are not indifferent to the current tendencies in the world to comply with the requirements of International CSR Standards. Proof of this are the results of an empirical study of 30 Bulgarian public companies, conducted in 2017. The surveyed sample of companies was proposed by X3 News Information Agency as the main subject for transparent information about regulated public companies in Bulgaria. The analysis was developed on the basis of processed interviews with the managers as well as web company information. Despite the small number of observed enterprises it is possible to reveal some peculiarities in the Bulgarian practice. Public companies in Bulgaria are most recognizing three international CSR Standards – OECD Guidelines for Multinational Enterprises (the Guidelines), UN Global Compact (UN GC) and SA 8000.

The Guidelines is the most comprehensive set of government-backed recommendations on responsible business conduct as compliance of national legislation is a priority. In the Guidelines skillfully are integrating activities of governments (fair regulation, transparency, public regulation), trade unions/ NGOs (proactive engagements, ensuring accountability) and business (responsible business conduct). The implementation of the Guidelines creates effective reputation management, trust for investors, social license to operate, added value for consumers, assets to new markets.

Updated 2011 Version of Guidelines even more strongly emphasized the observance of business and human rights, responsible supply chain management, stakeholder engagement, Employment and Industrial Relations, Bribery, Environment, Consumer Interests.

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<sup>3</sup> „Enemona” AD, „Euroterra” AD, „Industrialen Holding” AD, „Sofarma” AD, „Stara planina Holding” AD, „Bulgartabak” AD, „Fond Nedvigimi imoti” AD, Spidi AD, „Treis Grup” AD.

<sup>4</sup> „Sviloza” AD.

<sup>5</sup> „Albena Invest” AD, „Sviloza” AD, „Industrialen Holding” AD, „Sinergon Holding” AD, „Sofarma” AD, „Sofarma Trade” AD, „Stara planina Holding” AD, „Treis Grup” AD, „Bulgartabak” AD.

<sup>6</sup> „Industrialen Holding” AD, „Sofarma” AD, „Stara planina Holding” AD.

<sup>7</sup> „Sofarma” AD, „Spidi” AD, „Bulgarska Holdingova kompanija” AD, „Monbat” AD, „Zaharni zavodi” AD, „Bilbord” AD, „Investor” AD, „Korabostroene” AD, „Petrol” AD, „Eltos” AD, „Kateks” AD, „Agria grup” AD.

Observance of Guidelines by companies is full voluntary but it reflects very detailedly on future expectations. Particularly important is Due diligence requiring a systematic approach to company performance as the process through which enterprises can identify and reduce potential negative impacts and provide information on how to overcome it. This is very important for risk evaluation of different suppliers and determines whether contracts with suppliers will be continued or terminated.

Stakeholder Engagement is very important for Guidelines applying and interactive interaction is recommended. The active consultation and communications are imperative in the mining sectors where most often cause large negative socio-economic and environmental negative impacts.

Good corporate governance and implementation of OECD Principles for corporate governance is a stable foundation for International CSR Standards implementation.

The empirical data show that 20% (5 firms)<sup>8</sup> of observed companies adhere to the requirements of OECD Principles.

SA8000 is important reporting standard that reveals develop and enforce of corporate social policies and social accountability requires in the following main directions: Child labor, Forced Labor, Health and Safety, Freedom of Association/ Right to Collective Bargaining, Discrimination, Disciplinary Practices, Working Hours and Remuneration of Directors.

None of the observed Bulgarian public companies declare performance of SA 8000. This requires that it be promoted in order to implement it in the future.

The requirements of Standard SA 8000 to companies must be respected by their suppliers and contractors, too. Commitments of top management is the building of effective management systems with respect to international reporting instruments and their interpretation. Reporting Indicators of Standard SA 8000 are in line with The Guidelines and UN Global Compact.

The UN Global Compact as international CSR Standard is directed primarily to the business sector. The Standard is multi-stakeholder initiative and engages different subjects-public institution, NGO and trade unions. The UN Global Compact invites companies to support within their activity the following main approaches – Human Rights, Labor Standards, Environment, Anti Corruption- systematized in 10 principles. Business should support the protection of internationally proclaimed human rights, uphold the freedom of association and collective bargaining rights, elimination of child labor and discrimination, promoting environmental responsibility, activities against corruption. This voluntary international initiative is established as a basis for learning, dialogue and partnership. In this sense, UN Global compact strengthens corporate sustainability and increases long-term value in environmental, social and ethical terms.

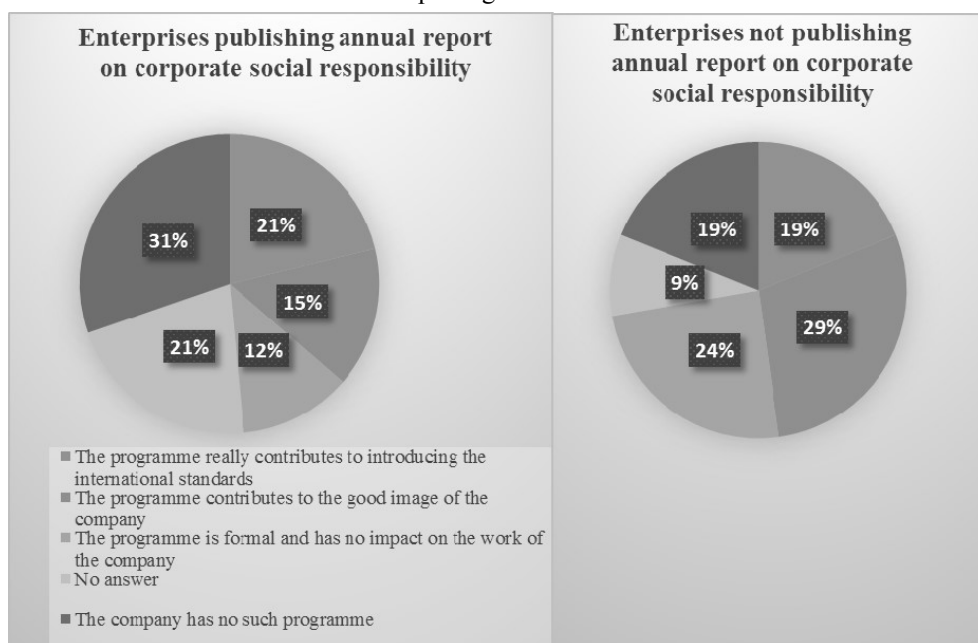
27% (8 firms)<sup>9</sup> of observed public company declare that they comply with the norms of UN Global Compact. Values of UN Global Compact are universal and should be actively promoted and applied.

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<sup>8</sup> „Sofarma”AD, „Sofarma Treid”AD, „Sparki Eltos”AD, „Svilosa”AD, „Optela”AD.

Empirical data show that 21% (6 firms) of the surveyed joint-stock companies apply requirements of International CSR Standards through their corporate program and strategies, 15% (5 firms) believe that corporate initiatives related to the implementation of International Standards contribute to a good image of companies. 12% of companies (4 firms) are of the opinion that corporate standards-related programs have no impact on the company results. 21% (6 firms) of the firms do not answer and 31% (9 firms) not have corporate policies and programs aimed at complying with requirements of International Standards.

Figure 1  
CSR Reports in Bulgarian joint-stock companies on the basis of programs for international reporting standards



Bulgarian public companies appreciate the importance of international CSR Standards. Even more active inclusion of corporate policies related to the requirement of the world norms of business conduct is necessary.

<sup>9</sup> “Bulgarska holdingova kompania”AD, “Euroterra”AD, “Treis Grup”AD, “Sofarma”AD, “Enemona”AD, “Velgraf”AD, “Sparki”AD, “Kateks”AD.

## **Conclusion**

CSR has a great potential for assessing the impact of business on society. International CSR Standards perform the function of a landmark of business conduct. Bulgarian public companies also join the observance of norms and rules of international CSR Standards. Their activity in this direction is recommended to be even more active.

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## INNOVATION ACTIVITY OF THE BUSINESS SECTORS IN THE BORDER REGIONS OF THE REPUBLIC OF BULGARIA AND THE REPUBLIC OF MACEDONIA

*The paper argues that cross-border cooperation is important for border regions for building productive economies and inclusive societies. It justifies also the need of integrating sustainable development principles into regional development practice.*

*The paper analyses levels and dynamics of key socio- economic indicators of the Northeast Region of Macedonia and Kyustendil district in Bulgaria such as regional – GDP, gross value added, employment, economic structure, demographic indicators.*

*It concludes by presenting prospects for development of cooperation in the cross border regions.*

*JEL: R10; R58*

### Introduction

The research in this paper concerns the situation related to economic development and innovative activity of the businesses in the Kyustendil District of the Republic of Bulgaria (Kyustendil, Dupnica, Rila, Sapareva Banya) and Northeast Region of the Republic of Macedonia, more precisely in the Kratovo, Kriva Palanka, Kumanovo, Lipkovo, Rankovce, and Staro Nagoričane municipalities.

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*Mochurova, M., Dimitrov, M., Totev, S., Fiti, T., Antovska-Mitev, M., Jovanovski, B. (2019). Innovation Activity of the Business Sectors in the Border Regions of the Republic of Bulgaria and the Republic of Macedonia.*

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Innovativeness, i.e. innovative business is being defined, in accordance with the already comprehended meaning of innovation as recognized by scholarly papers in the areas of economy and of entrepreneurship, as well as the Eurostat and the European Innovation Scoreboard methodology for innovative businesses. An enterprise is considered innovative if it has introduced at least one of the following four types of innovation: product / service innovation, process innovation, organizational innovation and marketing innovation.

The paper is structured in three parts. The first part refers to the analysis of the socio-economic characteristics of the two cross border (CB) regions. In the second part of the paper, the focus of the research is on the analysis of innovation activities of the enterprises from the two cross border regions. The third part of the paper consists of conclusions and recommendations for improving the innovative capacity of enterprises from both CB regions of the two countries.

## **1. Socio-Economic characteristics of the two Border Regions**

### *Kyustendil District of Bulgaria*

The Kyustendil district is one of the five NUTS 3 regions forming the Southwestern region of Bulgaria (NUTS 2 level). Specific for this region is the big difference between the districts – on the one hand, the highly developed metropolitan area – Sofia city district, and on the other hand, Kyustendil district, characterized by comparatively low economic indicators – both in terms of achieved level and dynamics of development. The administrative division of Kyustendil district comprises nine municipalities, the two largest Kyustendil and Nevestino being border with the Republic of Macedonia. The territory of Kyustendil region (NUTS 3 level – districts) is 3084 km<sup>2</sup>, and the population of Kyustendil district represents only 1.76% of the population of Bulgaria in 2015.<sup>7</sup>

Achieving stable economic growth is the main challenge for Bulgarian regions, the development of which has been severely complicated in the last decade of the economic crisis. The weak economic starting positions of the Kyustendil district on the eve of the economic crisis further aggravated the overall socio-economic picture – the result is a relatively high slowdown of GDP growth compared to the country average rates and the ones of the most other districts.

The statistical evidence shows that Bulgaria's GDP growth (in current prices) in the Kyustendil District lags considerably against the average indicators for the country.

Some key indicators for the socio-economic development of Bulgaria, the Southwestern region and the district of Kyustendil for 2015, as well as their dynamics, are presented in Table 1.

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<sup>7</sup> Republic of Bulgaria National Statistical Institute (NSI) -- <http://www.nsi.bg/en> and own calculations.

Table 1  
Socio-economic data for Bulgaria, Southwestern region and districts of Kyustendil – 2015

	GDP per capita in 2015 – average for the country = 100%	Change of the share of GDP, 2015/2007, %	Productivity (GVA per employee) as a share of the average for the country 2014, %	Population density 2015, inhabitants per 1 km <sup>2</sup>	Mechanical growth in 2015, ‰	Total FDI for the period 2007-2014 – Bulgaria = 100%	Employment coefficient 2015, % (aged 15-64)	Unemployment coefficient 2015, %	Share of the average annual salary of employees, Bulgaria = 100%
	1	2	3	4	5	6	7	8	9
Bulgaria	100.0	100.0	100.0	64.8	-0.59	100.0	62.9	9.1	100.0
Southwestern region	170.1	103.5	133.4	105.8	2.22	63.1	-	6.7	124.4
Kyustendil district	54.7	78.1	71.0	40.8	-3.24	0.1	60.2	13.1	71.1
<b>Average unweighted by districts<sup>8</sup></b>	<b>72.6</b>	<b>92.8</b>	<b>81.4</b>	<b>-</b>	<b>- 2.6</b>	<b>-</b>	<b>60.0</b>	<b>11.5</b>	<b>81.4</b>

Source: NSI and own calculation.

The unfavourable development determines also the low level of GDP per capita, ranks the Kyustendil district on 20<sup>th</sup> position among the 28 districts in the country (column 1, Table 1). Labour productivity in the Kyustendil District (column 3) is also lower than the average unweighted for the country.

Among the observed indicators in Table I-2 clear interdependencies can be identified. Economic indicators GDP per capita, productivity and foreign direct investment (FDI) are closely related – the correlation coefficient between GDP per capita and labour productivity is 0.85<sup>9</sup>, between GDP per capita and FDI is 0.93 and between productivity and FDI is 0.69, (Totev, 2014).

Expectedly, the demographic indicators are interrelated with economic indicators. The population density is most closely related to the economic indicators of the observed demographic indicators. The correlation coefficient between GDP per capita and population density is 0.92. Population density is also closely related to labour productivity, a positive correlation coefficient of 0.65. Since FDI is mainly directed to highly urbanized regions, there is a logical close relationship between population density and FDI.

The stability and sustainability of the firms in the conditions of market competition is also of particular importance for the development of the economy in the Kjustendil district. Comparatively large enterprises, with over 250 people employed, are relatively few, and

<sup>8</sup> The comparison of the indicators for Kyustendil district with the average unweighted for the 28 districts is more appropriate in some cases, because the weighted average is strongly influenced by the data for metropolitan city Sofia – see column 1, total average for Bulgaria 100, average unweighted 72.6.

<sup>9</sup> Linear correlation coefficients calculated on the basis of the information on observed indicators for the 28<sup>th</sup> districts in Bulgaria.

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they are concentrated in the municipalities of Kyustendil, Dupnitsa and Bobov Dol. The structure of the companies according to the number of employees shows a trend of increase of the firms with up to 9 employees for Kyustendil district – a trend which is characteristic for the country as a whole (Table 2).

Table 2

Share of firms according to the employed persons in Bulgaria and Kjustendil and Blagoevgrad districts, %

Region	Number of employees	2005	2010	2015
Bulgaria	Up to 9 employed	89.2	91.9	92.4
	from 10 to 49 employed	8.7	6.6	6.2
	from 50 to 249 employed	1.8	1.3	1.2
	More than 250 employed	0.3	0.2	0.2
	Total	100.0	100.0	100.0
Kyustendil	Up to 9 employed	91.2	92.8	93.5
	from 10 to 49 employed	6.7	5.7	5.2
	from 50 to 249 employed	1.8	1.3	1.1
	More than 250 employed	0.3	0.2	0.2
	Total	100.0	100.0	100.0
Blagoevgrad	Up to 9 employed	88.9	92.1	93.3
	from 10 to 49 employed	8.5	6.4	5.6
	from 50 to 249 employed	2.4	1.4	1.0
	More than 250 employed	0.2	0.1	0.1
	Total	100.0	100.0	100.0

Source: NSI, Infostat

The data in Table 2 shows that the majority of these companies fall in the category of micro companies with the inherent characteristics – limited opportunities for innovation and use of European development programs, as well as other specific features.

The educational level of the population of Kyustendil is lower than the average (the percentage of population with higher education in Bulgaria in 2015 is 27,5%), but for a region that is peripheral and in the absence of a Higher education institution (University), the percentage of 23.7% of the population with higher education in 2015 can be considered as relatively high.<sup>10</sup>

The R&D expenditures for Kyustendil district are very low, at the rate of 0.1% of all the country's expenditures. For example, the ones in Blagoevgrad district are about 4-5 times higher. Similar are data for the employed people in R&D activity (Table 3).

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<sup>10</sup> NSI, Infostat.



Table 3

Research and Development activities and access to Internet for Bulgaria and Kyustendil and Blagoevgrad districts\*

Indicators	Regions	Measures	2010	2011	2012	2013	2014	2015
R&D Expenditures	Bulgaria	1000 BGN	421612	429566	496176	521682	664829	850457
	Kyustendil		1063	..	..	..	712	..
	Blagoevgrad		..	4339	..	3045	3421	4079
Persons employed with R&D	Bulgaria	Number	20823	20810	21677	22307	25484	29591
	Kyustendil		132	..	..	..	110	132
	Blagoevgrad		..	639	..	628	587	613
Share of household with access to Internet	Bulgaria	%	33.1	45.0	50.9	53.7	56.7	59.1
	Kyustendil		21.4	35.2	31.7	52.4	45.8	50.3
	Blagoevgrad		24.3	42.3	54.9	60.5	61.9	63.3
Share of persons using Internet on a regular basis (in age 16 -74)	Bulgaria	%	41.6	46.4	50.3	51.2	53.7	54.6
	Kyustendil		30.9	32.7	32.2	48.6	40.0	46.5
	Blagoevgrad		34.1	38.8	48.0	51.1	54.3	55.6

\* ".." - Confidential information

Source: NSI, Infostat

By indexes access to the internet and a share of internet users aged 16-74, Kyustendil district lags behind both the average levels for the country and Blagoevgrad district, which indicators are slightly higher than these average levels.

#### *Northeast Region of Macedonia*

In 2007, under the imperative to harmonize its laws with the EU, Macedonia adopted the Nomenclature of Territorial Units for Statistics (NUTS 3 level) and created eight statistical regions: Vardar, East, South-West, South-East, Pelagonija, Polog, North-East and Skopje.

The total area of the Northeast Planning Region is 2,310 km<sup>2</sup>, i.e. 9.3% of the total territory of the Republic of Macedonia. This planning region consists of 6 municipalities (Kumanovo, Lipkovo, Staro Nagorichane, Kratovo, Kriva Palanka and Rankovce) with 176,018 inhabitants (8.5% from total population in Macedonia).<sup>11</sup>

According to the level of development, the Northeast planning region is the economically least developed planning region in the Republic of Macedonia. Its share in the Gross Domestic Product (GDP) of the Republic of Macedonia (table 4) is at a modest level of 5.0% (for 2014), which is much less than the share (9.3%) of the region in the total territory and the total population of the country (8.5%).

<sup>11</sup> Data from 30.06.2014 (Regions of the Republic of Macedonia, 2017, State Statistical office, Republic of Macedonia).

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Table 4

Gross Domestic Product								
	2009	2010	2011	2012	2013	2014	2015	2016
<i>Republic of Macedonia</i>								
Gross Domestic Product (in million MKD)	410.734	434.112	459.789	466.703	499.559	527.631	558.240	607.452
<i>Northeast region</i>								
Gross Domestic Product (in million MKD)	18.299	19.021	25.288	25.891	26.613	26.181	N/A	N/A
Participation	4.5%	4.4%	5.5%	5.5%	5.3%	5.0%	N/A	N/A

Source: Data obtained by Makstat (<http://www.stat.gov.mk/>) and World Bank Country profile for 2016.

Measured per inhabitant (Table 5), the Northeast planning region in 2015 had a gross domestic product of 164,161 Macedonian denars (MKD).

The acceleration of the economic activity in the region and the gradual escape from the crisis since the end of last decade affects to increase the GDP per person from 4.5% in 2009 to 5.5% in 2012. However, the share again decreased and reduced to 5.0% in 2014 (Table 4). This means that the Northeast planning region developed relatively faster than some other regions.

Table 5

GDP per inhabitant								
GDP per inhabitant (MKD)	2009	2010	2011	2012	2013	2014	2015	2016
Republic of Macedonia	200.293	211.246	223.357	222.519	241.827	255.206	269.514	287.760
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	N/A
Northeast region	104.775	108.664	145.554	147.095	151.328	148.745	164.161	N/A
	52 %	51 %	65 %	66 %	63 %	58 %	61%	N/A

Source: [http://www.stat.gov.mk/KlucniIndikatori\\_en.aspx](http://www.stat.gov.mk/KlucniIndikatori_en.aspx),  
<http://www.worldbank.org/en/country/macedonia/overview#2>

The Northeast planning region in 2016 had 4,095 active business entities and compared to 2010, the number of active entities decreased by 6.86%, while the decreased number of active entities in the Republic of Macedonia was 5.27% (Table 6).

According to the size of the business entities (the number of employees – for 2016), most of the active business entities in the region (90.55%) are micro enterprises (<10 employees) with small accumulation force and established with the purpose of economic existence of the founders and employees, and not for more serious business purposes, especially not in the area of asking of greater innovativeness. In the Northeast region are located 87 medium enterprises and only 4 big (+250 employees) business entities (Table 7).

Table 6

Active business entities

Active business entities	2010	2011	2012	2013	2014	2015	2016
Republic of Macedonia	75.497	73.118	74.424	71.290	70.659	70.139	71.519
Per 1.000 inhabitants	36,70	35,50	36,09	34,51	34,15	33,86	34,49
Northeast region	4.397	4.279	4.283	4.303	4.159	4.139	4.095
Per 1.000 inhabitants	25,10	24,41	24,40	24,47	23,63	23,49	23,24

Source: MAKSTAT (2017).

Table 7

Structure of the business entities (by number of employees)

Region	Northeast region			Macedonia		
Size / Year	2014	2015	2016	2014	2015	2016
0	102	299	315	3972	7329	8057
1-9	3651	3451	3393	60215	56261	56725
10-19	170	170	170	3092	3032	3111
20-49	146	125	126	1869	1947	2030
50-249	83	87	87	1305	1339	1363
>250	7	7	4	206	231	233
<b>Total</b>	<b>4159</b>	<b>4139</b>	<b>4095</b>	<b>70659</b>	<b>70139</b>	<b>71519</b>

Source: MAKSTAT (www.stat.gov.mk).

The most valuable sectors in the economic activities are the industry (food, chemical and metal, tobacco and cigarettes) and construction. The Northeast Region had the lowest share of 2.1% in total gross fixed capital formation in 2014 (Table 8).

Table 8

Gross fixed capital formation

Investments in fixed capital (in million MKD denars)	2010	2011	2012	2013	2014
Republic of Macedonia	82,968	94,698	109,071	119,003	123,549
Northeast region	2,150	1,145	2,645	2,482	2,543
Participation	2.6 %	1.2 %	2.4 %	2.1%	2.1 %

Source: MAKSTAT (www.stat.gov.mk).

The employment and unemployment rates of the population at the regional level show fluctuations (differences) in relation to the total rates at the country level. The rate of active population for the region has slowly increased in the last three years, and also the employment has increased and unemployment has declined. However, comparing with the national average, these indicators, in total, are insufficient to assess that the situation on the labour market in the Northeast planning region will be positive.

Table 9

Labour force market

	Macedonia			Northeast Region		
	2014	2015	2016	2014	2015	2016
Working population	1.673.494	1.676.659	1.678.890	140.454	141.719	142.121
Active rate	57.3	57.0	56.5	54.2	54.0	55.4
Employment rate	41.2	42.1	43.1	30.3	30.6	32.0
Unemployment rate	28.0	26.1	23.7	44.0	43.2	42.2

Source: MAKSTAT ([www.stat.gov.mk](http://www.stat.gov.mk)).

Unfortunately, the lowest employment rate in 2016 was again observed in the Northeast Region and the highest unemployment rate was registered in the same region (Table 9).

## 2. Results from the survey of the innovation activity of the business sectors in the two Border Regions

This part of the paper concerns innovations and it is mainly based on the analysis of the results obtained from the survey conducted in June and July 2017 in the framework of the Interreg-IPA Project № CB006.1.31.158 "Bulgarian-Macedonian Cross Border Cooperation for Capacity building for Competitiveness and Innovation". The survey which was based on the methodology of the "European Community Innovation Survey" (CIS), includes 150 firms from Kyustendil District in Bulgaria and 150 from Northeast Region in Macedonia that were interviewed using a stratified sample. The survey refers to the period 2012-2016.

In the beginning of the survey, it has been explained to the interviewee what an innovation is considered to be, its characteristics and types. Also, a special type of innovation, renewable energy sources (RES), was investigated.

The sample in the case of the Kyustendil District includes: 66% microenterprises, small – 31%, medium-sized – 2%, and large – 1%. Representatives of services sector are 33% of companies, manufacturing – 33%, trade – 27% and other sectors – 7%.

The sample in the Northeast Region includes: 87 micro enterprises (up to 9 employees), 48 small (10-49 employees), 14 medium-sized (50-250 employees), and one large (> 250 employees). Representatives of services sector are 60 of companies, 44 in manufacturing, 45 in trade and one in other sectors.

The interviewees in the both regions are mainly owners and managing directors of the companies, i.e. people who participate in taking decisions and represent different economic sectors. Selected results from the survey are presented below.

In both countries according to the survey a significant number of firms have been engaged in any activities related to introduction or initiation of innovative activities – in Macedonia about 40% and in Bulgaria more than half of firms. In Macedonia most often activities related to introduction or initiation of innovation activities are: trainings for innovative

activities and acquisition of machinery, equipment, software & buildings. In Bulgaria these activities are: employment of new staff and acquisition of machinery, equipment, software & buildings (Table 10).

Table 10  
During the last five years (2012-2016) have your enterprise engaged in any activities related to introduction or initiation of innovative activities

Type	% of all cases	
	Bulgaria	Macedonia
In-house R&D	4.0	0.0
External R&D	2.7	0.0
Acquisition of machinery, equipment, software & buildings	17.3	24.7
Acquisition of existing knowledge from other enterprises or organizations	0.7	2.0
Training for innovative activities	11.3	26.0
Introduction of a new or significantly improved product (good, service)	06.7	19.3
Change in the organization	16.7	8.7
Employment of new staff	20.0	2.0
Market introduction of innovation	3.3	4.0

Only few companies in the Bulgarian survey have been engaged in in-house or external R&D activities, and none in the Macedonian survey. Also, only 3% of enterprises in Bulgaria have introduced renewable energy sources (RES) and no one in Macedonia. The innovations are most often new for the company or new to the local market.

Most of the respondents with innovations in Bulgaria and only 12.7% in Macedonia have made some kind of legal protection of their innovations. The most common form of protection in both countries is “trademark”.

Concerning kinds of innovation (Table 11), about 41% of interviewees in Bulgaria have introduced innovations in some sphere during the last five years; most often this is an organizational innovation. In Macedonia 39.3% of interviewed companies have introduced innovations in some sphere during the last five years, where the most frequent types of innovations were – service and process innovation.

Table 11  
During the last five years have your enterprise introduced any kind of innovation in the following fields /aspects?

Sphere of innovation	% of all cases	
	Bulgaria	Macedonia
Goods innovations	5.3	16
Service innovations	8.7	23
Process innovation	8.0	22
Organisational innovation	17.3	17
Market innovation	1.3	7

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In Macedonia 48% of respondents are currently developing some innovations, less enterprises in Bulgaria (33% of responses) have answered that currently they have some innovations in the process of development. Again, the most common in Bulgaria are the organizational innovations and in Macedonia marketing innovations.

Innovation activities are more typical for bigger enterprises in the survey. Answers of medium-sized and large firms show that they have pointed out all kinds of innovations and innovations in all spheres, which they have introduced during the last five years. Innovations in micro enterprises are limited to acquisition of machinery, equipment, software & buildings; change in organization and employment of new staff, as well as organizational innovations and service innovations.

Concerning the effect of innovations according to respondents, innovations most often have had slightly positive influences on the enterprises and these are related usually to increased turnover, profits and market share. In Macedonia innovations have greater positive influence according to responders (Table 12).

Table 12

Direct influence of innovations on respondents' business

*1 – it might have some negative influence; 2 – not at all; 3 – it might had some positive influence; 4 – it had slight positive influence; 5 – it had moderate influence; 6 – it had great influence*

Type of influence	Weight average rang	
	Macedonia	Bulgaria
Increase turnover	5.4	4.1
Increase profit on enterprise level	5.3	4.0
Increase profit margins	5.1	3.9
Increase market share	5.2	3.9
Decrease costs	4.7	2.7

It is interesting to note that in both countries most of the respondents with innovations have financed the development of their innovations though own financing (Table 13). It is the case for 86% of the micro firms, 60% of small ones and 40% of large ones in Bulgaria and for 39.1% of the micro firms, 54.2% of small ones and 100% of the medium-sized firms in Macedonia. The opposite is the situation with EU funds – in Bulgaria only 2 and 3% of micro and small firms have used such funds to finance their innovations, in contrast to large firms – 40% of these respondents have EU financing. In Macedonia none of the respondents have received such financing. These differences are understandable for various reasons it is more difficulty for micro and small firms in Bulgaria to benefit from the EU funding and such funds are not available for Macedonia.

The sources of financing are an important topic and a special survey should be dedicated to the issue to study it in more detail.

It is important to be noted that in both countries the majority of enterprises with innovations that participated in the survey (90.2% of all Bulgarian respondents and 95.3% of Macedonian ones) have not received any support from public sources during the last five years for their innovation activities (Table 14). There are six cases of EU grants and single

cases of other types of support. This fact raises serious questions about the role public sources should play.

Table 13

Financing the development of innovations (in %) for Bulgaria

Type of financing	Type of enterprise by number of employees, %					
	Bulgaria			Macedonia		
	Micro	Small	Large	Micro	Small	Medium
Own financing	86	60	40	39.1	54.2	100.0
loan from a bank	12	31	20	1.1	8.3	21.4
Private investors / private investment fund	0	3	0	0.0	0.0	0.0
Public financing - from national funding (Excluding EU funds)	0	3	0	0.0	0.0	7.1
From EU funded funds	2	3	40	0.0	0.0	0.0

Table 14

Public support for innovation activities received by enterprises during the last five years in Bulgaria

Support	Percent of cases*	
	Bulgaria	Macedonia
Tax credits or deductions	1.6	0.0
Subsidized loans	0.0	1.3
Loan guarantees	0.0	0.0
Direct grants (EU funding)	9.8	0.7
Involvement of educational events – workshops, conferences	1.6	2.0
Providing training on innovation	1.6	1.3
No, we haven't received any support	90.2	95.3

\* Multiple answers.

It is also interesting to note that most of the companies have not prepared a project for EU programmes in the field of the innovations, environment, RES or are not interested at all in such projects (Table 15). There are single cases of approved projects for energy efficiency and RES, and no projects for innovations among the interviewees in Bulgaria. In the case of Macedonia there are not approved projects for energy efficiency and RES, neither approved projects for innovations among the interviewees.

The interviewees with innovations have been asked to make a self-evaluation of the innovativeness of their enterprises (Table 16). Most of them, in the case of Bulgaria, consider themselves to be modest innovators and firms that introduce changes only to follow market minimum requirements. This result is in conformity with the general assessment of the innovativeness of the country. According to the European Innovation Scoreboard 2017 Bulgaria is a Modest Innovator as well as Macedonia. Over time, performance has not changed relative to that of the EU in 2010<sup>12</sup>. In the case of Macedonia 15,3% of the innovators consider themselves to be modest innovators and 32,2% of the

<sup>12</sup> [https://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards\\_en](https://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_en)

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companies consider themselves to be innovators, but innovation activities are not their primary focus.

Table 15

Do you have any EU funded projects in the field of innovations, environment, RES or not interested at all in such projects (percent of respondents with innovations)

	Bulgaria	Macedonia
Yes, we have approved project	8.2	0.0
No, we applied but were not approved	6.6	6.7
We have submitted project(s), but still waiting for results	1.6	0.7
We haven't prepared a project yet	72.1	40.7
We are not interested in such projects	11.5	52.0

Table 16

How would you evaluate the innovativeness of your company? (%)

Degree of innovativeness	Bulgaria	Macedonia
1 Our company is not innovative	8.3	0.0
2 Our company introduces changes only to follow market minimum	38.3	13.6
3 Our company is modest innovator (follow innovative companies)	41.7	15.3
4 Our company is moderate innovator	8.3	28.8
5 Our company is innovative but this is not our primary focus	1.7	32.2
6 Our company is very innovative	1.7	10.2
Total	100.0	100.0

Enterprises participating in the survey have been asked about their intentions and interest to develop innovations at the company in the future (Table 17). The majority of respondents in both countries are either looking for opportunities, or expressing interest to know more about the issue.

Table 17

Are you considering developing any innovation activities at your company in the next three years? (percent of cases)

	Bulgaria	Macedonia
1 Yes, we have some concrete idea /innovation in mind	8.7	26.0
2 Yes, we are looking around for opportunities, though not thought not having anything particular in mind	24.0	24.7
3 Not yet, but would be interested to know more about that	34.0	44.7
4 We do not intend and not interested in applying innovation	16.0	3.3
5 Not relevant to us/I think that our business is not suitable for implementing innovations	17.3	2.0
Total	100.0	100.0



Some of the firms have specific intentions in the field of energy and RES (Table 18). Most of the interviewees in Bulgaria (77.3%) are interested in applying measures for improving energy efficiency. Also a significant share of respondents has pointed out “solar collector and heater” (25.8%) and “eco transportation vehicles” (9.1%). In Macedonia most of the respondents are interested in energy efficiency measures (58.7%), photovoltaic panels (28.7%), solar collector and heater (18.7%) and eco transportation vehicles (15.3%).

Table 18

Intentions of the company in the next 5 years to invest in some RES equipment or in improving energy efficiency (percent of cases)

	Bulgaria	Macedonia
Measures for improving energy efficiency	77.3	58.7
Solar collector and heater	25.8	18.7
Eco transportation vehicles	9.1	15.3
Heating system on biogas	3.0	5.3
Photovoltaic panels	1.5	28.7
Water power station	1.5	0.0
Geothermal heating system	1.5	4.0
Other	1.5	0.0

\* Multiple response question

On the national level, in the business sector in Macedonia, in the period 2012-2014, 36% of the enterprises reported some form of innovation activity.<sup>13</sup> Hence, the indicator for R&D Intensity (participating in research and development of the GDP) relating to Macedonia is 0.22% (Erawatch, 2013), and the participation of the business sector in investment for research and development turns out to be in the range of 18 to 20%. According to the data in business sector in Bulgaria, in the period 2012-2014, 26.1% of the enterprises have introduce product, process, marketing or organizational innovation.<sup>14</sup> The indicator for R&D Intensity (participating in research and development of the GDP) in Bulgaria is 0.57%, and the participation of the business sector in investment for research and development turns is somewhere around 50% (European Union, 2013).

<sup>13</sup> As a data source for all presented data on innovation for Macedonia is State Statistical Office of Republic of Macedonia and EUROSTAT.

<http://www.stat.gov.mk/pdf/2016/2.1.16.20.pdf>

<http://ec.europa.eu/eurostat/web/science-technology-innovation/data/database>

<sup>14</sup> As a data source for all presented data on innovation for Bulgaria is National Statistical Institute of Republic of Bulgaria and EUROSTAT

[http://www.nsi.bg/sites/default/files/files/pressreleases/NIRD\\_Innovation2014\\_en\\_R518IJ7.pdf](http://www.nsi.bg/sites/default/files/files/pressreleases/NIRD_Innovation2014_en_R518IJ7.pdf)

<http://ec.europa.eu/eurostat/web/science-technology-innovation/data/database>

### **3. Main findings and conclusions**

The conducted analyses shows that Kyustendil Region according the key economic indicators as GDP growth (in current prices), GDP per capita, labour productivity, foreign direct investments etc. is one of the least developed regions in the Republic of Bulgaria. Even worst is the situation with Northeast Region which according to the level of development (GDP per inhabitant, active business entities per 1.000 inhabitants, participation in gross fixed capital formation, employment rate etc.), is the economically least developed planning region in the Republic of Macedonia.

According to the survey, companies in Bulgaria and Macedonia can be regarded as modest innovators. Although over half of the respondents from Macedonia and more than half of the respondents from Bulgaria state that they have carried out some innovation-related activities over the past 5 years these are limited types of innovation, mostly related to change in the organization and acquisition of machinery, equipment, software & buildings. There are few cases of product and process innovation, as well as R&D in the enterprise or use of external R&D in the case of Bulgaria. Also, few enterprises in Bulgaria have introduced renewable energy sources or have made improvements in the energy efficiency of businesses (Mochurova, Kotseva-Tikova, 2018). In the case of Macedonia none of the enterprises in the analyzed period has been engaged in in-house or external R&D activities neither in introduction of RES.

Most of the respondents in Bulgaria and only 12.7% in Macedonia have taken legal action to protect their innovation and the most common form of protection of innovations in both countries is “trademark”. The domination of trademarks can largely indicate the limited capacities of enterprises from the two cross border regions for introducing of technological innovations.

The innovations had only a slight positive effect on the activity of the surveyed companies in Bulgaria and a greater positive effect in Macedonia. A large part of the enterprises in both countries have financed innovations with their own funds and did not receive support from public sources.

Respondents also consider institutions to be relatively passive – municipalities, as well as professional and industry associations, education, research and consultant organizations. Institutions should be more active and beyond the formal implementation of their legal obligations to take concrete initiatives to strengthen their role in innovations and cross border cooperation. The recommendation can also refer to similar organizations in Macedonia.

Lack of information, lack of competence in the institutions, including municipalities, lack of specialists in these institutions, are highlighted as obstacles to European funding projects in the both countries.

Companies are interested in exploring the opportunities for innovation in the future. Although relatively a small share of respondents have a specific idea at the moment, the respondents have a positive attitude and desire to seek information and cooperation, which is a prerequisite for developing innovation and competitiveness in the cross-border area.

Much of them are interested in implementing energy efficiency measures, photovoltaic panels and solar heat collectors. In Macedonia many respondents are interested in passive houses.

Analyzed data on national level in the field of innovations for the period 2012-2014 shows higher innovativeness of the Macedonian business sector (36%) compared with the Bulgarian business sector (26.1%), in the same period. From the other side the indicator for R&D Intensity for the Republic of Macedonia is over 0.22% and the participation of the business sector in investment for research and development is over 20%. This situation in the Republic of Bulgaria with indicator for R&D Intensity of 0.57% and the participation of the business sector in investment for research and development with around 50% seems significantly better.

In the analyzed period (2012-2014), in the case of Macedonia (on national level), almost 20% of the innovators have introduced technological innovation, almost one quarter, 24.8%, of innovators have introduced non-technological innovation and over 56% of the innovative enterprises have introduced both technological and non-technological innovation. Considering the four types of innovations, the enterprises mostly introduce process innovations, 22.8%, and marketing innovations, 22.3%. From the other side, Bulgaria is the country where, in the analyzed period 2012-2014 (on national level), enterprises are introducing more technological innovations than non-technological innovations. Almost 38% of the innovative enterprises introduce innovation on product or process only. As regard to the non-technological innovations, only marketing or organizational innovations introduce 34.6% of the innovative enterprises in Bulgaria. And at the same time both types of innovations, technological and non-technological are introduced by 27.7% of the innovative enterprises. Considering the four types of innovations, marketing innovations prevail in business sector in Bulgaria, where 11.7% from the total enterprises have introduced marketing innovation (Antovska and Drangovska, 2017).

It should be concluded that the innovation capacity of the country is important, but... "a major importance belongs to the ability to introduce relevant changes, and to implement the international practices and technologies at enterprise level" (Petreski and Lazarov, 2015, p. 61).

#### **4. Recommendations**

##### *4.1. Recommendations for the development of the Bulgarian Competitiveness and Innovation Ecosystem*

###### Recommendations to national and local authorities:

- As a priority, the authorities from the border regions should support the establishment of working CBC centres in the regions;
- Cooperate at the level of staff education;
- Help transfer of experience and know-how;

*Mochurova, M., Dimitrov, M., Totev, S., Fiti, T., Antovska-Mitev, M., Jovanovski, B. (2019). Innovation Activity of the Business Sectors in the Border Regions of the Republic of Bulgaria and the Republic of Macedonia.*

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- Financial and technical assistance to firms; including assistance for partnership projects between enterprises and research organisations on interdisciplinary issues that could foster innovativeness
- Increase financial assistance to cross border networks – telecommunications, infrastructures;
- Promote and stimulate resource efficiency, energy efficiency measure, decentralised renewable energy sources;

Recommendations to business organizations and other stakeholders:

- Foster innovativeness by conducting trainings on topics like: Innovation management or product development, Generating innovative ideas, Process development and optimization, Export promotion support
- Initiate contacts and cooperation with universities, science and research organisations and facilitate the development of applied interdisciplinary projects.

*4.2. Recommendations for the development of the Macedonian Competitiveness and Innovation Ecosystem*

Important recommendations for the Central government

- Public assistance in the field of R&D is important because it directly contributes to strengthening the research capacity of the domestic scientific institutions, to encouraging and facilitating their cooperation with the business sector and to intensifying their international cooperation. It should be ensured that within the central budgets, the expenditures on R&D will be treated as non-discretionary expenditures (like for example, liabilities for servicing the public debt of countries).
- Strengthening of the competitive pressure in the economy through continued improving of the investment climate in the country – building infrastructure, easier access of firms to business premises, prevention of monopolistic behavior and misuse of the monopolistic positions of individual firms, transparency and fairness in the field of public procurements, eliminating the corruption, abandoning the practice of involving politics in business, etc.
- The strategies for improving the innovation of the enterprise sector pay particular attention to the need to raise entrepreneurs' awareness of the importance of innovation for business performance (OECD, 2011). It is therefore necessary to raise the understanding and awareness of the business-sector for the benefits from the innovation activity – the organization of seminars, round tables, conferences, media campaigns etc., with debates on the benefits from the innovation activity of businesses, which is a measure that can give significant results in this aspect.

- Very important measure for raising the innovation of enterprises is the encouragement of their cooperation with well-known foreign companies that have invested in Macedonia (with foreign direct investors), through the development of the subcontracting, i.e. by enabling our businesses to produce various inputs (spare parts, semi-products, etc.) for the needs of foreign investors. This would enable the inclusion of Macedonian enterprises to the global value chain.
- Increasing the capacity of the country (i.e. of the entrepreneurs and employees in companies, as well as of the administration in the local self-government units) for using the assets of the European pre-accession funds.

#### Important recommendations for the local self-government units

We think that several suggestions for the local self-government units are especially relevant:

(1) In our opinion, only young, ambitious, highly educated workers (economists, lawyers, engineers, technologists etc.), with necessary knowledge in the area of entrepreneurship and innovations, and with motivation to work and learn, can induce the entrepreneurial process on local and regional level. Sometimes it is sufficient to employ a small number of young and capable people in the most important departments, with competences in the field of support to the development of businesses and entrepreneurship, in order to “shake” and “wake” the departments and the people, and to create a network of supporters in the municipality, region and wider. Their tasks would be:

- Creation of solid and rich statistical registry of the number of active SMEs in the municipality and region, especially of innovative firms and of firms with high growth potential, preparation of development programs and proposal of measures for entrepreneurial process support;
- Preparation of projects for infrastructure undertakings which would have a strong impact on improvement of the business climate and looking for financial resources for their realization;
- Creation and support of initiatives for the development of qualitative entrepreneurial processes: establishment of business-incubators, accelerators and clusters, local economic development offices, and regional centers for SME and entrepreneurship support etc., in cooperation with local businesses, educational institutions, regional entities of the economic chambers etc.
- Introduction of educational programs for existing and future entrepreneurs in cooperation with the higher education institutions and other scientific institutions from the region and beyond.
- Recording good entrepreneurial ideas and encouraging and supporting their creators;
- Development of programs which would facilitate subcontracting of local firms with large enterprises, especially with larger foreign investors. This includes a good

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identification of the existing and future local firms, their production program and production possibilities, organization of trainings for the employees in those firms, of course, in cooperation with the large companies, etc.

We would like to emphasize here that the costs for wages for new employments can be returned in the medium run, and the long run effects can be significant. Moreover, it should always be kept in mind that the development of entrepreneurship does not have to be based only on full-time jobs. In the entrepreneurial process, many people can be engaged in project assignments, in consulting assignments etc.

#### Important recommendations for the business sector

- One of the most important barriers for introduction of innovations in Macedonian business entities is the access to funding for their development. In Macedonia from the one side there is a necessity for developing a venture capital market (formal and informal). From the other side, in order to insure bigger use of classic bank loans firms must make an additional effort to raise the quality of business planning. They need to be trained in developing investment programs, based on innovative and profitable business idea.

There are two key institutions in the Republic of Macedonia that provide financial support for innovative SMEs and export-oriented companies: Macedonian Bank for Development Support (MBDS) and Fund for Innovations and Technological Development (FITD).

In our opinion, MBDS as a state-owned bank that provides loans to businesses with subsidized interest rates, which are approved through commercial banks under strict banking criteria, should be capitalized. Also, it is necessary the utilization of the opportunities offered by the FITD to be increased.

- The training of companies for participation in qualitative entrepreneurial processes and for raising their innovation can be significantly facilitated by their participation in the realization of the European projects. These projects enable the companies to have training and education of the employees, learning from the best practices of the successful companies, assistance in improving the business planning, assistance in setting up and implementing programs for innovating their products and services, etc. Therefore, the responsibility of the central government and of the local governments is to improve the system of information about the opportunities offered by the European funds and to animate the companies in the realization of these projects.

#### *Specific measures for development of joint cross border Competitiveness and innovation Ecosystem*

1. Forming a two-sided expert group (economic council), which will prepare a presentation of the region as a whole which can be offered to potential investors. The presentation should include an introduction of: the resources of the region, the

advantages, special features of the economic legislation of the countries, the requirements and preconditions for doing business, tourism opportunities, etc.

2. The same or different two-sided group can be created to work on a permanent basis, elaborating joint projects and looking for funding.
3. **Establishing permanent contacts and cooperation between business-incubators, regional business-councils.**
4. **Creating a centre for support of SMEs and joint SMEs.**
5. Establishing a regional Information Pool and business and information centres.
6. Re-starting active cooperation between the universities, as well as BAS, in the field of education, scientific-research work and other fields of common interest, (some agreements on cooperation were signed between the universities but in practice there is no real activity).
7. Creation of a web-site of the region presenting the opportunities for investments, containing a catalogue of firms that are looking for partnerships; containing also information about the trade and investment conditions in the region – description of legislations, custom/tariff information, Free Trade Agreements etc.

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## DIGITALISATION AS A CHALLENGE FOR ENTERPRISES IN 21<sup>ST</sup> CENTURY<sup>3</sup>

*The paper is devoted to digitalization of enterprises as a challenge of the 21<sup>st</sup> century. It is measured on national and cross-border region levels on the case of Bulgaria and Macedonia. The methods applied include a comparison of the state of the art and of trends of digitalization by size of enterprises. Data used for a country level is from national statistical institutions, for the level of their cross-border regions – from a database from a survey of 1941 enterprises, collected in the frame of a European project in 2017.*

*It is argued digitalization is a contemporary way of innovating, which depends on the size of enterprises. The new stage of digitalization is characterized by the usage of big data. Development of the respective algorithms for using big data is understood as a prerequisite for improving connectivity, networking and complexity of business processes. The latter characterizes preparedness to reap the benefits of emerging technologies and to capitalize opportunities of the digital revolution.*

*JEL: L00; M00; O00*

Economies are complex production systems with many subcomponent production systems. The way of processing of these systems is grounded in technology. When the most shared technologies in an economy change, production systems also change. Nowadays the most important and widely used technologies are digital information and communication technologies<sup>4</sup> that include an array of personal computing devices, back-office servers, IT-

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<sup>3</sup> This paper has presented results of the work undertaken in the frame of the project № CB006.1.31.070 “Innovative cooperation initiatives in cross-border region”, co-financed by European Union through INTERREG-IPA CBC CCI Number 2014TC16I5CB006 and of BAS-MASA project “Bulgarian-Macedonian economic and innovation cooperation: ICT impact on the European perspectives”, and ERI-BAS – University of telecommunications and posts: “Digitalization of the Bulgarian economy”.

<sup>4</sup> Information and communications technology (ICT) is software and hardware for communications and data interchange, such as: radio, TV, fax, satellite dish, fixed phone, mobile phone, personal computer, Internet, e-mail.

embedded machines, and cloud-based services that are connected or dynamically provisioned to users over private networks or the Internet. Recent years' production system is beginning to transform into a new kind of digital system, one that will not only build on existing devices and systems, but also increasingly will incorporate emerging technologies such as sensors, robotics, and artificial intelligence as they improve in price and performance.

The process of penetration of these technologies in the economy is understood as the first stage of digitalization of the economy. The main characteristics of the next stage is increase of the connectivity (with many more things, and many more types of things networked, including in more advanced wireless and wireline networks), more automation (as devices and systems enable more work to be done by machines), and intelligence (as algorithms play increasingly important roles in sensing—and making sense of—all this)<sup>5</sup>. Developing such characteristics is a contemporary challenge to define new perspectives.

## **1. New perspectives for digitalization in Europe**

Digitalizing businesses today is of big importance as countries' competitive advantage in the global economy will increasingly be based on the extent to which they are home both to the industries that are developing these new technologies and to the industries that are adopting them, particularly in globally traded sectors (e.g., agriculture, business services, and manufacturing).

The new stage of digitalization of enterprises concerns big data sets and algorithms. Big data sets - the big data - and the algorithms are the new engines of companies, assisting them in analyses and decision making. Digital platforms allow the aggregation and sharing the data. The new challenges develop new partnerships<sup>6</sup> aimed the both – big data and digital platforms to bring enormous opportunities and benefits for European industry and enterprises.

When properly processed the big data presents significant *new opportunities* for improving business performance becoming a driver for innovation. Big data allows:

- Using resources more efficiently
- Supporting decision making
- Responding to changing demand toward mass customization

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<sup>5</sup> Atkinson R. 2019, The Task Ahead of Us: Transforming the Global Economy With Connectivity, Automation, and Intelligence, Washington, ITIF

<sup>6</sup> The Strategic policy forum on digital entrepreneurship was set up in 2014 to outline what would be the short and long term strategy for digital entrepreneurship in Europe, to implement this strategy and advice and advice European Commission on key priorities. The objectives of this Forum were to inforce dialogue between industry, and the scientific and political communities, with the aim of shaping an ambitious EU vision and a European roadmap that will fuel digital entrepreneurship in Europe.

- Creating competitive value chains
- Taking the lead to stay ahead of the competition.

*Challenges* to overcome to capture the full potential from big data and digital platforms could be summarized as follow:

- A complex and fragmented regulatory environment
- Investment gap in infrastructure
- Developing quickly and at a large scale

*Recommendations* for new partnership development include:

- appoint Chief data officer (CDO) in each member state to take full advantage of big data based on non-personal or anonymized data, promote data quality and standards, champion effective data curation; and, maximize the social and economic value of public sector open data.
- invite CDOs to work collaboratively and develop European guideline for enterprises on how to harness the benefit of big data in the public and private sectors, in the light of European values and sensibilities.
- develop an EU – wide action plan for the deployment of 5G that involves stakeholders from industry, the public sector and funding providers, as well as exploiting innovating financing models
- develop multivendor test beds for new generation digital solutions
- promote European digital identity management solutions for objects and people
- carry out sector by sector analysis of opportunities for the development of European business to business platforms

## **2. Digitalization of enterprises – how to measure**

According to the Eurostat standards the digitalisation of enterprises is characterised by computers and Internet usage by enterprises through following indicators – Enterprises having access to the Internet, Enterprises having access to the Internet by type of connection, Persons employed using computers/Internet, Persons employed using Internet, Enterprises having Website or Home Page, Enterprises using the Internet for interacting with public authorities, E – enterprises sending and/or receiving e-invoices, Enterprises using social media, Enterprises using cloud computing services. On the other hand, the paper characterizes E-commerce, through Enterprises having received orders online, Enterprises having purchased online, Use of Automated Data Exchange (ADE), Enterprises using ERP software package, Enterprises using software application for managing information about clients (CRM), Enterprises having a formally defined ICT security policy, Enterprises sharing electronically information on the supply chain management

enterprises. These indicators characterize first level of digitalization. The indicators for enterprises, using big data analysis concern the second level of their digitalization.

### **3. Digitalization of enterprises on a country level**

The first level of digitalization of the economy is characterized by ICT penetration and usage by enterprises. The indicators applied concern enterprises using the Internet to interact with public institutions, enterprises that have a website/web page, enterprises using social media, enterprises using the Internet to interact with public institutions.

#### *3.1. Bulgaria*

Generally, the official data<sup>7</sup> for these indicators has shown Bulgaria is lagging comparing to EU – average. But over a period of five years, there has been a steady tendency to increase the share of businesses using the Internet to communicate with public institutions. In addition to downloading and sending completed forms, businesses use the Internet and receive information. The share of businesses using the Internet to bid for an auction system is the lowest. The biggest companies are the most active, followed by the medium ones. Although the relative share of small enterprises (up to 50 people) is the least represented, their relative share has also increased by over 20%. This upward trend is due to the ease of work with state institutions and the shortening of time for document processing.

Enterprises that have a website/web page. Over the six-year period considered, a general increase in the proportion of enterprises that have a web site / web page is measured – from 42.7% in 2012 to 50.8% in 2017. During this period, small businesses have made relatively little progress 1% per year, while the average increases by nearly 2% per year. Large companies report the highest rate between 2 and 4 per year, with the highest figure being 2016 – 86.3%. This can be explained by their ability to have departments whose sole job is to support and update the web page.

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<sup>7</sup> Source and scope of further data used is from NSI survey, which covers enterprises with 10 or more persons employed, classified in the following categories of NACE Rev. 2: Section C – “Manufacturing”; Section D, E – “Electricity, gas, steam and air conditioning supply”, “Water supply, sewerage, waste management and remediation activities”; Section F – “Construction”; Section G – “Wholesale and retail trade; repair of motor vehicles and motorcycles”; Section H – “Transportation and storage”; Section I – “Accommodation and food service activities”; Section J – “Information and communication”; Section L – “Real estate activities”; Division 69 - 74 – “Professional, scientific and technical activities”; Section N – “Administrative and support service activities”; Group 95.1 – “Repair of computers and communication equipment”. The data analyses are in the context of the benchmarking framework for the Digital Agenda Scoreboard, Europe's strategy for a flourishing digital economy by 2020, as well as at national level by the Ministry of Transport, Information Technology and Communications for evaluation of the indicators of 'Digital Bulgaria 2015' programme.

The review period starts in 2014, when the total share of enterprises using cloud services is 7.7%, up to 2018 with a rising value to 8.3%. Small businesses have a declining share over the period under review, with the lowest in 2015 – 4.5% over the next two years is rising at a low rate, reaching 6.7% in 2017, and 6.6% in 2018 which is lower than the start of the period considered. Medium enterprises have a relatively uniform rate of increase of the share – by almost 2% per year, reaching 14.8% in the last year under review. Large enterprises have steadily rising values over the years, close to 4% per year, with the highest value for 2018 year – 29.7%.

Table 1

Enterprises using cloud computing services in Bulgaria (per cent)

	2018
Total	8.3
By size class	
10 – 49 employed	6.6
50 – 249 employed	14.8
250+ employed	29.7

Note: The percentage is calculated on the basis of total population of enterprises with 10 or more persons employed.

Source: NSI, [www.nsi.bg](http://www.nsi.bg), 07.12.2018.

Table 2

Enterprises using social media in Bulgaria (Percent)

	2017
Total	34.4
By size class	
10 – 49 employed	33.1
50 – 249 employed	39.1
250+ employed	49.4

Note: The percentage is calculated on the basis of total population of enterprises with 10 or more persons employed.

Source: NSI, [www.nsi.bg](http://www.nsi.bg), 08.12.2018.

In the case of enterprises using social media big enterprises account for the largest share of 49.4%. Next are the medium-sized enterprises with a relative share of 39.1%. The lowest share – 33.1% has small enterprises. Of all registered businesses, 34.4% use social media. After 2014 there is a steady trend of increasing the share of social networking enterprises. It can be concluded that social networks are increasingly being used as a channel for business communication. The opinion of the experts in the sector is that their importance will increase in the future.

The total share of enterprises using cloud services is 7.7%, up to 2017 with a rising value to 8%. Small businesses have a declining share over the period under review, with the lowest in 2015 – 4.5% over the next two years is rising at a low rate, reaching 6.7% in 2017, which is lower than the start of the period considered. Medium enterprises have a relatively

uniform rate of increase of the share – by almost 2% per year, reaching 11.7% in the last year under review. Large enterprises have steadily rising values over the years, close to 4% per year, with the highest value for 2017 – 28.6%.

For businesses having purchase online in 2018, a larger share occupied 28.5% of enterprises with 250+ employees. It is 10 percent points up, comparing to the data for 2017. A smaller share in the same year with 14.5% occupied 50 – 249 employees, the smallest share with 9.5% occupying 10 – 49 employees. Total businesses having purchase online in 2018 occupy 17% relative share. Large businesses will therefore receive the most online orders (sales). Small businesses will have fewer and fewer orders.

The most of big enterprises in Bulgaria use automated data exchange in 2017. About 60% of them use an enterprise resource planning (ERP). A third of the big enterprises are using software application for managing information about clients (CRM). More than half of the big companies in the market have an information security policy. SMEs are lagging, because of several reasons, the most important of which is the volume of investment needed to implement automated data exchange software applications.

*The second stage of digitalization* is characterized with using big data analysis and respective algorithms. The usage of big data analysis in Bulgaria is monitored since 2016. The comparison of data between 2016 and 2018 indicates a decrease of the percentage in 0.5 percent points of the total enterprises using big data analysis. The reason for this trend could be found in the usage of this instrument by enterprises by size class. The share of small and medium enterprises using big data analysis decreases, while of big enterprises increases with 1.7 per cent points.

Table 3

Enterprises using big data analysis in Bulgaria (Per cent)

	2016	2018
Total	7.2	6.7
By size class		
10 - 49 employed	5.8	5.4
50 - 249 employed	12.5	10.8
250 + employed	23.1	24.8

Note: The percentage is calculated on the basis of total population of enterprises with 10 or more persons employed.

Source: NSI, [www.nsi.bg](http://www.nsi.bg), 08.12.2018.

In summary, the results of the analysis of the National Statistical Institute's data on the ICT used in the enterprises show that in recent years' Bulgarian enterprises have invested more resources and resources in ICT.

The trend is positive and rising with each passing year. The fastest and most successful is the introduction of technology in large enterprises, as they are more solvent and more needs for IT.

They are followed by medium-sized enterprises, which moderately implement new information and communication technologies into their work processes. The lowest

percentage of implemented information and communication technologies are the small enterprises, dictated by their low solvency and the lower number of employees. Information and communication technologies are a convenience to business and administration. In the future, the trend of increasing the number of enterprises using new technologies is expected to continue.

### 3.2. *Macedonia*

According to the data of the State Statistical Office of the Republic of Macedonia, as of January 2017<sup>8</sup>, 91.2% of the enterprises with 10 or more employees had broadband connection to the Internet (via fixed or mobile broadband connection). Access to the Internet via a portable device using mobile telephone network (3G/4G) was used by 63.0% of the enterprises. This type of mobile Internet connection (via portable devices: notebook, laptop, smartphone, PDA phone, etc.), for business purposes, was used by 14.5% of the persons employed.

More than half 54.2% of the enterprises used social media (e.g. Facebook, LinkedIn, Twitter, Present.ly, YouTube, Flickr, Picassa, Wiki-tools, etc.), i.e. had a user profile, an account or a user license for using certain social media.

Around 49% of the enterprises had website/homepage, of which 80% provided on their website descriptions of goods or services, price lists, 59% had links or references to their social media profiles, and 21% provided online ordering or reservation or booking. During 2016, 10.3% of enterprises with 10 or more employees had e-commerce, i.e. buying or selling goods or services over computer networks (via websites or EDI-type systems), 6.0% of enterprises had e-sales, and 5.8% of enterprises had e-purchases.

Implementation of the new stage of digitalization is lacking from the regular statistical surveys in Macedonia, which could be a base for assumption that it is not enough implemented and is on a lower level in comparison to Bulgaria.

## **4. Preparedness to reap the benefits of emerging technologies and to capitalize opportunities of the digital revolution**

This section aims to address the impact of the ICT industry on the economy using two indexes: the network readiness index and the index of economic complexity.

The Networked Readiness Index assesses the factors, policies and institutions that enable a country to fully leverage information and communication technologies (ICTs) for increased competitiveness and well-being.

Under the theme *Innovating in the Digital Economy*, the Report also examines the role of information and communication technologies (ICTs) in driving innovation.

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<sup>8</sup> SOURCE [http://www.stat.gov.mk/PrikaziSoopstenie\\_en.aspx?rbtxt=76](http://www.stat.gov.mk/PrikaziSoopstenie_en.aspx?rbtxt=76)

Networked readiness is a key indicator of how countries are doing in the digital world.

The World Economic Forum's Networked Readiness Index 2016 measures how well an economy is using information and communications technologies to boost competitiveness and well-being. The world is at the dawn of the Fourth Industrial Revolution, which represents a transition to a new set of systems, bringing together digital, biological and physical technologies in new and powerful combinations.

Networked readiness shows how ready each country is to reap the benefits of that transition. Networked readiness depends on whether a country possesses the drivers necessary for digital technologies to meet their potential, and on whether these technologies are actually having an impact on the economy and society. To get an accurate picture of all the drivers and the full effects, the study breaks down the information into different subsections. The drivers are grouped within three sub-indexes: the overall environment, readiness (which includes infrastructure, affordability and skills) and usage (which is made up of individuals, business and government). The impact is measured in terms of both economic and social impact.

Table 4 shows the values of the NRI for emerging and developing countries in Europe (EDE – Emerging and Developing Europe). It shows Macedonia is better performed in achieving economic and social impact from ICT penetration.

Table 4

Network readiness index for emerging and developing countries in Europe out of 139 countries in 2016

Rank	Country	Value		
42	Poland	4.5	HI-OECD	EDE
46	Macedonia	4.4	UM	EDE
48	Turkey	4.4	UM	EDE
50	Hungary	4.4	HI-OECD	EDE
51	Monte Negro	4.3	UM	EDE
54	Croatia	4.3	HI	EDE
66	Romania	4.1	UM	EDE
69	Bulgaria	4.1	UM	EDE
75	Serbia	4.0	UM	EDE
84	Albania	3.9	UM	EDE
97	Bosna and Hercegovina	3.6	UM	EDE

\* HI: high-income economies that are not members of the OECD; HI-OECD: high-income OECD members; UM: upper-middle-income economies.

Source: Baller, S., Dutta, S. and Lanvin, B. (Eds.) (2016). Global Information Technology Report 2016. Innovating in the Digital Economy. Geneva: World Economic Forum and INSEAD. Retrieved July 07, 2016, p.16

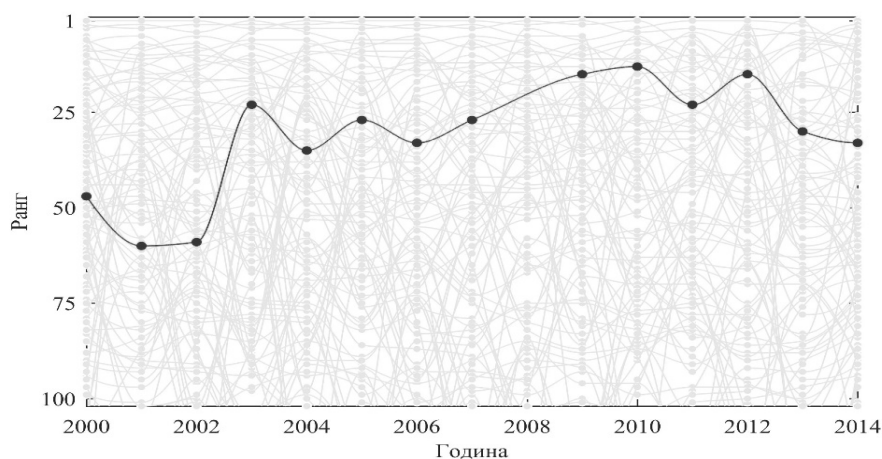
Kristoski and Kostoska (2018) have recently developed an alternative approach for studying the ICT impact on the economy by proposing and applying a two-stage methodology. First, they use a hierarchical cluster analysis to allow clustering of countries of interest (Macedonia and EU-28) in line with the values of 53 individual indicators



distributed across the various pillars of the composite NRI. Then, the authors suggest a simulation model based on System Dynamics to simulate the evolution of the values of the indicators contained in the index, in order to explore the potentials of the country to improve its ranking globally, and in this context, yes increased its capacity to utilize ICT to increase competitiveness. By focusing on those attributes needed to move the country to the next higher cluster and to improve its position vis-à-vis other countries, this methodology can serve as a useful tool for policymakers in those areas where interventions can stimulate the ICT impact on productivity and growth.

Next, we analyze the index of economic complexity on the case of Macedonia. The economic complexity index (ECI) was introduced in Hidalgo and Hausmann (2009) as a measure of the productive capabilities of countries. In other words, the ECI provides information of the knowledge accumulated in a population by expressing economic activities presented in the country. In order to reveal the complexity of the ICT sector in the Republic of Macedonia, we consider 102 countries in the period from 2000 to 2014, 10 groups of goods and 12 service groups or a total of 22 products. Classification of goods and services is undertaken by Stojkoski and others (Stojkoski et al., 2016). Figure 1 shows the position of the Republic of Macedonia in the ranking over the years. The color of the Republic of Macedonia is marked with red, while the dynamics of all other countries is grayed out in the background. It is noticeable that by 2002 the Republic of Macedonia is located in the lower half of the ranks. In the next 10 years, the Republic of Macedonia provides a steady increase in the rankings, which culminates in 2012 when the Republic of Macedonia is among the 25 most complex countries in the world. In the last two years covered by the data, the Republic of Macedonia has seen a steady decline in complexity, compared to other countries.

Figure 1  
Position of the Republic of Macedonia in the ranking of economic complexity over the years



To reveal the role of the ICT sector in the complexity of a state in Figure 2, the complexity of information and computer services over the years has been shown. The blue color indicates the dynamics of information and computer services, while with gray in the background everything else. It is noted that these services are consistently one of the most complex for production. More precisely, in all the years, the only more complex of them is the production of financial services, copyrights and licenses, and machine products. This means that the advantage developed in the production of information and computer services greatly increases the complexity of a country. In turn, it contributes to an increase in the potential of an economy.

Figure 2  
Complexity of information and computer services over the years in Macedonia

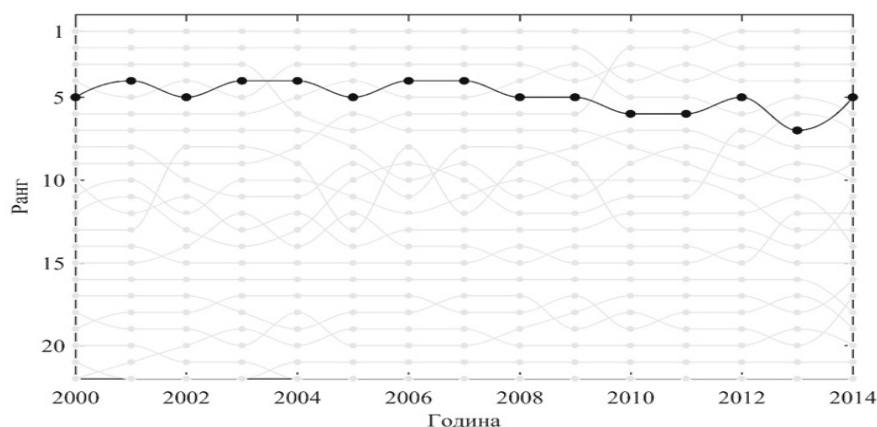
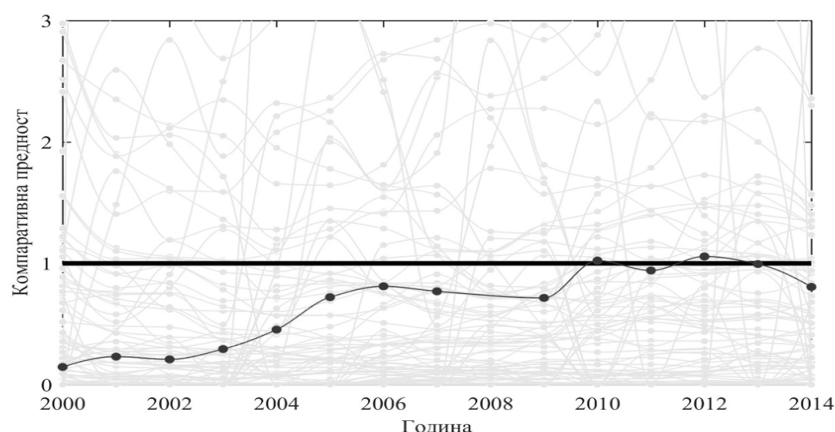


Figure 3 illustrates the change in the comparative advantage of the Republic of Macedonia in relation to information and computer services during the same period.

The comparative advantage is a standardized measure that compares the share of exports to a single product in an economy with the participation of the same product in world exports. A value greater than one signifies that in a given economy, the product is significantly exported, that is, that part of the complexity of the economy is due to the production of that product. In the figure, in red is marked the comparative advantage of the Republic of Macedonia, the gray color in the background is the dynamics of the other countries, while with the black horizontal line the threshold of one is shown. From the picture it can be concluded that by 2012 the comparative advantage of the Republic of Macedonia in the production of information and computer services is constantly increasing. In 2010 and 2012 it is even over one which means that in that period the Republic of Macedonia significantly developed its capabilities in the production of this service. However, after 2012, the comparative advantage is declining.

Figure 3  
Comparative advantage of the Republic of Macedonia in information and computer services  
over the years



## 5. Digitalization of enterprises in the cross-border region

### 5.1. Methodological notes

The regional integration is a precondition for sustainable development and competing in the global economy. Innovation characterizes the potential for such integration. In this respect the paper applies the bottom-up approach to analyses of data, resulted from a survey of 1941 enterprises on cross border region between Bulgaria and Macedonia, taking place in 2017 in the frame of the project “Innovative cooperation initiatives in cross border region (ICI)”, INTERREG project CB006.1.31.070. As methodology for collecting and interpreting technology innovation data was used a methodology developed in Economic research institute at the BAS, which meets the general requirements of the OECD and EUROSTAT Oslo manual.

The topics of interest for study are company profile, innovation and digitalization level and policy, R&D and export intensity support.

### 5.2. Companies profile in the cross border region

The companies observed in Bulgaria were dominated by activities like sawmilling and plating of wood and manufacture of other furniture, while in Macedonia – logging and support services to forestry. The age structure of the enterprises operation was dominated by those, established in the period 2001-2010. 38,4% of the Bulgarian ones have been operating for less than 16 years. The biggest share of companies participating in the study in Bulgaria were started in 2011 or later (43, 4% against 28,8% in Macedonia). All of the

surveyed enterprises in Bulgaria were private ones, while in Macedonia 14,3% of them were public.

The observed companies were predominantly local (with either Bulgarians or Macedonians being the owners). In Macedonia, there were some cases of foreign or mixed ownership. The legal status of firms observed the organization's in Bulgaria are predominantly sole-member limited liability companies (60%), and in Macedonia, where 51,5% of the surveyed enterprises were limited liability companies. Since in Macedonia there were public companies, they answered "other" when asked this question. The connectivity of firms in the observed regions is not well performed as the majority of the organizations in the survey in both countries are independent. In Macedonia, very few companies are part of another enterprises. The majority of the businesses in the observed sectors were operating in the years 2014, 2015 and 2016. In Macedonia, those that were not operating were between 2 and 4% of the responding companies and in Bulgaria that percentage varies between 5,3% and 12.2%.

Predominantly the monitored enterprises were micro, small and medium. The following data provides arguments for such conclusion: a) Companies that took part in the study in both of the regions typically have assets whose book value is no more than EUR 3.5 mln. (72.3% and 94.7% in Macedonia and Bulgaria respectively). In Macedonia, 18.1% of the interviewed enterprises have a book value of the assets that is between EUR 3.5 to 4 mln.

According to the next indicator of the size of the firms the survey says the net sales revenue of the majority (84,3% in Macedonia and 94,6% in Bulgaria) of the companies are micro and small and have revenue which does not exceed EUR 7 mln. 6.7% and 5.4% of the interviewed companies in Macedonia and Bulgaria respectively have net sales revenue between EUR 7mln. and EUR 8 mln. The majority of organizations which participated in the study were micro – about 61 and 65 % of all firms, and small with between 50 and 249 employees were 12.5% in Macedonia and 2.6% in Bulgaria.

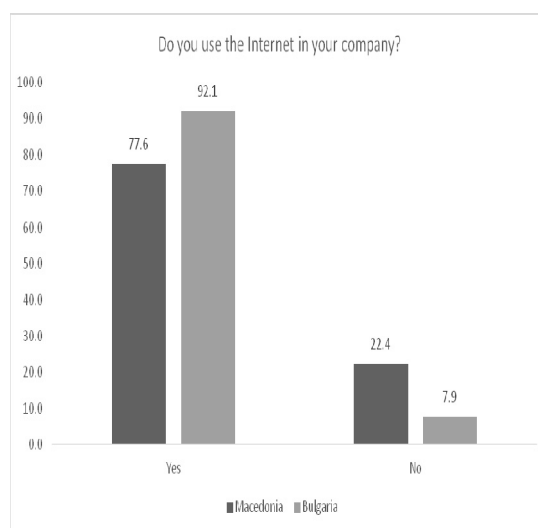
In conclusion, the observed enterprises in the cross border region in the frame of the ICI project were predominantly micro, and private, operating for less than 16 years. There are few small and medium-size enterprises which operate in the last 3 years in wood-related sectors according to NACE Rev.2. The majority of the companies that took part in the survey in both Bulgaria and Macedonia have been micro – with between 1 and 9 employees (61.5% and 64.6% respectively). 19.8% of the respondents in Macedonia work in medium-sized companies with 10 to 49 workers (against 35.9% in Bulgaria). Dominated observed firms' activity in Bulgaria were sawmilling and plating of wood and manufacture of other furniture, while in Macedonia – logging and support services to forestry, predominantly sole-member limited liability companies.

### *5.3. Digitalization of companies in the cross-border region*

Predominantly the companies in the observed sectors use computers both in Bulgaria and in Macedonia. In the latter, 17.3% of the enterprises answered that they do not use a computer and in Bulgaria that percent was 7.9%

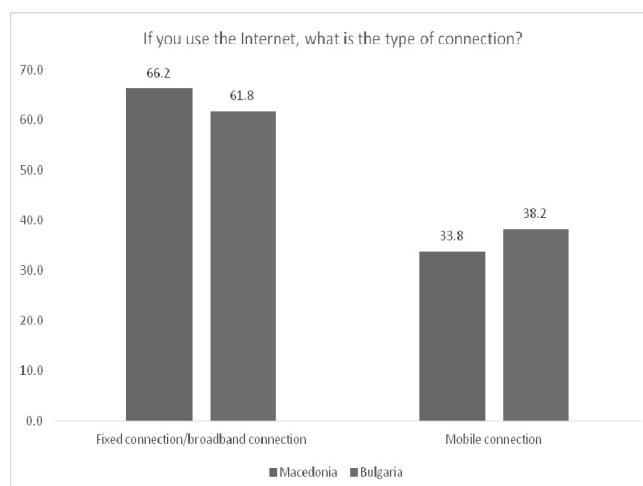
The majority of the surveyed businesses in both of the observed regions use the Internet. In Bulgaria, 7.9% of the interviewed companies do not use it, while in Macedonia that percentage is 22.4. Consequently, there is room for improvement: connecting as much of the firms as possible to the Internet might prove to be efficient (when it comes to maintaining the relationships with customers and suppliers) and eventually profitable for the organizations in the observed sectors (Figure 4).

Figure 4



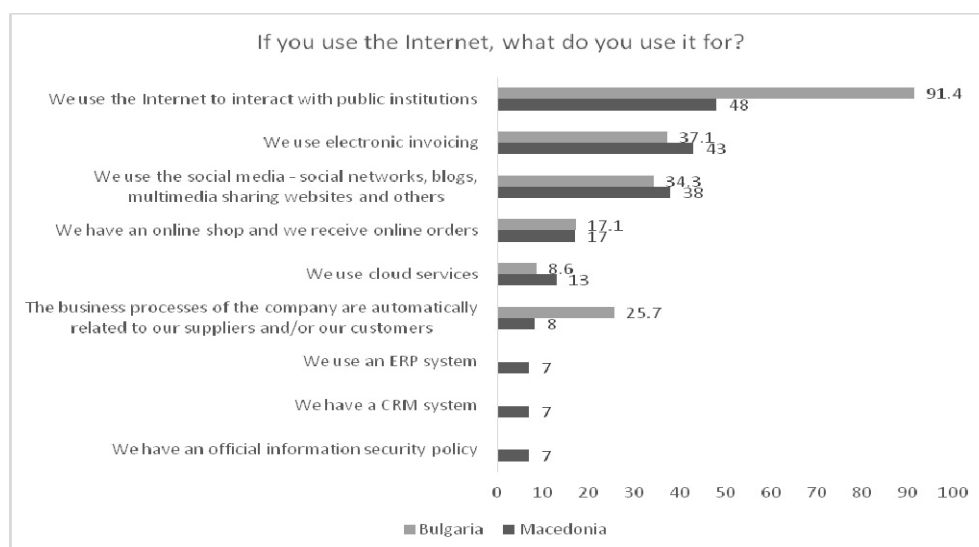
The companies which use the Internet in Macedonia and Bulgaria mostly have a fixed or broadband connection – 66.2% and 61.8% respectively (Figure 5).

Figure 5



The most widespread use of the Internet amongst the surveyed companies is for interaction with public institutions. This is valid for 91.4% of the enterprises in Bulgaria and 48% of those in Macedonia. Electronic invoicing is another widely used advantage of the Internet, followed by social media and automated relations to the customers or suppliers of the firms. Some of the companies have online shops or use cloud services. ERP or CRM systems and information security policies are not popular (Figure 6).

Figure 6



Apart from Internet connection and R&D activities, another problem which the study indicates is that more than half of the interviewed companies, both in Bulgaria and Macedonia, do not have websites. 76.9% of Bulgarian enterprises and 59.8% of Macedonian ones do not have their own website. This could be a major drawback in a digitalized and automated world, where online presence is of crucial importance. Consequently, it could be beneficial for the firms to create their own websites and attract their customers through it (Figure 7).

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Figure 7

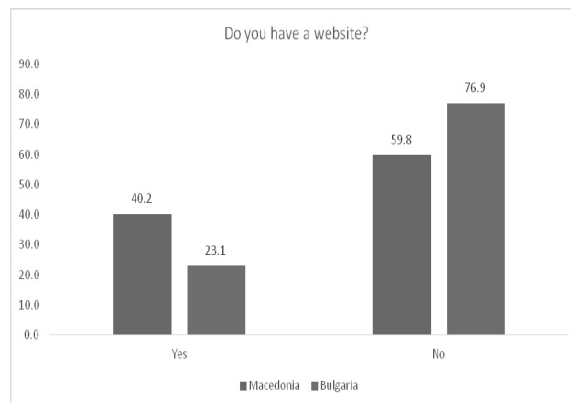


Figure 8

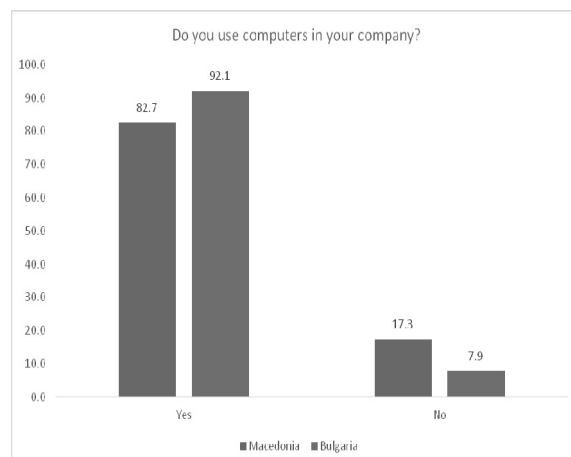
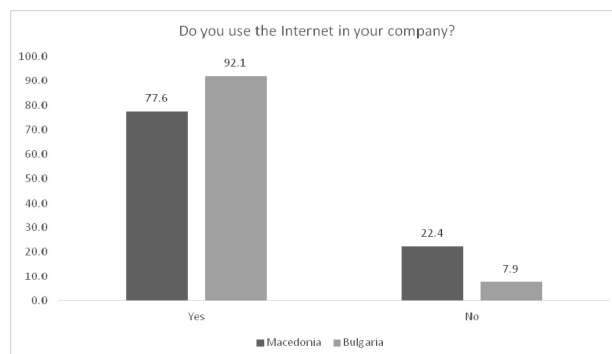
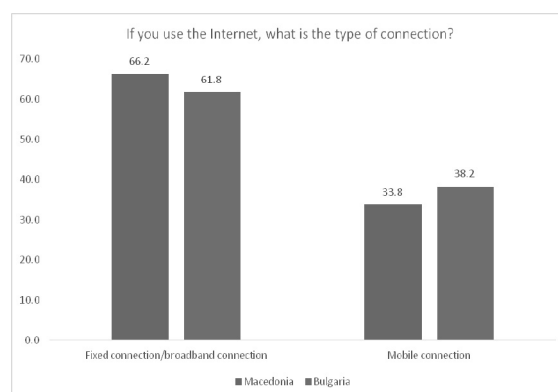


Figure 9



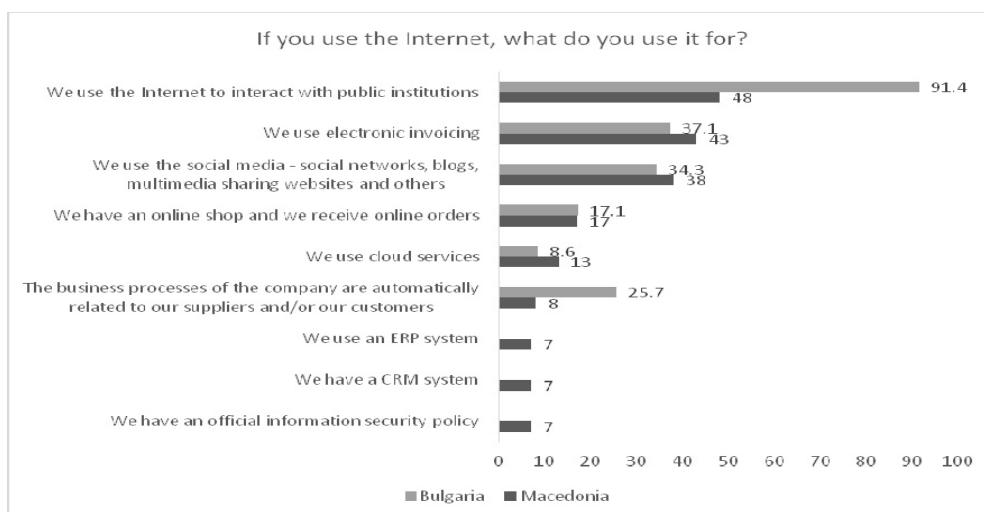
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Figure 10



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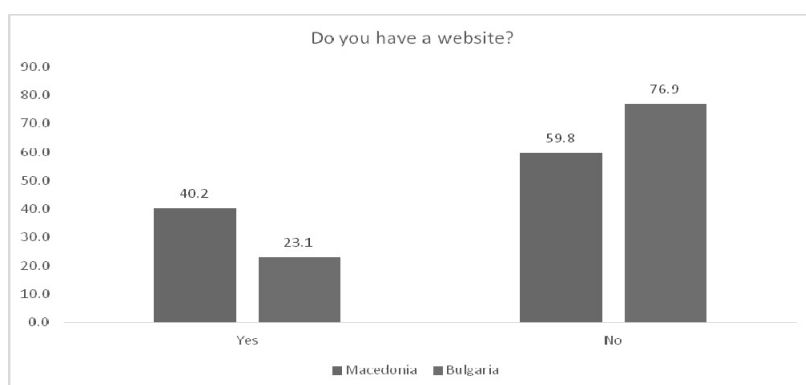
Figure 11





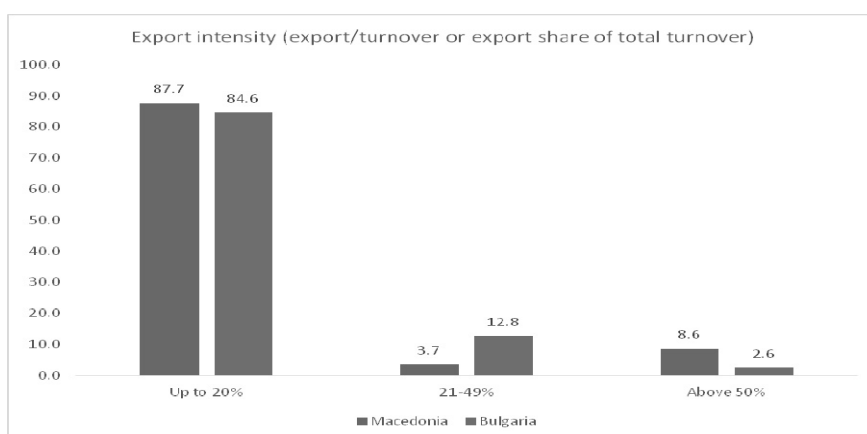
Apart from the Internet connection and R&D activities, another problem which the study indicates is that more than half of the interviewed companies, both in Bulgaria and Macedonia, do not have websites. 76.9% of Bulgarian enterprises and 59.8% of Macedonian ones do not have their own website. This could be a major drawback in a digitalized and automated world, where online presence is of crucial importance. Consequently, it could be beneficial for the firms to create their own websites and attract their customers through it (Figure 12).

Figure 12



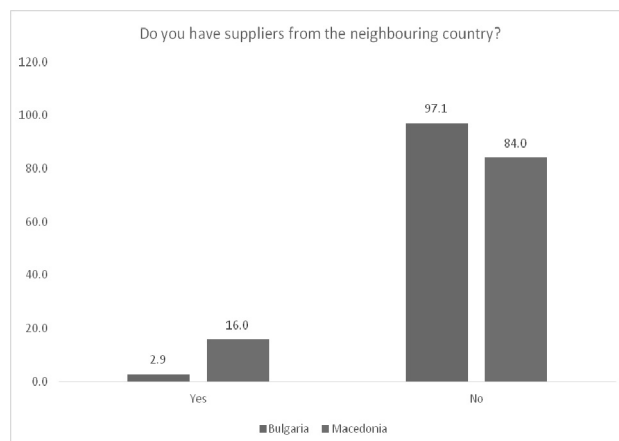
Here the **cross-border export intensity** is understood as an indicator for the cross-border connectivity. The majority of the interviewed enterprises (87.7% in Macedonia and 84.6% in Bulgaria) export goods or services with a value which equals up to 20% of their turnover. The export of 12.8% of the Bulgarian companies which participated in the survey equals a value which is between 21 and 49% of their turnover. The export of 8.6% of the companies from Macedonia that took part in the study equals more than 50% of their turnover (Figure 13).

Figure 14



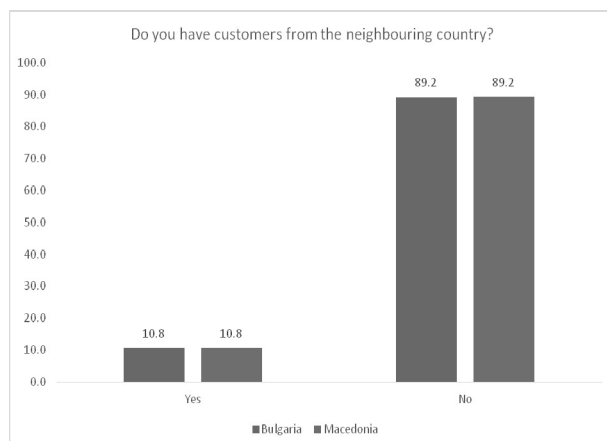
The firms in the survey answered that they do not have suppliers from the neighboring country: 97.1% of Bulgarian companies do not have suppliers from Macedonia and 84% of Macedonian businesses are not supplied by Bulgarian partners (Figure 14).

Figure 14



Approximately 90% of the interviewed companies said that they do not have customers from the neighboring country. The local authorities and all the stakeholders in the forestry, logging, wood, paper and furniture production and trade might enhance cooperation between the regions through appropriate policies and initiatives. The good relations between the two neighboring regions might become a great advantage (Figure15).

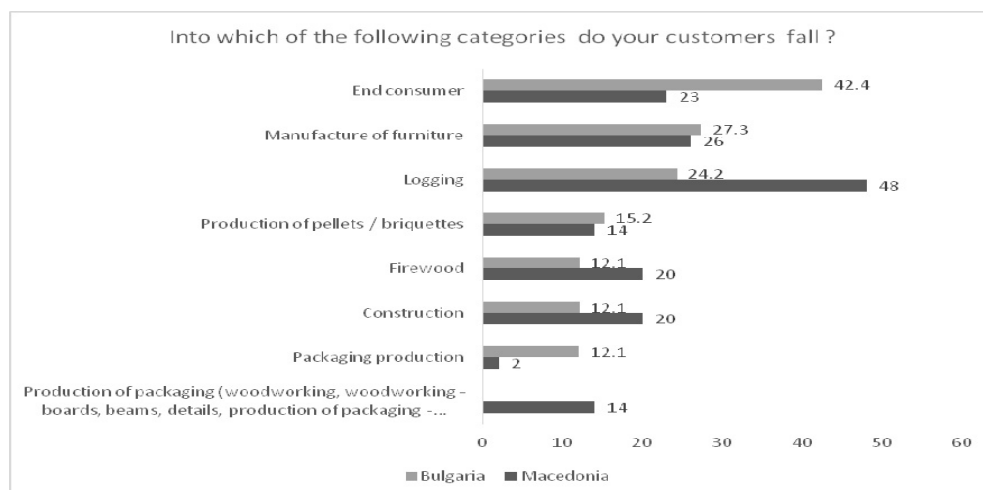
Figure 15



In Bulgaria most of the customers of the interviewed companies are end consumers – 42.4% of the businesses answered that they supply end consumers versus 23% in

Macedonia. In Macedonia the majority of enterprises (48%) sell to the logging division. In Bulgaria, 24.2% of the companies that were surveyed do so. In both countries there are many firms (27.3% in Bulgaria and 26% in Macedonia) that sell out to the manufacturers of furniture.

Figure 16



In Bulgaria, 34,6% of the companies have delivery costs that are equal to 5 to 10% of the total production value. In Macedonia, the delivery costs of more than half of the companies are from 10 to more than 20% of the total production value (Figure 16).

The key findings regarding digitalization of enterprises on a regional level could be summarized as follow:

- The majority of the companies in the sectors observed in the regions of Kyustendil and Blagoevgrad in Bulgaria and Northeastern, Eastern and South-eastern planning regions of Macedonia are micro, small and medium-sized companies. The turnover of those companies is usually less than 700 000 euro and the majority has employees between 1 and 9 persons. In the majority of the cases, the value of the assets is up to 350 000 euro. The legal form of the companies is solo-member limited liability company or limited liability company. Their managers are predominantly male and ageing.
- The prevailing share of enterprises is not innovating. The innovation policy provided shows the most important aims of the enterprises in Bulgaria and in Macedonia when they introduce technological novelties are: the improvement of the quality of the products; the expansion or maintenance of the existing markets and the reduction of environmental pollution. Reducing unit labour costs and energy expenses as well as increasing the flexibility of the production are of high importance in both countries, too.

- The innovations realised are with a low level of novelty, using predominantly in-house sources for innovative ideas. In general, the cooperation levels between enterprises from the forestry sector in the both countries across border region are low. Their representatives would like to increase the cooperation that will contribute in increasing the innovativeness and competitiveness in the region.
- The share of companies in both regions that use computers and Internet is high (above 78% in Macedonia and above 90% in Bulgaria), but still a lot of companies do not have web sites (60% in Macedonia and 77% in Bulgaria). By now the key reason for using Internet is interaction with public administration and electronic invoices. ERP or CRM systems and information security policies are less popular in this sector.
- Usage of new technologies could be a major drawback in a digitalized and automated world, where online presence is of crucial importance. Consequently, it could be beneficial for the firms to create their own websites and attract their customers through them.

To summarize – the European perspective of meeting digitalization challenge concerns the trends that:

- The next frontier for Europe's enterprises digitalization is defined by the large data sets - big data are valuable assets for economic growth and social progress
- European enterprises can grow and create jobs faster through better use of big data and digital platforms
- Digital technologies can deliver additional benefit when used in collaboration across the value chain
- European leadership in business-to-business platforms will support European economic growth and job creation.

Provided analyses, based on official statistical data has shown the level of digitalization in Bulgaria and Macedonia is lagging from EU – average. On another hand, digitalization of the enterprises in both countries is characterized by bettering performance. Bulgaria is better performed among both. About 25% of its enterprises are operating on the second stage of digitalization, i.e. using big data analysis. There is no any statistical evidence some enterprises to perform second stage in digitalization in Macedonia.

According to network readiness – a complex index (NRI) is used to characterize preparedness to reap the benefits of emerging technologies and to capitalize opportunities of digital revolution. The country NRI indexes of both countries Macedonia and Bulgaria are in the first half group of 139, although the index of Macedonia is above the index of Bulgaria. It could be a result of area and level of complexity of the ICT services as research of Macedonian teams has suggested.

In summary, contemporary enterprises are facing increasing pressure to innovate continuously. Implementing the second stage of digitalization is the main challenge for the economy and society development. Bulgaria is performing that stage, although lagging from EU-average, Macedonia is performing the first stage, but with a better level for

network readiness to benefit from the ICT. In both countries, ICT penetration is better performed in bigger size enterprises than in smaller ones. Improving connectivity / networking in both countries require a special policy. This is even more necessary in the cross border region.

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## SUSTAINABLE DEVELOPMENT AND ENERGY POVERTY: CHALLENGES FOR THE GOVERNING INSTITUTIONS

*This article presents the major challenges faced by the state for tackling energy poverty as one of the barriers to sustainable development not only of the energy sector but also of the society. The article presents the scope of energy poverty in Bulgaria, the underlying factors, the consequences, and the trends of development in the last three years until 2016. The article also provides a brief guide to tackling the challenges of combating energy poverty.*

*JEL: Q01; B41; B55; C18; D63; P36*

### 1. Actuality of the problem

Energy poverty in Bulgaria is the highest in the European Union. In 2010 it is defined as covering 67% of the country's population<sup>2</sup>. Since then, until the end of 2018, several things have changed. **Firstly, energy poverty in Bulgaria increases**, although the same Eurostat statistics report a sharp fall in population coverage – from 67% in 2010 to 46% in 2011 and a steady decline in the remaining few years to 36.5% in 2017, without any significant changes in the methodology of the study. At the same time, the energy poverty in Luxembourg and the EU countries that hit the lowest levels in 2010, doubles by 2017. With the change in the data reported by the statistics on income and living conditions, the differences in the levels of energy poverty among EU countries diminish. However, Bulgaria remains again with the highest level of energy poverty in the Union. Country data showing a deepening of energy poverty.

**Secondly, electricity prices in Bulgaria mark an increase** by 16% from 2010 to 2017 in Bulgaria and by 24% on average in the EU in the same period. Only for the period 2014-2016, the increase in electricity prices is 14.9% for Bulgaria and 0.7% for the EU. Per capita energy expenditure gradually rises from 579 BGN in 2014<sup>3</sup> to 586 BGN in 2016

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<sup>1</sup> Chief Assistant Prof. Teodora Peneva, PhD, Institute for the Study of Society and Knowledge at BAS, Public Policy and Social Changes Section.

<sup>2</sup> According to Eurostat's subjective measurement of the Survey on Incomes and Living Conditions (SILC) that takes place annually in the EU.

<sup>3</sup> Anonymized data from the NSI Household Budget Surveys.

while the net total income per person drops slightly from 5,034 BGN per year in 2014 to 4,530 BGN in 2016 despite the increase in the nominal total income per person.

**Third, there is no radical change in the policy of energy poverty in Bulgaria.** The only existing policy remains the targeted heating allowances, which during the period increased from BGN 56.7 per month in the season 2010/2011, BGN 65 in 2011/2012 and BGN 72 in 2014/2015 and 75 for 2018/2019. The scope of the target group remains unchanged. In April 2016, the Ministry of Energy adopted a Mechanism for the Protection of Vulnerable Energy Users which implies the introduction of a social tariff for electricity, but this mechanism is still not implemented in December 2018. For the period 2015-2016, a total of 2,184 households in 155 buildings have received funding for the renovation of their homes from Operative Program for Regional Development (OPRD) 2007-2013, which represents less than 0.05% of all panel housing in the country. At the same time, 2,000 buildings have applied for the new National Energy Efficiency Program for multifamily buildings<sup>4</sup>, or nearly 10% of the panel housing in the country. Many of these buildings have not been renovated during the period, meaning that energy efficiency measures have not had a real effect on the level of energy poverty yet.

Within the European Union, several important things are happening: 1) energy poverty is set as the No. 7 objective in the 17 objectives for sustainable growth of the Union, measured by 2030, at the proposal of the United Nations<sup>5</sup>; 2) On November 30, 2016, the European Commission introduced the Clean Energy for All package in order to provide the necessary legal framework for meeting the objectives of the Paris Agreement. In December 2018, four of the eight dossier packages were formally adopted and political agreement was reached for the other four. In the packages, policies directly related to energy poverty. Are the energy efficiency requirements for buildings and the new energy market rules requiring Member States to measure and monitor energy poverty and to report to the Commission every two years; 4) An Energy Poverty Observatory is set up on 29 January 2018 in Brussels, and the website “Fuel poverty network”, which brings together energy poverty articles by researchers from all over the world, moves under the new Observatory website (<https://www.energypoverty.eu/>).

In Bulgaria, besides the aforementioned policy measures, the term energy poverty becomes more popular. Several discussion forums and round tables are organized on the topic, several reports are presented with proposals for measures by independent institutions. In general, there is a lack of political consensus on the term, a lack of understanding of the nature of the phenomenon, both among the population and experts, and unfortunately – there is no change in the legal framework introducing the new term and setting criteria for new target groups, nor of the statistical framework of the National Statistical Institute (NSI) to cover the phenomenon, not directly in the policies. There is a lack of awareness of the importance of introducing a methodology for measuring the required energy cost of

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<sup>4</sup> Adopted by Decree No 18 of the Council of Ministers of February 2, 2015, on the Terms and Procedures for the Grant of the Program and the Bodies responsible for its implementation (Prom. y) (Prom., SG 10/02 February 6, 2015)

<sup>5</sup> Goal 7 for Sustainable Growth: Providing access to affordable, reliable, sustainable and modern energy for all.

households – the cost they have to make with their existing housing conditions (energy efficiency class), and energy consumption patterns to reach the heating comfort of 21<sup>0</sup>C for heated rooms and 18<sup>0</sup>C for unheated rooms, as set by the World Health Organization. This is the first step towards introducing a comprehensive management approach by defining energy poverty, defining the specific target groups and developing a strategy with measures, funding, and specific targets to reduce the number of the target groups.

## **2. Dimensions of energy poverty in Bulgaria**

### *2.1. Methods of measuring energy poverty*

There are three main approaches to measuring energy poverty: 1) an objective approach (based on the consequences of energy poverty – diseases and mortality), 2) a subjective approach (also called "conceptual") in Harriet Thompson (Thompson, 2016) and Trinomics (Rademaekers, 2016) articles based on the subjective perception of energy poor respondents), and 3) an expenditure approach (based on energy costs). Practical application of two or more of the above approaches uses the term "combined approach" (Rademaekers, 2016).

The objective approach monitors indicators such as mortality and illness as a result of energy poverty. EU-wide indicators have been used for the past few years, such as mortality from fine particles in the air, respiratory illness in the winter, etc. As a part of these statistics, it can be said that in Bulgaria the mortality rate from respiratory diseases has increased in recent years, from 48.3 per 100,000 population in 2013 (NSI, Health 2017) to 54.5 in 2014, 56.4 in 2015, 62.1 in 2016 and 64.5 in 2017. Unfortunately, it is unclear what the severity of the various factors behind this trend and how much energy poverty has affected these outcomes.

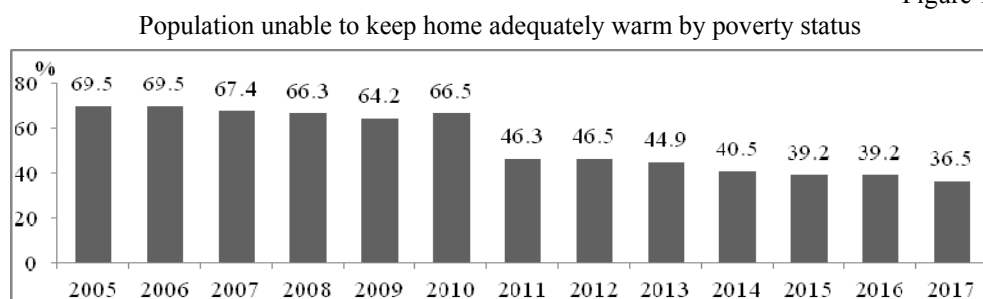
The subjective approach provides information on the actual energy needs subjectively assessed by the households themselves through surveys. It includes indicators of the number or percentage of households who fail to keep their home adequately warm, have difficulty paying their energy bills in time and/or have serious difficulties paying their utility bills. These indicators are set out in the Survey of Incomes and Living Conditions (SILC) of Eurostat as part of the material deprivation indicators. They were officially approved and added to the set of indicators for social inclusion at EU level only after 2009.

According to the subjective approach most often cited in EU policy documents, energy poverty in Bulgaria has declined in the last few years since 2011, with no change in methodology.

The expenditure approach is based on data on household incomes, their costs and in countries with available data, their housing characteristics. Within the expenditure approach, there are many options for defining energy poverty. According to the expenditure approach, regardless of which definition, energy poverty is growing in Bulgaria during the 2014-2016 period.

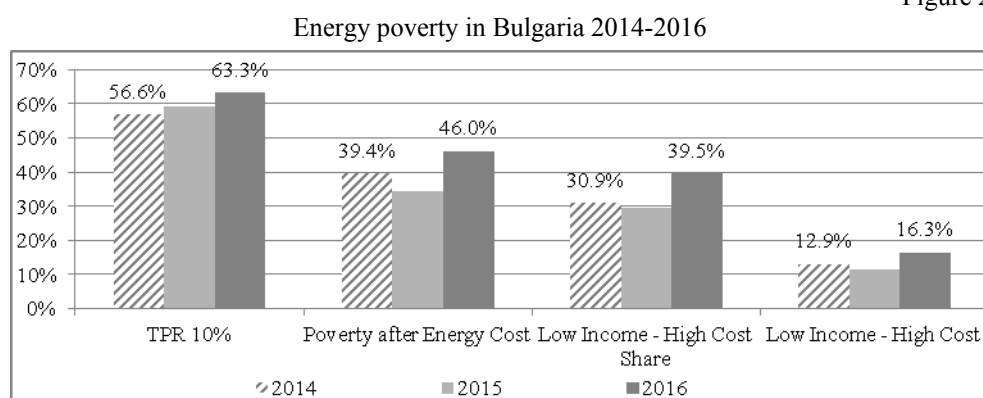


Figure 1



Source: Eurostat.

Figure 2



Source: NSI, own calculations. 1) 10% rule: Household is energy poor if its energy expenditure exceeds 10% of net income; 2) Poverty after energy consumption measures households with net income after energy cost under the official poverty line; 3) LI-HCS – households with a net total income below the poverty line and a share of energy cost above 10%; 4) LIHC – households with a net income below the poverty line and energy expenditure above the median for the country. The poverty line for the three definitions is according to the SILC for the respective year.

Although there is a slight decline in the energy poverty level in 2015, according to three of the definitions, this is due to the decline in the relative poverty line that is being used by these definitions. However, no matter which definition is applied, there is an increase in the percentage of energy-poor households in the country in 2016 compared to the previous two years. This is due to several reasons, discussed in more detail in the next section.

### 3. Factors Impacting Energy Poverty

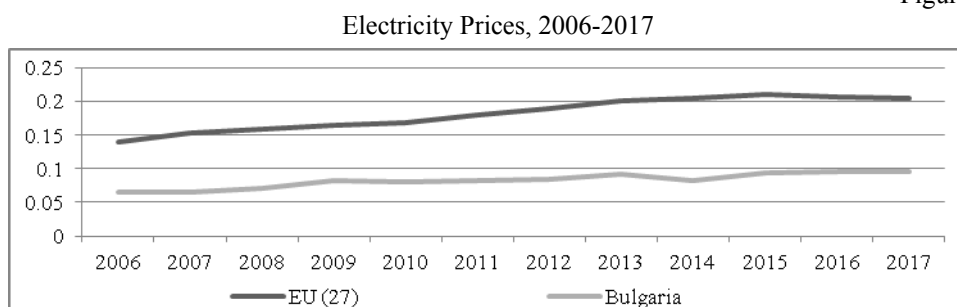
Energy poverty is a function of both household incomes and energy costs. Household incomes are flexible and depend mainly on the employment and economic activity of households themselves, and the economic situation in the country. Energy costs are not entirely flexible, excluding energy prices. They depend on the dwelling conditions and the

efficiency of the energy resources, appliances and heating systems used in it. Energy costs are expressed through quantity and price. The energy efficiency of the dwelling and the used electrical appliances and heating systems determine the quantity needed. Energy prices determine the value of energy costs. Between 2014 and 2017, electricity prices follow a steady upward trend in Bulgaria.

### 3.1. Energy cost increase

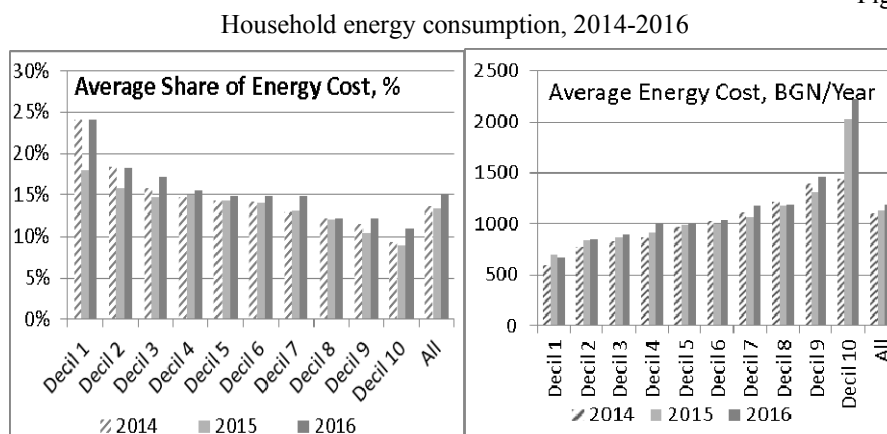
Electricity prices in Bulgaria increase by 16% from 2010 to 2017 in Bulgaria and 24% on average in the EU, with the price increase in Bulgaria more intense in the last years of the period under review. Only for the period 2014-2016, the increase in electricity prices is 14.9% for Bulgaria and 0.7% for the EU.

Figure 3



Source: Eurostat.

Figure 4



Source: NSI, own calculations

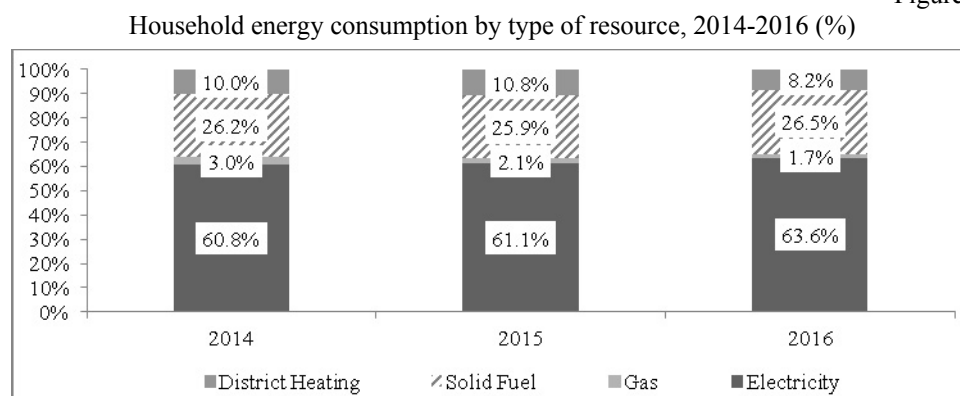
Since the bulk of household energy costs are generated by electricity consumption, the main energy resource in the sector, inevitably, and total energy consumption increases alongside electricity prices. It is important to note that if, in 2015, with the fall in the

poverty line, low-income and high-income three decile groups<sup>6</sup> show a relative drop in the share of energy expenditure relative to 2014, then during the same period, the average decile groups increased in this share, which shows the impoverishment of the middle classes of society.

### 3.2. Changes in the structure of consumption

At the same time, the structure of consumption changes, with tendencies to reduce the use of district heating by heating companies and gas and an increase in the percentage of electricity and solid fuel consumption. It is also important to take into account trends in decile groups, indicating the conditionality of choice of energy resource by price.

Figure 5



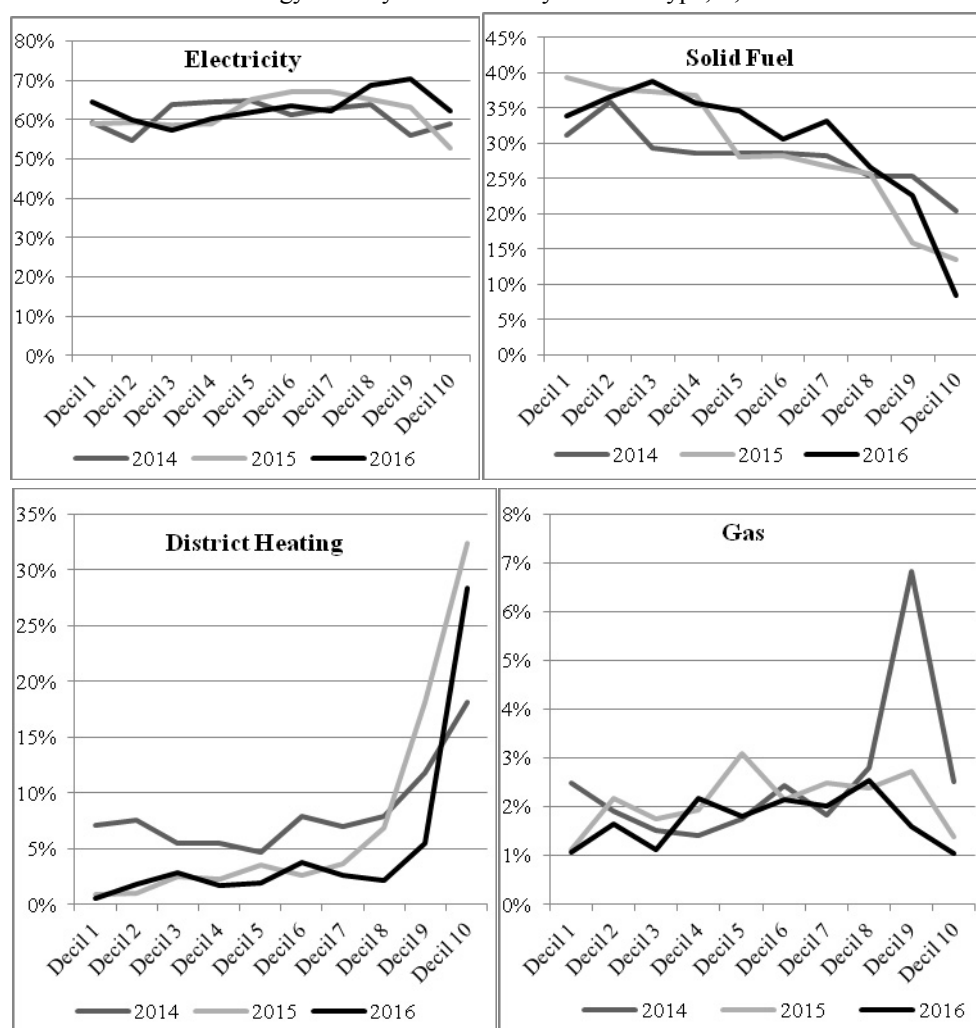
*Source: NSI, own calculations.*

The percentage of households using solid fuels from the first four low-yielding decylist groups increases each year, while higher-income groups are more likely to move to electricity. The use of TPP falls below 2% for low-income 40% of the population, while 20% of households with the highest yield increase to 25%. In 2015, when the winter season recorded the lowest temperatures at the beginning of the year, the low-income groups with a solid fuel increased sharply by about 6-7% from an average of 31% in 2014 to 37-38% in 2015, and again slightly return to 36% in 2016. All this shows the strong link of incomes with the structure of consumption.

<sup>6</sup> Lower and upper 30% of the population by income.

Figure 6

Share of energy used by households by resource type, %, 2014-2016



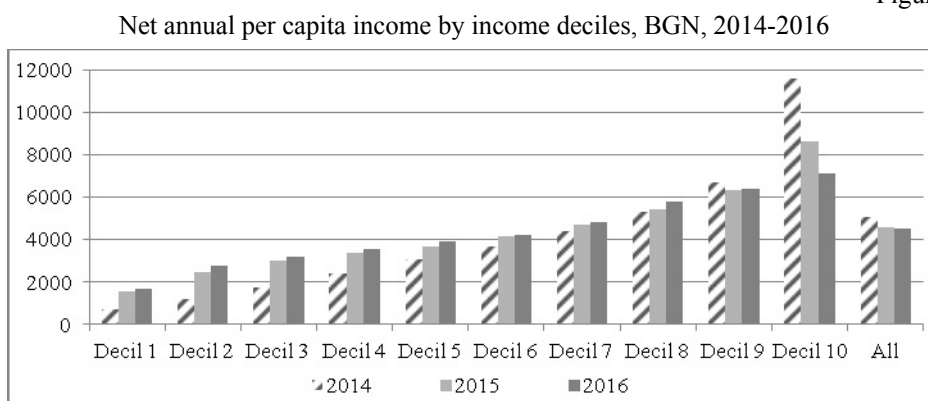
Source: NSI, own calculations

### 3.3. Per Capita Income Decline

The change in the structure of consumption in the high-income decile groups is much more dramatic than the rest, as they also suffer a drop in the per capita income during that period. Although the lower decile groups do not follow this trend, the country's total data shows a drop in the net per capita income. This is mainly due to a change in the demographic structure of households. The number of individuals per household falls by about 5% on

average for all households, from 2.42 persons in 2014 to 2.30 persons in 2017. This rate of decline is nearly twice as high in low decile groups. However, the rate of increase in the per capita income in the lower decile groups results in an increase in the per capita energy expenditure. Only in the highest-income 20% of the population, the income decline also reflects a decline in the energy expenditure, but also a growth in the share of expenditure in the household's total net income. There is an increase in the share of consumption in the middle classes of society, where the percentage of energy poor grows in 2014-2016.

Figure 7



Source: NSI, own calculations.

#### 4. Problems for the governing institutions

The statistics above clearly show that there is no reason to believe that the subjective assessment of respondents in Eurostat's SILC reflects the real situation in the country. There is no decline in the energy poverty in Bulgaria during the 2014-2016 period. Unfortunately, this indicator is set to monitor the EU's sustainable development goals, the seventh goal of which is to provide affordable, reliable, sustainable and modern energy for all by 2030 (Goozee, 2017). An interesting fact is that among the indicators for monitoring the sustainable growth targets in Bulgaria, in the energy and climate part, this indicator is not set, nor is another indicator for energy poverty. There is no mechanism to monitor energy poverty. The need for such a mechanism is also enshrined in the new EU political documents of 2018.

Energy poverty is seen in the context of energy savings targets in buildings and the financing of a series of measures to renovate the building stock. The latest EU documents set a new EU energy efficiency target for 2030 from 32.5% with a revision clause up to 2023.

From the data in the article above, it is clear that in Bulgaria, low-income 70-80% of the population increase their energy expenditure in the presence of growth in net total income. Such behavior clearly indicates the existence of energy poverty, which is a hindrance to investment in energy efficiency measures. The EU's expectations for real energy savings

between 2021 and 2030 are challenged in our country, precisely because of the high levels of energy poverty and the widening trend.

In June 2018, Directive (EU) 2018/444 amending Directive 2012/27 / EU on energy efficiency and Directive 2010/31 / EU on the energy performance of buildings was adopted. The directive imposes greater data requirements, increased transparency of energy efficiency calculation methodologies for buildings, ensuring the use of information and communication technologies and supporting the renovation of buildings by linking policy and funding with results (Claudia Canevari 2018) . In a few countries in the EU and the UK, this policy is tied to the policy of reducing energy poverty by reducing the rate according to the energy class of the dwelling.

The development of a methodology for monitoring energy poverty requires a household housing database to be combined with data on the household structure and income, types of appliances, and energy consumption regime. It is necessary to implement regulatory expenditure on energy, to monitor energy poverty and not to use actual expenditure, which is often suppressed due to underconsumption or rarely also overconsumption, where households have a high income. These are important, unavoidable steps to achieve the above goals.

Each government should bind its energy efficiency policies with a clear policy of reducing energy poverty, with all the steps and phases of the governance cycle. First of all, this includes the setting of new indicators in statistical research, the development and adoption of a methodology for monitoring regulatory energy consumption, and the adoption of a definition of energy poverty. Only this will bring us closer to the goal of accessible and sustainable energy for all.

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## ORGANIC FARMING IN BULGARIA AND EU – COMPARATIVE DIMENSIONS

*The report examines the state of organic farming in Bulgaria and the EU for the period 2000-2016. An important aspect is the type of production (arable land, orchard) of organic farms. The choice of type of production differs between regions and Member States and depends on various factors (including the technical aspects related to organic production and the structure of consumer demand). In the course of the study the methods of comparison, statistical methods, etc. are used. The results are aimed at identifying existing differences between EU countries in the field of bioproduction development.*

*JEL: Q10; Q12; Q15*

### 1. Status of Organic Farming in Bulgaria and the EU

The organic production sector in the EU is developing rapidly. Over the last decade, the EU's area of land used for organic farming has increased on average by half a million hectares per year. At present, there are over 186 000 organic farms in the Union. Bulgaria has achieved the largest growth of organic farming in the EU in recent years. This is apparent from official EC data published in early 2018. By the end of 2016, the EU has over 12 million hectares of organic production, this trend growing in all Member States except the United Kingdom.

The increase in the area between 2012 and 2016 is 18.7%. In the period 2012-2016, Croatia and Bulgaria registered a growth of more than 100% of the total organic farming area. Five EU Member States report a downward trend: Greece (-25.9%), Malta (-35.1%), Poland (-18.1%), Romania (-21.5%) and the United Kingdom (16.9%). In the case of Malta, however, the area for organic farming is small and the reduction of 35% is in absolute terms – 13 hectares. Spain, Italy and France have the highest common areas for organic farming between 2012 and 2016.

Within the EU, the land used for organic production in 2016 has increased by 21% compared to 2010, which is just over 11 million hectares. Increases over this period were observed in all Member States, with the exception of the United Kingdom (-29%) and, to a

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lesser extent, the Netherlands (-4%). By contrast, Croatia (from 16,000 hectares in 2010 to almost 76,000 ha in 2015, or +377%) and Bulgaria (+362%), reported an almost fourfold increase from the land used for organic farming. The same is observed in France (+61%), Ireland (+53%), Lithuania (+49%) and Cyprus (+48%).

Bulgaria is the EU leader in growth in the number of organic farmers over the past five years. The number of registered producers in the beginning of 2015 is nearly 4,000, increasing over five times over the last five years, with a growth of 17% on average in the Community. This trend is most intense in 2012 – the number of farmers is doubled. Then the pace slowed down and in early 2015 it remained almost at the level of the previous year. Certified organic areas or in transition to organic farming in Bulgaria are growing almost four times between 2009 and 2014. The most intense was the growth in 2010 (the area is doubled), 2012 (by 56%) and 2013. (44%) when they reach their peak of over 56,000 hectares. The rise for the period under review is the strongest among the 28 Member States of the European Union and more than 14 times faster than the Community average. Bulgaria also has the highest growth in terms of the share of organic production relative to the total utilized agricultural land. Despite the dynamic development, the country remains among the least widely distributed organic farming in the EU, both in absolute terms and relative terms. Only 1% of agricultural land is used in this area.

Bulgaria is also the country with the highest share of transition from the total organic production among the Member States – over 2/3, at 10% on average for the EU. This is a prerequisite for supplying production in this market niche to grow ever more intensively (Ruscheva, Todorov, Grozdanova, 2010).

## **2. Analysis of organic production – basic crops**

An important aspect is the type of production (arable crops and perennials) of organic farms. The choice of type of production in the regions and Member States depends on various factors (including the technical aspects of organic production and the structure of consumer demand).

Much of the land is used for permanent meadows and pastures, but also for perennials (such as fruits) and for cereals. When considering the organic farming area compared to the total area of the different agricultural holdings in Europe, the available data show that organic crops (in total) account for 5% of the total area cultivated in the EU-28.

The comparison of the main categories of use for the biological sector shows interesting features. The share of permanent crops is high in the organic sector (15%), as the demand for fruit and vegetable products is among the highest in the organic market. The share of permanent meadows and pastures represents more than 50% of the total area occupied for organic production.

Conversely, cereals cover more than 30% of the total EU farmland, but a lower percentage of organic land use. The explanation lies in the fact that organic farming systems are wider than in conventional farming (greater dependence on grazing on permanent pasture). Permanent meadows and pastures are often eligible for agri-environment payments and



easier and less risky to transform into the organic sector than other crops (eg field crops). Depending on the national characteristics of agri-environmental and / or environmental payments for rural development and the characteristics of land use at regional level, this could lead to preference for the development of permanent meadows and pastures for organic production.

### *2.1. Permanent meadows and pastures*

At the level of Member States, the area for permanent meadows and pastures is the highest in absolute terms in Spain, Germany, the United Kingdom, the Czech Republic, France and Italy where it is about 0.4 million hectares or more.

In Bulgaria almost 18% is the increase of the areas with permanent meadows and pastures. At the end of 2016, they are already 38,736 hectares, compared with 31,796 in 2015. Growth of 6,581 hectares in 2016 also marks the areas under forage crops (Green Crops), due to the increased interest of operators in organic livestock farming.

### *2.2. Field crops: grain crops, oilseeds and protein crops for grain production*

Among arable crops, cereals are the most important category of 1.4 million hectares in 2015, 14.6% of the total organic land in the EU. This represents 2.5% of the total area of cereals in the EU.

The largest areas of cereals are located in Germany and Italy (about 0.20 million hectares), and in Italy and Spain (about 0.2 million hectares). In 2015, France, the largest cereal producer in the EU, has raised more than 186,000 hectares of organic cereals. Poland ranks fifth with more than 101,000 hectares. Among the restrictions that prevent the development of arable crops in the organic sector are pest control and management. Other factors are weed control, which in the case of wheat is often noted as a major technical difficulty encountered in the organic sector, as the use of chemical herbicides is forbidden. In addition, the main obstacle is the lack of resources to develop new varieties of cereals that should not be controlled through the use of regular pesticides and fertilizers.

Organic areas with oil crops are estimated at around 212,214 hectares in 2015, and the areas for technical crops – about 273,087 hectares in 2015 for the EU-28.

Cereals in Bulgaria are mainly grown wheat, maize, barley and oats and in 2016 are 30 940,09 hectares, which is more than 28% more than in the previous year. Areas occupied by technical crops in a control system in 2016 are 30 512,05 ha (including areas with oil rose, aromatic crops, medicinal plants and spices). Growth of about 9 639 hectares more than in 2015.

There is a significant increase in areas with aromatic crops, medicinal plants and spices, which reach up to 18 088,83 ha, more than 36% more than in 2015 (11 456 hectares). The largest share of this group of crops occupies the lavender area, which amounts to 4 498,63 hectares, followed by a coriander with 4 491,77 hectares. and fennel -3,626.56 hectares.

Another important category of crops are bean and protein crops for grain production, which play a specific role in the organic sector. First of all, since beans have a high rotational value in organic production systems, contributing to the maintenance of soil fertility. Stimulation is also a legal obligation under Council Regulation (EC) No 834/2007. Second, they play an important role in organic feed because they can replace other ingredients of protein food (eg organic soybeans) that can hardly be delivered. In addition, the use of cultivated protein crops on the organic feed holding in mixed livestock production systems and livestock breeding guarantees the traceability of the protein feed ingredients. It is estimated that in 2015 301 461 hectares of organic dried leguminous crops will be grown in the EU-28. France is the largest producer of organic dry pulp with over 68 000 hectares in 2015, followed by Spain, Italy and Germany, with about 39 000 hectares, respectively 37 000 hectares and 33 000 hectares.

In Bulgaria, in 2016, cropped crops of grain crops (including seeds and mixtures of cereals and leguminous crops) fell almost threefold in the year 2016 compared to the previous year. 1 257 hectares in 2015 fell to 523 hectares in 2016. The root crops group (potatoes and beets) also dropped slightly. Areas of 103 hectares in 2015 declined to 92 hectares in 2016.

### *2.3. Vegetables*

The vegetable sector is an insignificant part of the organic area: 145 639 hectares in 2015. Poland is the Member State with the largest area under organic farming – 41 819 hectares, followed by Italy with 29 487 hectares, France with 16 832 hectares, Spain with 13 578 hectares and Germany – 11 190 hectares.

In Bulgaria, an increase of nearly 50% compared to the previous 2015 is observed in the group of fresh vegetables such as artichokes, onions, carrots, lettuces, cauliflower and broccoli, watermelons, melons, strawberries and cultivated mushrooms. The largest share of this crop group is for pumpkin -1418 hectares and artichoke -741 hectares.

Organically grown non-traditional crops such as artichokes – 741 hectares and kiwi – 6.68 hectares, although in small areas, show the efforts of organic farmers to meet market demand and diversify the crops they cultivate.

### *2.4. Perennials*

Perennials are an important category in the organic market. At EU level, the organic area of permanent crops is more than 1.2 million hectares. In 2015, in the EU, the areas under permanent management occupy 34% (454,227 hectares).

Areas in Bulgaria occupied with organically grown perennials amount to 34 874 hectares in 2016, which is 8 928 hectares more than in the previous year. Growth is mainly due to the growth of areas with stone fruit species, pome fruit, nuts and vines.

#### 2.4.1. Grapes

The EU's organic vineyards are mainly located in Spain, which cultivates 96,591 hectares of grapes, followed by Italy (83,643 hectares) and France (70,496 hectares). In Germany, the areas under organic vineyards are 6 766 hectares, Greece with 5 431 hectares, Austria with 5 100 hectares and Portugal with 2 719 hectares.

In Bulgaria, the interest in organic cultivation of vineyards continues to increase, from 4 199 hectares in 2015 at the end of 2016 to 5 390 hectares. The increase is due to the increase of areas with wine varieties from 4 013 hectares to 5 390 hectares and the desert varieties of 186 hectares in 2015 by the end of 2016 are 247 hectares.

#### 2.4.2. Nuts

In 2015, the EU has 190 580 hectares of organic nuts, of which 23 494 hectares in Bulgaria, Poland and Hungary. The remaining 167 086 hectares of organic nuts are mainly located in Spain and Italy.

At EU level, walnuts and olives occupy the largest share of organic perennial crops in 2015 (14% for nuts and 34% for olives). The reason is that these two types of production are much sought after in connection with the olive oil market, as well as the fact that there are less difficulties in producing them from an agronomic point of view. This can not be said, for example, for the production of grapes, because vines are very susceptible to disease.

In Bulgaria, interest in the group of gilts - walnuts, hazelnuts, almonds and chestnuts continues to grow. In 2016, the area of this crop group increased to 18,484 hectares, at 15,336 hectares in 2015.

### 3. Conclusion

In conclusion, it can be said that the market for organic farming and organic products has seen a significant growth during the analyzed period. The amount of land used for organic production has increased considerably, and the number of producers. A very important factor influencing the growth of organic farming is the growth in the market value of organic production and especially the increase in demand for organic products. In general, it is obvious that organic farming is a specific market niche on the world and European agricultural markets. Its development is particularly related to new trends in consumption, as well as to the growth of the economy of individual countries, and especially to the per capita income growth in individual countries.

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## THE POTENTIAL OF BULGARIAN AGRICULTURE IN THE COMMUNITY AGRICULTURAL POLICY

*The aim of the present study is to outline certain trends in the development of Bulgarian agriculture resulting from the application of the Community policy framework for the support of the primary sector. Given the chosen way of support of the Bulgarian farmers, after 2007 significant structural changes took place in the Bulgarian agrarian sector, which are also transformed into structural imbalances. Over a period of 10 years, the relative share of total production (TP) from the crops sub-sector has been steadily growing, while the TP from the livestock sub-sector has been steadily decreasing. Imbalances also occur at the subsector level. Subsectors "Livestock", "Vegetables" and "Fruit" are categorised as "vulnerable subsectors" and are subject to bound support. These subsectors have great potential as Bulgaria has monopoly natural assets, which are a prerequisite for creating products with high added value. Under CAP 2020+, national advantages are prioritised, which creates opportunities for restoring the importance of agriculture in the national economy.*  
*JEL: A12; Q10; Q18*

### Introduction

Bulgaria has been a member of the European Single Market for more than ten years. This political act has a positive overall impact on the national economy and improves the economic conjuncture in the country. Despite these undeniable benefits, a detailed review of the state of agriculture, as a significant sector of the economy, reveals discrepancies between potential and economic performance.

### 1. Production conditions in agriculture

#### 1.1. Agro-ecological potential

The set of resources, factors and conditions necessary to achieve a particular goal is an immanent essence of the existence of potential. Different spheres of material production imply/presuppose a need for a specific configuration of quantitative and qualitative

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parameters. Economic activity in agriculture is directly dependent on agro-ecological conditions, production factors, institutional environment, agricultural policy, market conjuncture, etc. Production in the primary sector also includes the process of reproduction of the substances cycle. This symbiosis highlights the importance of agri-environmental potential for the final economic results. The process of photosynthesis creates plant mass. Upon its incorporation in economic turnover, from a biological product, it is transformed into a product of economic importance. The process of realising new value and expanding value-added production is of paramount importance for the production unit, regional and national economy.

### *1.2. Institutional environment*

Changes in the institutional environment, brought by the transformation of the social model of society, affect production conditions and the economic system as a whole. The changed economic conjuncture modifies the state of structural links and the behaviour of the economic subjects. These processes have been ongoing in Bulgaria for almost three decades.

Part of the problems in the Bulgarian primary sector are rooted in the imposed liberal way of “democratising” the socio-economic model of the society. Planned economy was replaced by free market rules. The transition in Bulgaria as well as in the other Central and Eastern European countries and the resulting changes in the economic systems were accompanied by questions about the meaning, direction and response to a global challenge. For decades, Assoc. Prof. Bernard Munthyan explored and analyzed the complex processes of the “great transition”, studying the influence that this transition had on society and man. He made a profound cut of the functional system of society, differentiated horizontal and vertical social relations and highlighted their role in the types of societies. (Mitev, 2017, p. 51). The transformation in Bulgaria was dominated by political decisions. There was no economic justification for the necessity and feasibility of the changes. The absence of economic analysis had a negative impact on the development of agriculture in Bulgaria.

Upon the transition from planned to market economy, the specific potential of the Bulgarian agricultural conditions was not considered as a fundamental factor. Rather, political decisions were determining the way ahead. The political will was “justified” with moral motives, to the end of restoring justice (Mihaylov, 2001, p. 5; Popov, 2011, p. 15). As a result, Bulgaria conducted a unique “*real boundary*” restitution and restored land ownership on the principle of “*everyone at the grandfather's land plot*” The result of neglected economic and social motives and overestimation of ownership as a driver for agricultural development is a 10-year period of land restoration, abandonment of arable land, fragmentation of land ownership between 2 million landowners, broken sector structure and complicated production relations (Risina, Dimitrov, 2002, p. 25-26; Ilieva, 2012, p. 130; Yovchevska, 2016, p. 52). The 10-year transformation period in the 1990s did not lead to positive changes in agriculture. The oversupply of small and fragmented land plots, the unsettled property relations, the division of land and the labour force as factors of production (Risina M. held the prices for selling and renting agricultural land in Bulgaria.

All these factors limit the investment activity of entrepreneurs in Bulgarian agriculture (Valchev, Petkov, 2006, p. 73).

The next stage of the development of agriculture in Bulgaria, predetermined by the “real boundary restitution”, is the process of preparation and implementation of the common agricultural policy. In the absence of a preliminary assessment, it was administratively decided that the easiest means of direct support for the farmers will be applied – single area payment. The fallout was accurately foreseen by members of the scientific community: *“...it is not clear what will be the behaviour of producers in these circumstances. It can be expected that some of them will be redirected to extensive production. Hence, part of the comparative advantages of the country in vegetable and fruit growing will not be realised”* (Popov, Valchev, 2005, p. 209). Ten years after the implementation of the Community policy in our country, the researchers' assessment is that attention is directed to the resources that come from EU funds and programmes. The correction of achieved results is not among the priorities of the Bulgarian CAP implementation administration. Some of these results *“... reflect ... how the approach in the implementation of well-designed policies did not ensure continuity and adequate use of the experience accumulated in our country and did not lead to the desired positive changes that would strengthen the competitive advantages of our own resource base. The existing favourable natural conditions are not utilised to fulfil its potential as a provider of a significant part of the population's nutritional needs”* (Grozdanova, 2017, p. 217).

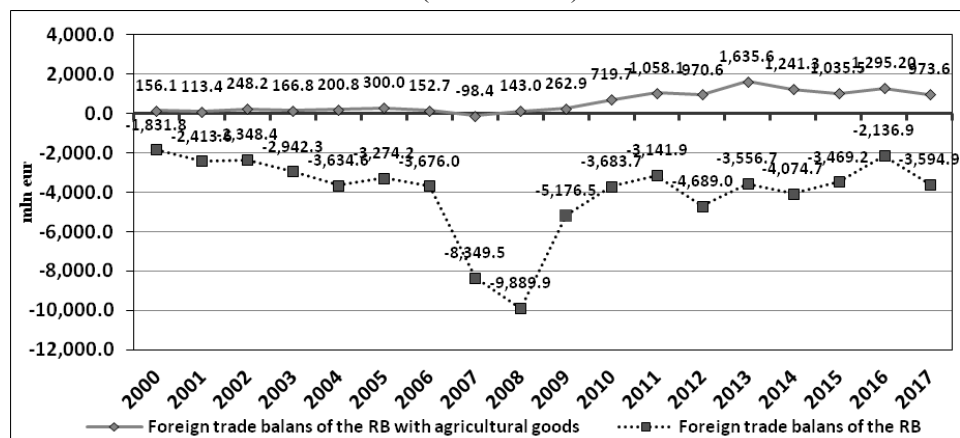
The absence of a meaningful scientific debate in changing the socio-economic model of society as well as the incorporation of new institutional norms in the national economy is due to a deficit of expert analysis in the study of the broken system connections. This also resulted in underestimation of the economic changes, some of which amount to imbalances. The elimination of pluralism in the field of economic theory and the depreciation of scientific expertise are a means of affirming the *“established monopoly of a single doctrine”* (Mladenova, 2017, p. 31). The directions of economic theory related to the social sciences are giving way to the expanding influence of the increasingly mathematical economics applied to serve the market doctrine.

The economy is a dynamic and open system, susceptible to influences from exogenous and endogenous factors. These affect the equilibrium and lead to disturbances in the economic system. The production process in the agriculture sector, which also includes biological organisms, is a complex conglomerate of natural environment, living matter and economic activity. The interweaving of laws of different types and sectoral characteristics require interdisciplinary knowledge and a comprehensive approach to the study, research and analysis of the processes taking place in the primary sector in Bulgaria.

## **2. Economic importance of agriculture**

The graphical presentation of information of fig. 1 reflects the importance of agriculture for the development of the national economy. The primary sector in Bulgaria creates value and is a source of foreign currency revenues for the country.

Figure 1  
External trade flows total for the country, incl. agricultural goods in the period 2000-2017  
(million euros)



Source: Information processed from NSI data [www.nsi.bg](http://www.nsi.bg) and Eurostat [www.eurostat.com](http://www.eurostat.com).

In the case of foreign trade flows, Bulgaria recorded a permanently negative external trade balance, while in the trade in agricultural goods the balance was a positive figure during the monitored period 2000-2017. An exception was observed in 2007, marked by adverse climatic factors and changes in the institutional environment.

The information in fig. 1 illustrates the high potential of Bulgarian agriculture, a positive factor for the national economy. This has encoded essential information regarding the process of extensification of agricultural production. The single area payment stimulates the output of covered crops. Direct payments support the expansion of areas with cereals and technical crops. More and more economic units improve their economic situation, specialising in extensive production. The economic conjuncture for growing and realising crop species is favourable. The demand for cereals and oilseeds on the international market ensures rapid realisation. Since 2007, wheat, barley and sunflower have become well-established commodities on the stock-market. It is a positive phenomenon that a large part of the deserted lands, once the Bulgarian model of agrarian reform has been implemented, is again included in economic turnover. The agglomeration of agricultural plots and the shaping of massifs is also a positive economic practice leading to the improvement of the economic system. In essence, this is a process of comasation and consolidation of the agricultural land, albeit made difficult by provisions of the Inheritance Act. The process of fragmentation of land ownership continues as the hereditary rights of landowners of agricultural land are enforced.

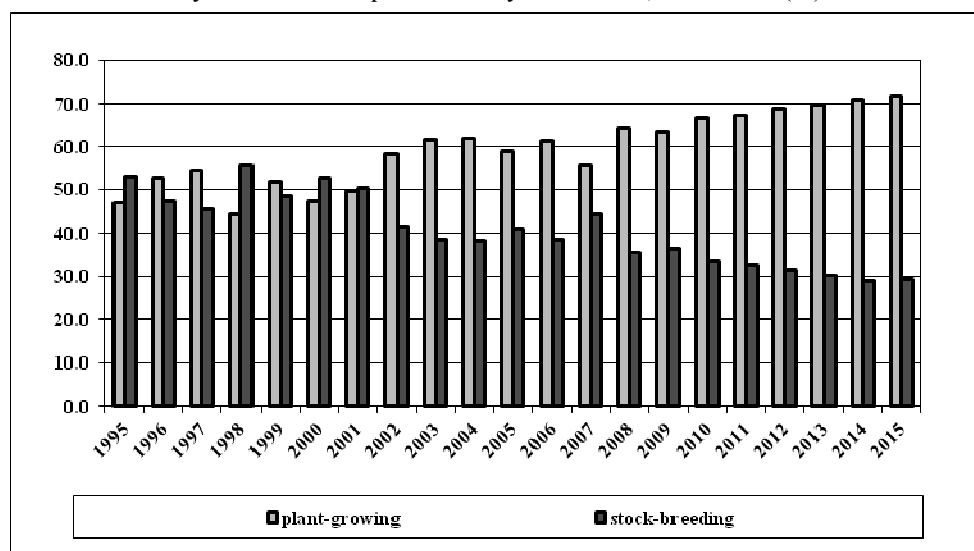
### 3. Structural changes

Apart from the high potential of Bulgarian agriculture, the information presented in fig. 2 also reflects the effect of the application of the Community agricultural policy. The economic conjuncture in Bulgaria is improving. Thanks to the European funds, economic growth, incl. in agriculture, marks an upward trend (Tanchev, Terziev, 2018, p. 72 et seq.).

At the same time, as a result of the European income support policy, there is a significant change in the established structure of the Bulgarian primary sector (Figure 2). It also illustrates the process of manifestation of structural changes between the two main sub-sectors of agriculture in our country and their transformation into structural imbalances. The observed period 1995-2017 could be divided into three sub-periods: 1995-2001, 2002-2007 and 2008-2017.

Figure 2

Dynamics of total production by sub-sectors, 1995-2017 (%)



Source: Information from the Ministry of Agriculture, [www.mzh.government.bg](http://www.mzh.government.bg).

During the first sub-period there is a relatively balanced state of the total plant production and total livestock production. The second sub-period coincides with the implementation of the SAPARD Programme (Special Accession Program for Agriculture and Rural Development) in Bulgaria. It was designed to support agriculture and rural development in the countries from Central and Eastern Europe before the accession to the European Union. The implementation of SAPARD marked the period in which the dominance of the plant growing sub-sector over livestock production in Bulgaria became substantial. Following EU accession, this trend is increasing (Figure 2). In recent years, total livestock production accounts for only one-quarter of total farm production. This is due to ever-expanding extensive production. The covered crops cultivation process is a preferred business practice



that provides secure financial resources through direct single area payment. The received European funds cover a substantial share of the cost price of the cultivated covered crops. Economies of scale add to the profits. The production of grain and technical crops is increasingly industrialised. Grain and sunflower are recognisable commodities that provide high returns. All these advantages stimulate farmers to grow larger areas of grain-cereal and technical crop plants. As a result, in Bulgaria the production of extensive crops with lower added value expands and has a significant share in agrarian export (Rangelova, 2015). Exports of processed production would have brought more national income. The tendency to export grain as a raw material is still sustainable. The process is fuelled by two favourable prerequisites. The absolutising of the market economy in Bulgaria and the subsidisation under the Community agricultural policy. The social relations in the Bulgarian agrarian sector, considered as a functional system, have a horizontal structure. This is the technical-economic basis of the material-producing sphere. Business entities, "guarded" by the ideology of market economy, make sovereign decisions about the type and mode of economic activity. Managing this process introduces coordination elements, leads to so-called vertical structure in public relations. As Assoc. Prof. Muntian said in 1995 the biggest danger to humanity today is the acute ideologisation of the problems and their solutions. Report submitted to the Centre for the Study of Ideologies. Personal archive of Assoc. Prof. Muntian (Mitev, 2017). This is related to the role of the state. Such processes are observed in the Czech Republic, Slovakia, Poland and some other countries that have chosen social democracy as a way of transforming the model of social development.

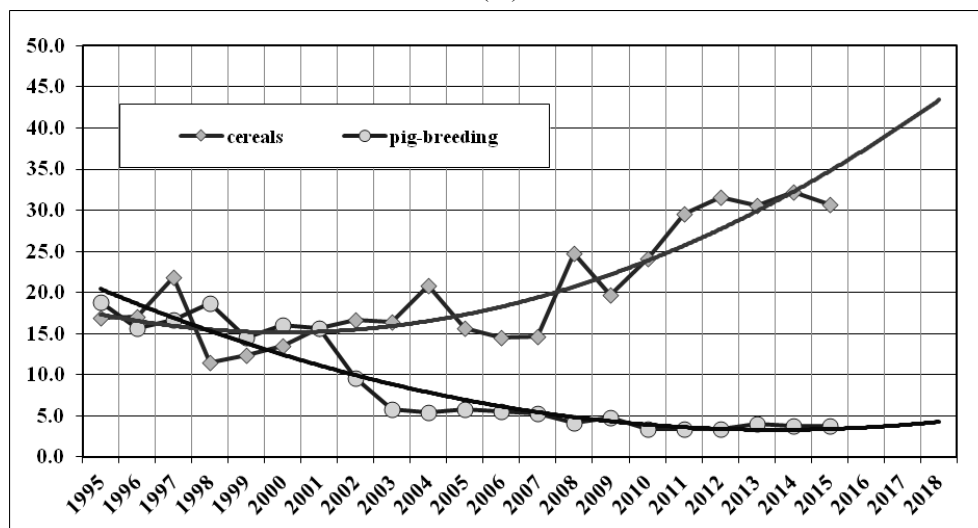
The horizontal structure of the social system in Bulgaria could be illustrated with some elements of the material production sphere in agriculture (Figure 3). The graphical method reveals the economic results of the "Cereals" and "Pig-breeding" sectors. Figure 3 reflects the total production of cereals produced and the total production of pig-breeding. The observed period is the same: 1995-2017. As we have distinguished three relative sub-periods in the development of the two main subsectors of agriculture in our country, in the same way the graphic image of the presented in fig. 3 information could also be subdivided into three sub-periods.

The reason for comparing the dynamics of generating total production in the cereals sector with that created by the pig-breeding sector is the fact that the latter is the main consumer of cereals. This is the most direct way to add value and create high added value products to increase the share of national income generated by the agriculture sector.

The data in Fig. 3 reflect a clearly outlined/marked upward trend of TP created by the cereals sector. The beginning of the growth trend after 2002 coincides with the implementation of the SAPARD Programme in Bulgaria. After the country's accession to the EU and the adoption of the rules of the Community agricultural policy, the dynamics of the process of increasing the production of cereals sped up. Growth compared to 2002 doubled in 2008. With the acceptance of 2009, 2010 marked an increase of the total yield of cereals in excess of 30% by the end of the survey period. Therefore, one-third of the TP in the primary sector is created by the production of cereals. This is a positive trend because the production of cereals is a major source of export potential and plays a significant role in

the positive foreign trade balance in agricultural raw materials. The trend is illustrated in Fig. 1 and was analysed in the context of the income support policy for farmers.

Figure 3  
Dynamics of the total production of cereals and pig-breeding during the period 1995-2017 (%)



Source: Calculations based on Eurostat [www.eurostat.com](http://www.eurostat.com).

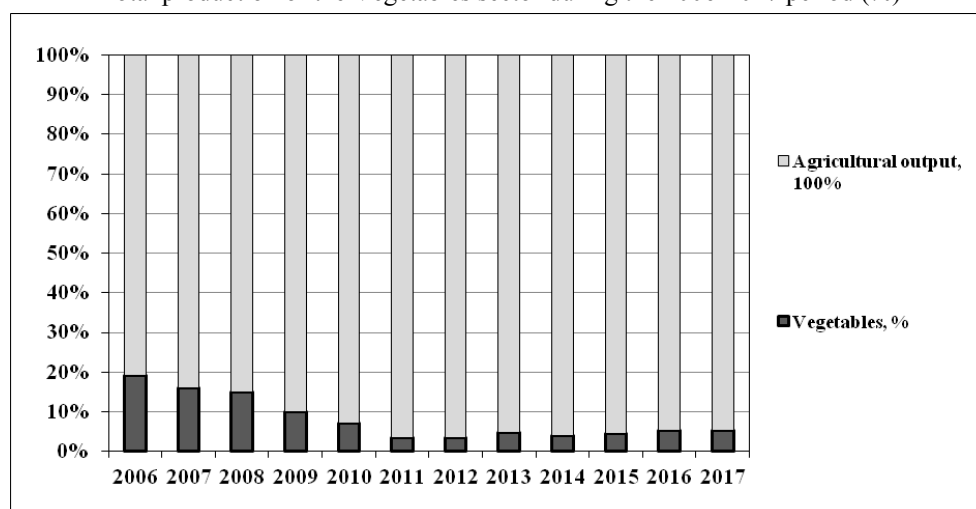
At the same time, the analysis of the graphically presented data (Figure 3) shows a significant decrease in the total production of pig-breeding. In 2001-2002 the decline was 5% per year. For two years the pig-breeding sector in Bulgaria lost two-thirds of its potential. After 2003, it maintained the symbolic 5-6% of total production. In the 2010-2017 period stagnation was permanent. Critical shares of 3-4% of total production are a sign of an unfavourable economic trend. The agri-environmental potential of the country is not used for value-added production. The direct export of cereals and oilseed harvest deprives the country of many additional opportunities - economic benefits, improvement of economic performance, expansion of intensive production, part of which is the livestock sub-sector. The use of grain as a raw material for pig and poultry breeding provides additional employment opportunities for the workforce in the livestock sector. The socio-economic benefits for the rural population have a potentially synergetic effect. Apart from having employment effect and a role in diversifying local economy, the benefits also include a demographic dimension.

Figure 4 presents a graphical picture of the economic situation of the Vegetables sector in the 2006-2017 period. The value economic indicator we use in the survey is the total vegetable production, a reliable indicator, reflecting the impact of the Community agricultural policy and the way it is applied. The results show a significant drop in total output. At the beginning of the period, almost a fifth of total agricultural output originated from vegetable production. During the 2011-2012 period it declined down to critical levels

of around 3%. This collapse in vegetable production is characteristic of all intensive productions in Bulgarian agriculture. The process of unsatisfactory economic performance of livestock farming has already been analysed (Figure 3). The same decline in economic performance was also observed in the production of perennial plants. The Perennial fruit and berry plantations sector partially realises its high agri-ecological potential in Bulgaria.

Figure 4

Total production of the Vegetables sector during the 2006-2017 period (%)



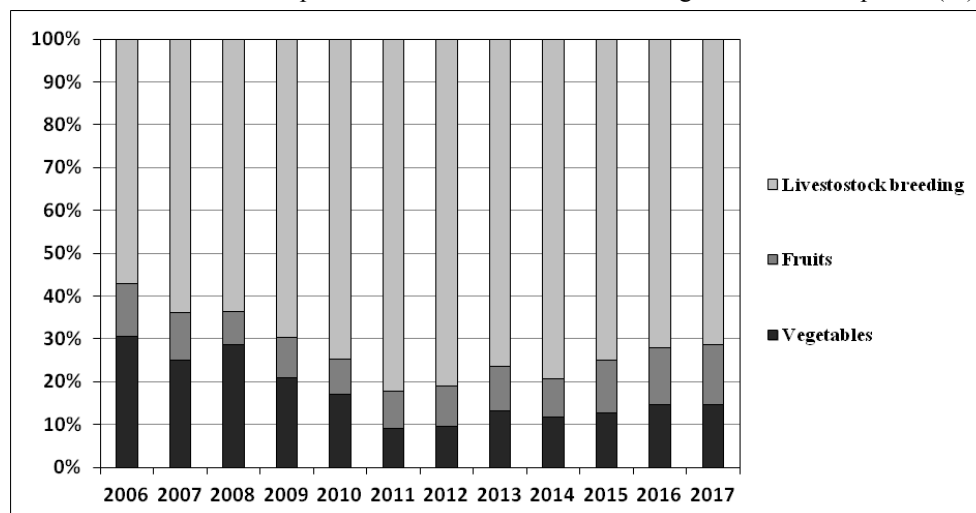
Source: Calculated on the basis of information from MAF and Eurostat.

#### 4. Change in the implementation of the Community agricultural policy in Bulgaria

The unfavourable economic results also grow into a socio-economic problem. This requires Bulgaria to recognise the presence of “Vulnerable” sectors in the economic system of agriculture. This category includes the Livestock sector, the Vegetables sub-sector and the Perennial fruit and berry plant sub-sector. In order to reverse the unfavourable trend, in 2013 Bulgaria started to disburse binded subsidies to these sectors. This policy shift was a success as the sectors are experiencing a revival. There is a process of improving the business environment, which has grown into economic recovery and boom in sectors with support binded to production.

The development of these productions plays a significant role in solving a number of socio-economic problems in the country's agriculture and its rural areas. These have the potential to expand the nomenclature of commodities and to create added value and products with high export potential. Support for those intensive production processes provides new jobs and lowers the effect of emigration.

Figure 5  
Relative share of total output from “vulnerable” sectors during the 2006-2017 period (%)



Source: Calculated using information from MAF and Eurostat.

Financial support for the “vulnerable” livestock and fruit and vegetable sectors continues to have a proven and expanding positive effect on agriculture and the food industry. The results for the first 8 months of 2018 showed a rise in meat and dairy production between 10 and 20%.<sup>2</sup> The Minister of Agriculture, Food and Forestry Rumen Porozhanov announced at the opening of six food fairs in Sofia – Messomania, Bulpek, World of Milk, Wine Salon, Interfood and Drink and SIHRE that the export of Bulgarian food and agricultural products is more than 13% higher on an annual basis. The huge interest in the exhibitions, both by Bulgarian and foreign producers, shows/reflects the potential of agriculture, as well as that of the “vulnerable sectors”. Minister Porozhanov appealed to the public to shift the focus again towards Bulgarian products and traditional tastes. In this regard, on 14 November 2018, the Ministry of Agriculture, Food and Forestry, together with representatives of the agricultural industry, launched the campaign *"I support the Bulgarian producers, support them too"*.<sup>3</sup> It envisages products for which Bulgaria has monopoly conditions and the capacity to satisfy the demand in many niche markets in Bulgaria, Europe and worldwide. The intensive contacts with entities from the United Arab Emirates<sup>4</sup> as well as the will for cooperation between the Agricultural Academy and

<sup>2</sup> Minister of Agriculture, Food and Forestry Rumen Porozhanov at the opening of 6 food fairs in Sofia – Messomania; Bulpek; Milk World; Salon of Wine; Interfood and Drink and SIHRE. 07.11.2018 Interexpo center. <http://www.mzh.government.bg/bg/press-center/novini/rumen-porozhanov-za-prvite-8-meseca-na-2018-g-otch/> accessible on 09.11.2018.

<sup>3</sup> <http://www.mzh.government.bg/bg/press-center/novini/rumen-porozhanov-zapochvame-kampaniya-v-podkrepa-n/> accessible on 14.11.2018.

<sup>4</sup> <https://www.agriacad.bg/index.php/новини/17.11.2018> г. The Minister of Food Security of the United Arab Emirates.

scientific centres from the Gulf state are an evidence of this. Long-term contacts of Bulgarian and Chinese scientists are maintained in carrying out common selection, technological and production projects<sup>5</sup>, which transfer the Bulgarian scientific product to the Chinese agricultural production structures.

The research interest in the processes in the primary sector highlights a number of problem areas, some of which could be located in the coordinate system of political and economic factors. The knowledge of the political and economic factors allows for a precise definition of some weak links in Bulgarian agriculture: *"the biggest problem of the Bulgarian plant-growing is to provide conditions for the restoration of the traditional productions corresponding to the geographic climatic conditions (Tasev, 2012, p. 87)"*. The provision of these conditions is aided by the increasing demand among the consumers for real food, a process facilitating opportunities for increased traditional national and regional productions with high-quality characteristics. Another factor contributing to the rediscovery of the potential of the so-called vulnerable sectors in Bulgarian agriculture are the European social policies and the sentiment of the European public in support of small and medium-sized farmers with an important role in preserving rural areas.

## 5. Potential as a resource

The way of implementation and the results of the use of the European funds are subject to analytical studies by a number of social scientists. This is the scientific potential that the society is about to recognise and use to improve the economic system in agriculture and to solve and overcome a number of problems with socio-economic character. We fully support the opinion of social scientists that "the deep decline of agriculture, communities and rural areas can hardly be overcome without special support" (Minev, 2012, p. 98). Our view is that the problems of Bulgarian agriculture are not only problems of the sector. Their origin in the land reform and the ongoing "fine tuning" of the land relations in Bulgaria presuppose a particular resistance of the negative processes in the plant growing and livestock breeding. The liberal model and the absolutisation of market forces marginalise the role of the state and devalue the importance of strategic and sectoral documents for the development of the sector. In our view, the socio-economic role and importance of agriculture is not influenced by the imposed dogma of the market. The significance of the sector is constant and is not subject to conjunctural influences. The role of agriculture stems from the eminently inherent function of the activity of economic actors – to create enough food that is essential for the existence of man as a species. In his *opus magnum*, in the first volume of the Capital, Karl Marx writes that *before they are engaged in science and art, people need to be fed*. Agriculture is attributed with providing indispensable nutritional resources for maintaining and developing human life. We believe that the growing social sensitivity of Europe and the "greening" of economic activity allow for the study of the potential of agriculture to go beyond the technical and technological frameworks of study and evaluation. The society as a whole, incl. more and more farmers are aware of the

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<sup>5</sup> <http://www.mzh.government.bg/bg/press-center/novini/rumen-porozhanov-imame-mnogo-vzmozhnosti-za-strudn/> accessible on 17.11.2018.

possibility of seeking synergies between natural resources and economic activity. The accomplishing of the positive effects of these opportunities has a multi-layered dimension and multivalent assessment. It is a systemic process in which investments have the nature of a natural resource, capital and human activity. The system's output consists of vital material goods. The natural form of the newly created product assumes a value dimension. Depending on the nature of the production, a substantial added value can be attached to each product upon its sale. Thus, the system of material production in agriculture multiplies the potential of primary production means. The transformation of primary natural potential into economic creates new/added value in the course of various biological, technological, economic, etc. processes involved in the production of different agricultural products. The way in which the economic activity is organised presupposes the possibility to also create social potential, perceived as potential of third generation. The social potential includes not only the ability of the primary economic agents to rationalise their production activities, but also the expertise of CAP Authority, implementing the Community agricultural policy as well as their ability to prepare farmers for the ever more ambiguous and dynamic changes in Bulgarian and pan-European standards. We can see "processes of decline, due to the concentration of land and capital ... in agriculture. ... a small number of particularly large tenants have been able to derive rent from their privileged access to these funds and to the political decision-making process" (Minev, 2012, p. 94).

A decade after Bulgaria's accession to the European Union, a number of researchers believe that *"over-consolidated agriculture and monopolised land use are the result of the administration of the governments that have ruled the country since the land reform, and above all since the EU membership"*. According to the authors, *"it is important for our country to have both a political and a public consensus to get things going in a new direction."* The difficulty is to realise the need to *"make a huge turn and give preference to creating and supporting family farms that will save both agriculture and rural areas"*. (Tasev and Dimitrov, 2016).

Individual decisions, actions, behavioral motivations and production practices of agricultural producers add new qualitative content to their economic activity. The decisions concerning the organisation of a production process and the way it is carried out, from the choice of the crops to be cultivated and the types of livestock to the realisation of the production are essential for the economic system in agriculture. Farmers, as business agents in the primary sector, attach economic importance to the process of transforming matter. Adding value to the newly created production, using natural, biological and economic factors, the economic agents are also influenced by institutional factors. The dynamically changing regulatory and market conditions, influenced by the Community's agricultural policy, are increasingly taken into account when economic decisions are made. The impact of these conditions is "captured" by empirical data, from the amount of information observed by the statistical authorities in Bulgaria. The results take into account both the impact of European policy and some national specifics related to socio-cultural features and characteristics of the agri-environmental potential in the country.

The processes in Bulgarian agriculture are in direct connection with a number of contemporary globalisation trends. Openness of the economy, the absolute implementation of the free market, unification and standardisation of the European policy, aging of the

population, etc are subject to special analyses. The subject of generation renewal is increasingly debated on European and national political forums. On 21 May 2018, the Bulgarian Presidency of the Council of the EU circulates a document<sup>6</sup> that highlights the importance of the topic of generational renewal. Emphasis is placed on the need to increase the efficiency and development of current tools to support young farmers. In the context of the CAP after 2020, the need to take into account the national and regional specifics of the individual Member States is outlined.

## 6. General conclusion

The presented results of the implementation of the Community agricultural policy in Bulgaria presume/impose/require the conceptualisation of the complex processes in the Bulgarian agriculture. Horizontal and vertical links in the sector respond to changes in the institutional environment. Changes are made more dynamic by policy changes. The outcome of the economic activity in the sector reflects the complexity of all European and national changes. Effects are too often socio-economic. Given the overall CAP 2020+ platform, with a view to improving the performance/effect of the support instruments implemented in Bulgarian agriculture, national policy is gaining significance. Knowing the traditional advantages and specifics will help to improve the results of the absorbed funds, which, together with the requirement to simplify the implementation of the Community's agricultural policy, is also imposed on the national states.

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## ***SUMMARIES***

*Tatiana Houbenova*

### **THE GLOBAL CHALLENGES TO “TWO-SPEED” INTEGRATION IN THE EU: PROBLEMS AND PROSPECTS FOR BULGARIA'S PARTICIPATION IN THE ECONOMIC AND MONETARY UNION**

The paper discusses the current problems of the integration in the EU in the context of the ongoing restructuring of the global economy and its institutional order under the pressure of rising economic nationalism and protectionism. The differentiated integration conducted in EMU outlines the challenges for Bulgaria from the integration at "two speeds" in the EU. The problems of overcoming the crisis of the current EU integration model are being considered in the context of the ongoing reforms. By revealing the main trends in the world economy the paper discusses the impact of global changes on the European integration. The difficulties in reforming the completion of the Economic and Monetary Union are evaluated as a bottleneck to the further enlargement of the EMU. The opportunities and perspectives of Bulgaria's inclusion in the EMU are outlined.

JEL: G21; G24; G28

*Svitlana Mishyna*

*Oleksandr Mishyn*

*Nataliia Parkhomenko*

### **INNOVATIVE METHODS AND TOOLS FOR PERSONNEL INTERNATIONAL MARKETING DEVELOPMENT**

In the article approaches to the definition of the concept of "personnel marketing" are considered. The essence and definition of concepts "personnel marketing" and "international personnel marketing" are specified. Approaches to the formation of HR marketing mix are considered. The methodical approach to the formation of the system of international personnel marketing in the context of innovative development of personnel technologies is improved. The list of tools for innovative development of personnel marketing at enterprises of international business is substantiated.

JEL: M12; M31; O31

*Nedialko Nestorov*

### **GEOGRAPHIC SUSTAINABILITY AND GEOGRAPHIC CONCENTRATION OF BULGARIAN EXPORT**

The paper presents results from a survey of geographic stability and the geographical concentration of Bulgarian export. An innovative approach has been used through the approbation of specially developed coefficients. The results show that Bulgarian export over the last fifteen years has been balanced in terms of its geographical structure. At the same time, it is highly sustainable concerning the main partner countries, and they remain unchanged over the whole period under review.

JEL: F14; F19

*Serhii V. Hlibko*  
*Nataliya N. Vnukova*  
*Daria D. Hontar*  
*Hanna V. Anisimova*  
*Anna N. Liubchych*

### **RISK-ORIENTED APPROACH TO DETERMINING BANK'S CAPITAL SIZE ACCORDING TO REQUIREMENTS OF BASEL COMMITTEE ON BANKING SUPERVISION**

The article establishes that it is necessary to introduce capital requirements for the Basel Committee on Banking Supervision to improve the regulation of banking activities. The conducted experiment on calculation of the bank's capital for operational risk with different methods showed non-profitability of the results, which requires further improvement of the processes of changes in the banking regulation system based on the Basel regulations. According to the calculations, there is a certain difference between the amounts of necessary reserves for bank's operational risk. At the same time, using different methods of calculation, we can see various trends over the last three years.

JEL: C10; G32; G21; F65; K29

*Andrey Nonchev*

### **THE REMIGRATION: CAUSES AND SUSTAINABILITY (THE BULGARIAN CASE)**

The paper deals with the causes and sustainability of remigration, carried out by the Bulgarian migrants. It is focused upon the returnees' own interpretations of the reasons behind their migratory behavior and the subjective meaning of their migratory movements. Comparisons are made between the motives for departure, return and re-departure as components of the overall migration trajectories. The return is looked upon in the overall context of mobility either as a split moment within it, or as a final point. Diverse economic and non-economic motives for return are identified. The relationship between the sustainability of return and the causes of initial migration and subsequent remigration is analyzed.

JEL: A14; F22; J61

*Venelin Boshnakov*

### **FUTURE PLANS OF BULGARIAN CIRCULAR MIGRANTS: EMPIRICAL EVIDENCE FROM BUS TRAVELERS**

The paper provides evidence about the future plans of Bulgarian migrants that use regular bus lines to travel to the European destination countries. The analysis utilizes data from a questionnaire survey conducted in 2018 among 305 migrants interviewed at the major nodes of the international bus transport infrastructure in Bulgaria. The future plans of these migrants are focused mainly on: (i) continuing their life in both home and host countries or (ii) searching for options to stay abroad for a longer period. In the same time, non-negligible shares of respondents (iii) still hesitate about their future plans or (iv) have expressed intentions to stay permanently in Bulgaria. Using multinomial logistic regression model, a set of variables that reflect: (a) socio-demographic status, and (b) the migration experience have been tested for potential significant effects on the choice reflecting the individual future plans of respondents.

JEL: F22; C35; J15

*Irena Zareva*

### **PARTICIPATION OF RETURNING MIGRANTS IN THE LABOUR MARKET IN BULGARIA**

The paper is focused on the issue of returning migrants and their participation in the labour market in Bulgaria. The study is based on data of a representative survey, conducted in 2017 under the project "Returning migrants: segmentation and stratification of economic mobility". The analysis covers two main aspects of the subject: 1) age and education of the respondents as characteristics for inclusion in the labour market and their labour status at the time of the investigation; 2) comparison between the type of employment (by economic activity, qualification, type of labour contract, etc.) abroad and in Bulgaria after the return, outlining peculiarities, disparities and consequences. Some essential problems for the participation of migrants in the labour market in Bulgaria are described.

Key words: returning migrants, labour market

JEL: J62; J24

*Plamen D. Tchipev*

### **THE CONCEPT OF THE OWNERSHIP IN THE LATE 'SOCIALIST' POLITICAL ECONOMY**

This paper investigates the collision between the unquestionable requirement to preserve and maintain the solitary existence of the **all-people socialist ownership** and the need to provide a certain, though limited, **independence** for the enterprises. The seemingly simple practical issue, eventually appeared as a complex contradictory knot of both theoretical and practical problems, which implicated a lot of attempts for their overcoming in the different socialist countries, continuing up to the end of 1980s, i.e. to the last days before the system break-down. The paper here focuses on the experience in Soviet Union and, particularly, in Bulgaria.

JEL: B14; B24; G34; L22; P26; P31

*Miroslav Nedelchev*

### **CORPORATE GOVERNANCE OF STATE-OWNED ENTERPRISES: THE CASE OF HEALTHCARE ESTABLISHMENTS IN BULGARIA**

The aim of the survey is to present the current situation of state ownership and its governance in Bulgaria. As a basis for good practices, the guidelines for corporate governance of state-owned enterprises by the Organization for Economic Cooperation and Development (2015) are used. The survey includes 65 healthcare establishments with concentrated state ownership.

The results of the survey show that the joint stock company and the sole ownership are preferred by the state due to their opportunity for control over the management of ownership. Regardless of the declared objectives of the state policy on social orientation of the healthcare sector, the data indicate that the priority of the healthcare establishments are mainly the financial results. The practices of corporate governance of state-owned enterprises are formed by three external factors: concentrated state ownership, social functions of state-owned enterprises, and the importance of healthcare for economic development.

JEL: G34; H51; I18

*Radostina Telerig Bakardjieva*

### **BULGARIAN FIRMS AS ENGINE OF CORPORATE SOCIAL RESPONSIBILITY**

CSR has a great importance for assessing the impact of business on society in global, European and national context. It is a complex and multidisciplinary conception it explores the institutional prerequisites for responsible activities of companies and their impact on its stakeholders. This publication systematizes new economic theories in the theoretical field, describes CSR core principle and international CSR Standards and gives empirical information on their application in Bulgarian firms. Recommendations are given for the CSR development guidelines according to European requirements.

JEL: M14

*Milkana Mochurova*

*Mitko Dimitrov*

*Stoyan Totev*

*Taki Fiti*

*Marica Antovska-Mitev*

*B. Jovanovski*

### **INNOVATION ACTIVITY OF THE BUSINESS SECTORS IN THE BORDER REGIONS OF THE REPUBLIC OF BULGARIA AND THE REPUBLIC OF MACEDONIA**

The paper argues that cross-border cooperation is important for border regions for building productive economies and inclusive societies. It justifies also the need of integrating sustainable development principles into regional development practice. The paper analyses levels and dynamics of key socio-economic indicators of the Northeast Region of Macedonia and Kyustendil district in Bulgaria such as regional – GDP, gross value added, employment, economic structure, demographic indicators.

It concludes by presenting prospects for development of cooperation in the cross border regions.

JEL: R10; R58

*Rossitsa Chobanova*

*Ljupco Kocarev*

### **DIGITALISATION AS A CHALLENGE FOR ENTERPRISES IN 21<sup>ST</sup> CENTURY**

The paper is devoted to digitalization of enterprises as a challenge of the 21<sup>st</sup> century. It is measured on national and cross-border region levels on the case of Bulgaria and Macedonia. The methods applied include a comparison of the state of the art and of trends of digitalization by size of enterprises. Data used for a country level is from national statistical institutions, for the level of their cross-border regions – from a database from a survey of 1941 enterprises, collected in the frame of a European project in 2017.

It is argued digitalization is a contemporary way of innovating, which depends on the size of enterprises. The new stage of digitalization is characterized by the usage of big data. Development of the respective algorithms for using big data is understood as a prerequisite for improving connectivity, networking and complexity of business processes. The latter characterizes preparedness to reap the benefits of emerging technologies and to capitalize opportunities of the digital revolution.

JEL: L00; M00; O00

*Teodora Peneva*

### **SUSTAINABLE DEVELOPMENT AND ENERGY POVERTY: CHALLENGES FOR THE GOVERNING INSTITUTIONS**

This article presents the major challenges faced by the state for tackling energy poverty as one of the barriers to sustainable development not only of the energy sector but also of the society. The article presents the scope of energy poverty in Bulgaria, the underlying factors, the consequences, and the trends of development in the last three years until 2016. The article also provides a brief guide to tackling the challenges of combating energy poverty.

JEL: Q01; B41; B55; C18; D63; P36

*Petia Hrisomirova Branzova*

### **ORGANIC FARMING IN BULGARIA AND EU – COMPARATIVE DIMENSIONS**

The report examines the state of organic farming in Bulgaria and the EU for the period 2000-2016. An important aspect is the type of production (arable land, orchard) of organic farms. The choice of type of production differs between regions and Member States and depends on various factors (including the technical aspects related to organic production and the structure of consumer demand). In the course of the study the methods of comparison, statistical methods, etc. are used. The results are aimed at identifying existing differences between EU countries in the field of bioproduction development.

JEL: Q10; Q12; Q15

*Plamena Yovchevska*

### **THE POTENTIAL OF BULGARIAN AGRICULTURE IN THE COMMUNITY AGRICULTURAL POLICY**

The aim of the present study is to outline certain trends in the development of Bulgarian agriculture resulting from the application of the Community policy framework for the support of the primary sector. Given the chosen way of support of the Bulgarian farmers, after 2007 significant structural changes took place in the Bulgarian agrarian sector, which are also transformed into structural imbalances. Over a period of 10 years, the relative share of total production (TP) from the crops sub-sector has been steadily growing, while the TP from the livestock sub-sector has been steadily decreasing. Imbalances also occur at the subsector level. Subsectors "Livestock", "Vegetables" and "Fruit" are categorised as "vulnerable subsectors" and are subject to bound support. These subsectors have great potential as Bulgaria has monopoly natural assets, which are a prerequisite for creating products with high added value. Under CAP 2020+, national advantages are prioritised, which creates opportunities for restoring the importance of agriculture in the national economy.

JEL: A12; Q10; Q18