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Industry in Bulgaria: state of the play.

SWOT analysis

Project “Strengthening the industrial trade unions’ role in South East Europe in shaping the industrial policy agenda in the light of the objectives of Europe 2020”, VS/2015/0238



Revised version,

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Background

The present analysis is carried out in the framework of the project “Strengthening the industrial trade unions’ role in South East Europe in shaping the industrial policy agenda in the light of the objectives of Europe 2020” (VS/2015/0238). The report follows a methodological approach, discussed and approved by the project coordinator. The information gathered is based on desk research of national and European policy and research documents (the sources are presented in the references list¹) and interviews² (list of interviews is included in the Annexe)³ and discussions carried out in 2016 with representatives from the trade union federations, members of *industriAll European Trade Union* and *EFFAT* in Bulgaria. This version of the report is revised on the basis of the comments formulated by the participants of the Sub-regional Workshop on Industrial Policy in Bulgaria and Romania, held in Bucharest on the 19 – 20 of January 2017⁴. This SWOT analysis for Bulgaria will serve as a basis for the industrial policy recommendations and the trade union action plans, envisaged in the project.

The structure of the report is the following: after a short presentation of the economic and political context in the country the industrial development is analysed. The third section focuses on human resources and skills. The fourth section discusses industrial policy and main tools mobilised. On the basis of the analysis is compiled a SWOT analysis⁵ in the fifth section.

1. Introduction: economic and political developments setting the context

Bulgaria entered the European Union (EU) since 1st of January 2007, but it is still among the poorest members of the union. However, the EU membership has ensured the access to a large market and has represented a positive signal to foreign investors. In this perspective EU membership is considered as an opportunity for the country’s industry.

The economy of the Bulgaria experienced significant changes during the post 1989 period. The decade of the 1990s was characterised by the political instability (recent changes of governments and orientation), economic and financial crisis (hyperinflation, drastic reforms) and social difficulties (high unemployment, poverty). Since the introduction of the Currency Board in 1997, and the following macroeconomic stabilisation, the country experienced a period of robust growth (till 2008), followed by the crisis (2009 - 2011) and modest recovery since then (see evolution of the main economic indicators in Annexe).

¹ The existing documents are analysed critically and trade union perspectives are underlined. The results of some of the cited indexes should be examined with a caution; however they could provide useful indications, e.g. in terms of innovation, etc.

² I would like to thank all the respondents for the time dedicated and their valuable feedback.

³ The interviews were carried out, according to a common guideline, sent in advance to respondents.

⁴ I would like to thank Corrina Zierold, Anne-Marie Mureau and all the Bulgarian participants for their helpful comments and suggestions.

⁵ SWOT analysis is an analytical method which is used to identify and categorise significant internal (Strengths and Weaknesses) and external (Opportunities and Threats) factors faced either in a particular arena, such as an organisation, or a territory, such as a region, nation, or city.

The macroeconomic stability (see data in table 4 in Annexe) and the relatively predictable fiscal policy with low tax levels⁶ during the last 15 years are among the strengths for the development of the Bulgarian industry.

Since 1997 and till 2013, the country was stable politically (three governments were able to fulfil their four years mandate and one almost completely). From 2013 on there were two governments and two interim governments and a third one will be appointed in December 2016. The next general elections are scheduled for 26 March 2017. The political instability is a threat for the industrial and economic development. In general the economic policy of the country since the end of the 1990s was impacted by neo-liberal oriented agenda and austerity measures, since the beginning of the 2008-2009 crisis. In this context the government intervention in areas relevant for the industrial development such as R&D, vocational education and training, etc. was limited.

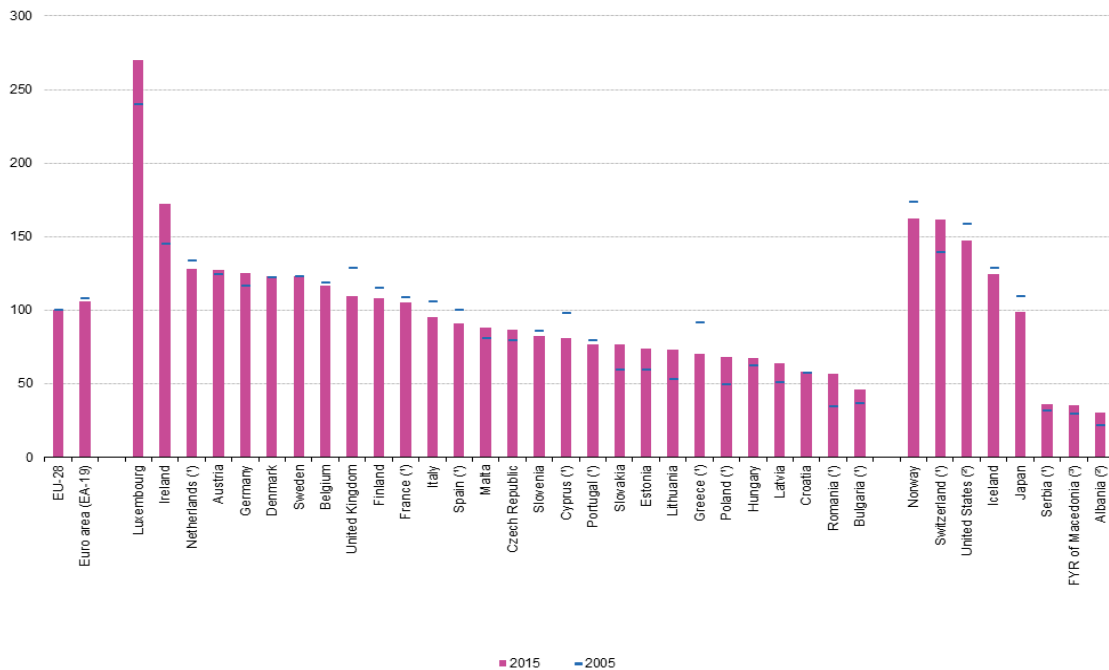
Despite that Bulgaria had shown substantial convergence between in the period 2000-2007 (from 29% to 40% of EU27 GDP), just prior to its EU accession, coinciding with the period of pre-crisis economic boom⁷, the country has still has the lowest GDP/capita in the EU (the only country with less than a half of the EU 28 average in 2015 – see fig. 1). During the 1990s, actually a ‘de-convergence’ had taken place and although convergence towards EU average continued from 2007, its pace had lost its momentum⁸. According to the last available data (see fig. 1), Bulgaria GDP growth per capita for the decade 2006 – 2015 was lower than the growth of countries from Central and Eastern Europe, such as Poland, Slovakia and Romania.

⁶ While in the 1990s corporate and taxes were relatively high, many countries in the region introduced flat taxation, including Bulgaria in 2008, one of the lowest in Europe (10%).

⁷ See Drahokoupil and Galgoczi, 2014.

⁸ Op. cit.

Figure 1 GDP per capita at current market prices, 2005 and 2015 (EU-28 = 100; based on PPS per inhabitant)



(*) 2015: provisional.
 (*) 2014 instead of 2015.
 (*) 2013 instead of 2015.

Source: Eurostat, 2016⁹

Part of the explanations for this insufficient performance stem from the overall institutional environment, characterized by the ‘capture’ of the state by different oligarchic circles, the perception for widely spread corruption practices (for example the country ranks 69 from 168 countries, according to the 2015 Corruption Perceptions Index¹⁰), the unreformed judicial system¹¹, the persisting informal economy¹², and so on. These phenomena, addressed also in the interviews, are weaknesses for the industrial development.

⁹ [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:GDP_per_capita_at_current_market_prices,_2005_and_2015_\(EU-28_%3D_100;_based_on_PPS_per_inhabitant\)_YB16.png#file](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:GDP_per_capita_at_current_market_prices,_2005_and_2015_(EU-28_%3D_100;_based_on_PPS_per_inhabitant)_YB16.png#file)

¹⁰ <http://www.transparency.org/cpi2015#results-table>

¹¹ In the 2014 country-specific recommendations the Council (28) urged Bulgaria to improve the quality and independence of the judicial system and to fight corruption more effectively as Bulgaria has made only limited progress in these areas. Council Recommendation on Bulgaria’s 2014 national reform programme and delivering a Council opinion on Bulgaria’s 2014 convergence programme.

¹² <http://www.eurofound.europa.eu/observatories/eurwork/industrial-relations-dictionary/undeclared-work>

2. Industry in Bulgaria: trends of development

The Bulgarian industry was established mainly in the period 1945 – 1989, even if a small industrial sector was already present during the pre-World War II period¹³. During the socialist years, the country focused on the development of heavy industries (metal, steel, chemical industry and so on)¹⁴, developing in parallel the light industry (food, clothing and so on). Bulgaria has developed its industrial sector in line with the COMECON (known also as the Council for Mutual Economic Assistance - CMEA) specialization.

In the years 1989 and 1990 Bulgaria had the second highest share of industry in its GDP among Central Eastern European countries, much higher than it was the case for developed market economies in Europe¹⁵. However the industry of the country was particularly hit in the early transition: it suffered the export orientation towards the market of the former USSR (65,2% of the exports in 1989) and the collapse of the economic ties from the planned economy. From this perspective Bulgaria started the transformation process from a disadvantageous position in comparison to other CEE economies. Bulgaria's significant foreign debt on the eve of transition represented another major constraint to the country's autonomous economic policy development. External debt was accumulated mainly in 1985–1990, when it rose from about USD 4 billion to USD 11.2 billion (BNB 1990: 39–41).

During the post-communist transition Bulgaria experienced a process qualified by many observers as deindustrialization. Already in 1991 the country applied shock therapy, including price and foreign trade liberalization, demonopolization (granting of autonomy to enterprises belonging to the former large state-owned complexes), marketization and privatisation. These processes lead to a drastic initial post-socialist restructuring (closures of companies, massive redundancies, loss of markets)¹⁶.

The bulk of the privatisation in Bulgaria started later than in Central Europe and the process was characterised as long and painful. The changes of political preferences of the Bulgarian governments lead to the prevalence of one or another privatisation mechanism (joint ventures, direct sales, mass privatization, management and employees' buy-outs, foreign direct investment, and so on). The variety of privatization methods lead to the involvement of multiple actors (such as foreign investors, local investors, mass privatisation funds, MEBOs) in the post-privatisation restructuring¹⁷. In parallel with the privatization, many industrial companies bankrupted or have been liquidated (including under pressure from the International financial institutions – IMF and the World Bank). The industry has been almost entirely privatised between 1996 and the beginning of the decade of 2000¹⁸. Since then there were some cases of re-privatisation (e.g. by foreign investors acquiring the shares of former

¹³ According to different sources, this industry was not competitive, and mainly targeted the internal market.

¹⁴ Number of large companies that do not exist anymore are emblematic for this development, such as steel producer Kremikovtzi near Sofia, Himko Vratza, Agrobiochim Stara Zagora, and so on.

¹⁵ Drahokoupil and Galgoczi, 2014

¹⁶ Kirov, V. 'Restructurations industrielles en Bulgarie: Strategie des acteurs dans le contexte de l'integration Europeenne', in 'Protection sociale et emploi. Regards croises sur la mondialisation en Europe et en Chine', Alaluf et Krzeslo (eds.), Editions de l'ULB, 2005, pp. 167 – 184

¹⁷ Each method having its advantages and disadvantages, see the World Bank, 2006.

¹⁸ However privatization of services continued till later.

privatisation funds or MEBOs). From the beginning of the years 2000 on, the Bulgarian state has limited participation in few industrial companies (military production, energy sector). The post-privatisation restructuring is more or less completed since several years for most of the economic activities examined in this report. However some further restructuring is envisaged in mining, energy production among others, according to interviews, carried out.

The fact that privatisation and post-privatisation restructuring are completed is one of the strengths of the Bulgarian industry, according to interviewed trade union representatives.

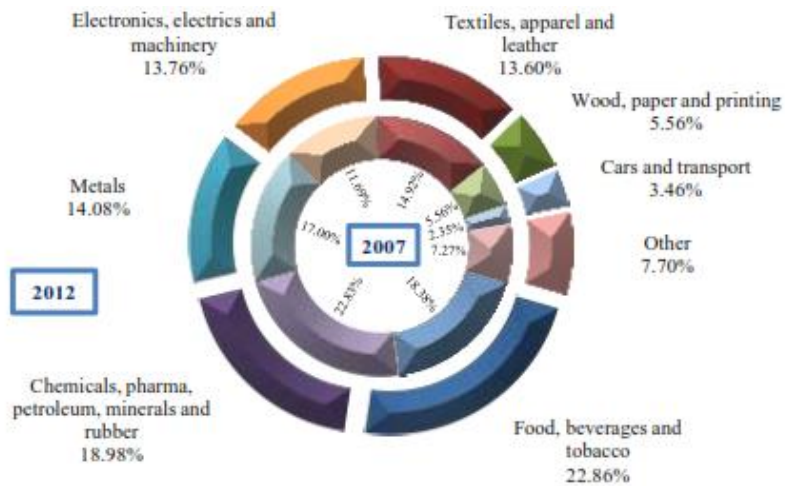
Structural changes and industrial production

The structure of the industry in Bulgaria experienced significant structural changes all along the post 1989 period. In the early 1990s many industrial regions were already severely affected by the large waves of restructuring. Closures of heavy industries and electronics and computer assembly plants were disastrous, especially for mono-industrial regions dominated by one large enterprise. During the last 25 years all economic sectors have been subject to drastic changes.

The recent Eurostat data (see table 4 in Annexe) suggests that industry in Bulgaria has a relatively stable role in the GVA for the period 2006 – 2015 (respectively 22,3% and 23%) which is larger than the EU 28 average (20,1% and 19,2%), but lower than its share in Central and Eastern European countries (CEEC) – e.g. Czech Republic (31,0% and 32,1%) or Romania (28,2% and 26,4%). The fig. 3 (below) points out also that Bulgaria is well placed in terms of the industry contribution to value added and employment within EU, but lags behind most of the new members states from Central and Eastern Europe (CEE).

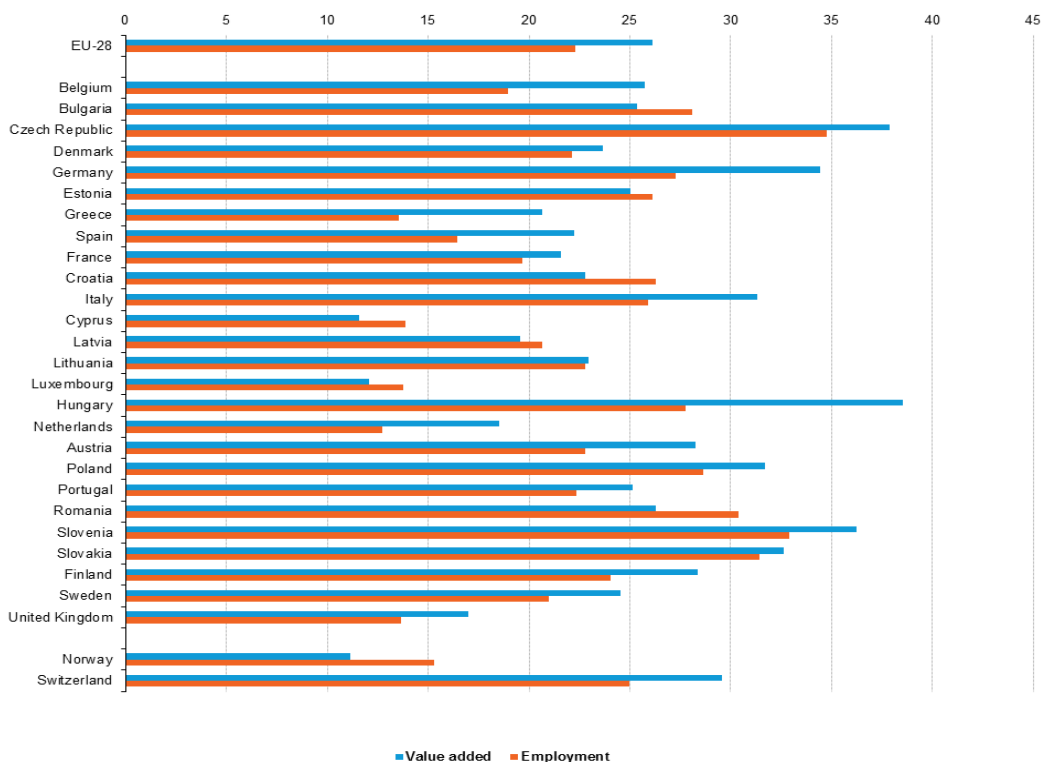
The largest branches of the industry in terms of their contribution to the Gross Value Added (GVA) in 2012 (see fig. 2) are food, beverages and tobacco; chemical; metal; machinery and electronic; textile and clothing, etc. (additional data for the industrial branches is available in Annexe 3).

Figure 2 Manufacturing sectors (GVA at basic prices) - Bulgaria



Source: Eurostat¹⁹

Figure 3 Relative importance of manufacturing (NACE Section C), 2013 (1) (% share of value added and employment in the non-financial business economy total)



(*) Data for Ireland and Malta not available.
Source: Eurostat (online data code: sbs_na_ind_r2)

¹⁹ In <http://ec.europa.eu/DocsRoom/documents/6723/attachments/1/translations>

Source: Eurostat, 2016²⁰

In Bulgaria the industrial employment, which in 1990 was 1,498 million, fell significantly in the early 1990s. Immediately after, employment experienced short periods of stabilisation and even growth in the period 1995–1996. However it started to decrease again following the crisis of 1996. It then rose from 2002 and this increase continued till the year 2008. After the decrease in the first years of the crisis, industrial employment (manufacturing) resumes growth in 2015 (see table 5 in the Annexe), a trend which is underlined in some of the sectors examined such as metal and machines. In 2015 the manufacturing industry includes (table 8 in Annexe) 512 316 employed, including 5448 in the public sector). This represents an increase, compared to 491 233 in 2012. The structure of employment according to the enterprise size is similar to the EU figures (table 9 in Annexe).

Within the industry, the situation has been really dynamic in terms of changes. The main sub-sectors of the Bulgarian industry are metal, chemical, electric, clothing, food, and so on. Bulgaria, together with Romania has experienced the largest changes in the structure of the industry during transition, but differences with the average structure of the EU remain high. Poor performance by industries means that the share of the lower segments of the production chain is much higher. In addition, the share of labour and resource intensive products in the exports are significantly higher, while its share of technology and skills intensive products are lower than the EU average. During the last 15 years no improvement had taken place.

Nevertheless, Bulgaria, together with Romania, are the two countries managed to increase at greater labour productivity in recent years. This suggests that the process of structural change in the manufacturing industry towards increasing the participation of sectors with higher efficiency can be achieved only if the increase in the comparative advantages of these subsectors - using development model that allows growth export competitiveness in these sectors.

Internationalization, entry in the GVC and exports

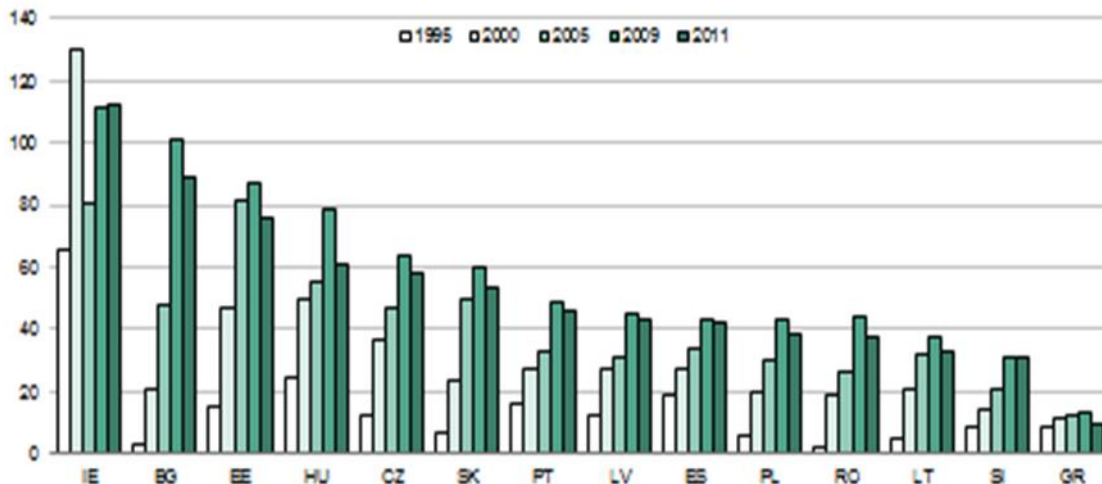
As a small and open economy, Bulgaria is heavily dependent of foreign markets and foreign investment.

FDIs are considered a powerful tool for the modernization of the industry. Foreign investment started to increase massively since the end of the 1990s, and with an FDI stock making up 90% of the GDP, after Estonia Bulgaria has the second highest FDI penetration in Central-Eastern Europe (in the EU, only Ireland has even more), as figure 4 shows. However in terms of per capita FDI Bulgaria is close to the NMS average, while countries as Estonia and the

²⁰ [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Figure_2_Relative_importance_of_manufacturing_\(NACE_Section_C\),_2013_\(%C2%B9\)_\(%25_share_of_value_added_and_employment_in_the_non-financial_business_economy_total\).png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Figure_2_Relative_importance_of_manufacturing_(NACE_Section_C),_2013_(%C2%B9)_(%25_share_of_value_added_and_employment_in_the_non-financial_business_economy_total).png)

Czech Republic have almost double than that. Although FDI stock is very high, FDI did not play the reindustrializing role as in the Visegrad group²¹.

Figure 4 Inward foreign direct investment stock in selected countries 1995-2011, in % of GDP



Source: UNCTAD, 2012²²

Greenfield investments into manufacturing are a key indicator for new investments that contribute to a re-industrialisation process and may create a potential for future growth and export performance. Bulgaria has the lowest share of manufacturing in terms of greenfield investments in CEE (only Portugal that we included for comparison had a lower value), as figure 5 shows. During the last few years greenfield investment was important in sectors such as automotive components (such as Canadian Magna, Sensata Technologies, etc.)²³.

The pace of the FDIs inflow in the country slows down during the last years – according to the Bulgarian National Bank statistics, there are significant fluctuations, but the data for 2016 is really modest, compared to previous years (fig. 6).

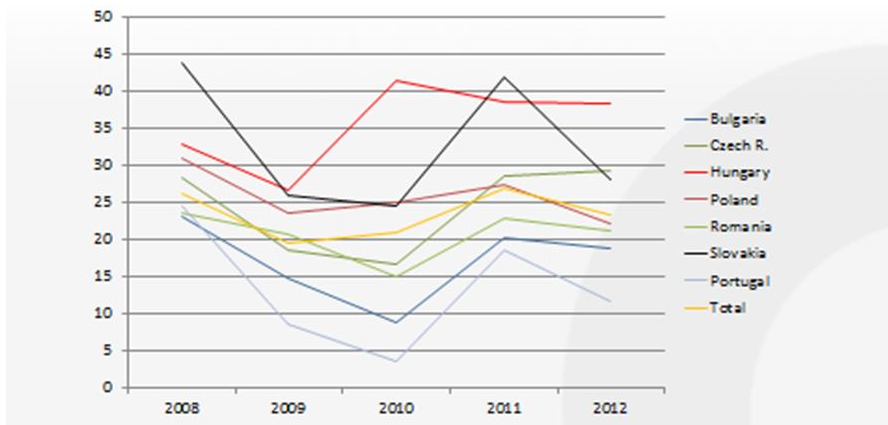
In summary, while the high foreign direct investment (FDI) is clearly one of the strengths of the Bulgarian industry, FDI composition does not seem to support a modernisation and reindustrialisation process.

²¹ Including Poland, Hungary, Czech Republic and Slovakia.

²² Drahokoupil and Galgoczi, 2014

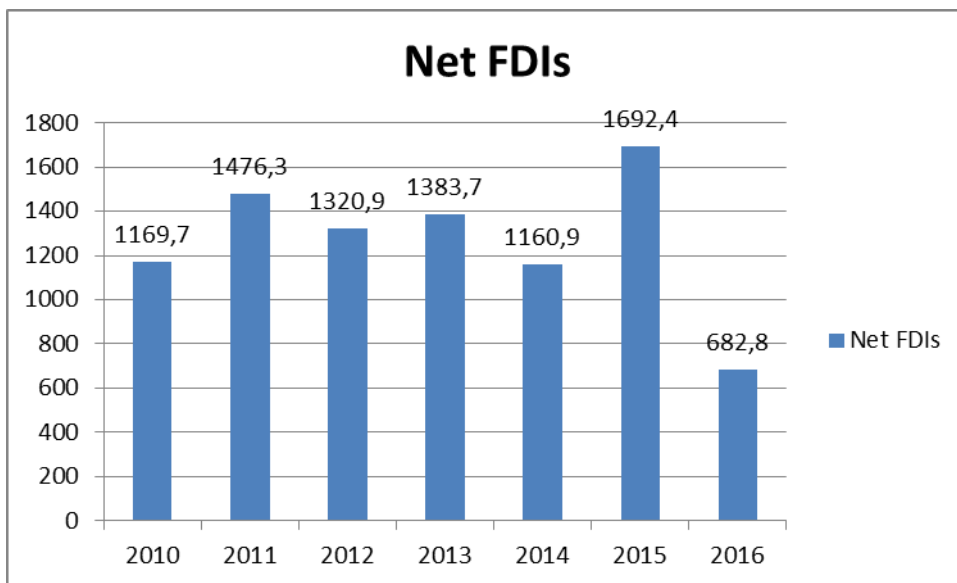
²³ <https://www.ft.com/content/4da3ca06-9a07-11e6-8f9b-70e3cabccfae>

Figure 5 Share of manufacturing in greenfield projects



Source: wiiw, 2013²⁴

Figure 6 Net FDIs in Bulgaria 2010 – 2016 (in millions of Euros)



Source: BNB

The composition of manufacturing exports by factor intensity gives an indication for the specialisation of individual countries. According to the UNCTAD Trade Development Report (UNCTAD, 2012) Bulgaria has a high weight of labour and resource based manufacturing products in its exports (31.1%), while the average figure for the EU28 this is just 10.1%. For

²⁴ Op. cit.

Bulgaria labour and resource intensity grew from 1995 to 2000 (with a peak of 45.2%), then decreased in the last decade to a level still slightly higher than it was in 1995 (29.3%)²⁵.

The exports of the country during the last two years (see table 12 in Annexe) are mainly designated to the EU (62,2% in 2015) and dominated by machines and metal components, food and drinks, oil products, etc.

In summary, the increasing exports of the country are certainly a strength of the Bulgarian industry, however the structure of exports suggests weaknesses in terms of the still important share of raw materials and low value added products.

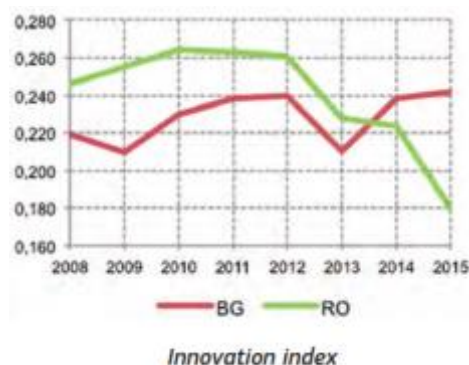
Innovation

Innovation boost is identified as one of the key challenges for the Bulgarian industry and more largely economy. The low degree of innovativeness of Bulgarian enterprises is a “result of insufficient cooperation between business, academia and universities, small in volume and inefficient investment in R&D and innovation, and lack of adequate infrastructure and environment for innovation” (OPIC, 2014: 11).

Different sources indicate the innovation related challenges of the country. According to the Global Competitiveness Report, in 2015-2016 Bulgaria is ranked 54²⁶ (from 140 countries) in terms of the Global Competitiveness Index, but 94th in terms of innovation and sophistication.

According the Innovation Union Scoreboard, Bulgaria has the lowest level in the EU27²⁷ following Romania and Latvia. In the lastly published European Innovation Scoreboard 2016, Bulgaria and Romania are the two countries in the group of ‘modest innovators’ and in general their results over the last few years are mixed (see fig. 7) and not converging with EU average.

Figure 7. Modest Innovators – Bulgaria and Romania



Source: European Innovation Scoreboard 2016

²⁵ Op. cit.

²⁶ <http://reports.weforum.org/global-competitiveness-report-2015-2016/competitiveness-rankings/>

²⁷ European Commission, 2013-b

Although according to the EU scoreboard for 2016, the country has made an improvement in 2014 and 2015, its results still equal less than half of the EU average. As a result of the low innovation activity, there is strong price competition from countries with lower production costs and a decline in the market share of Bulgarian exports in a number of leading industries (light industry, food processing, pharmaceuticals, iron and steel production, etc.) (OPIC, 2014).

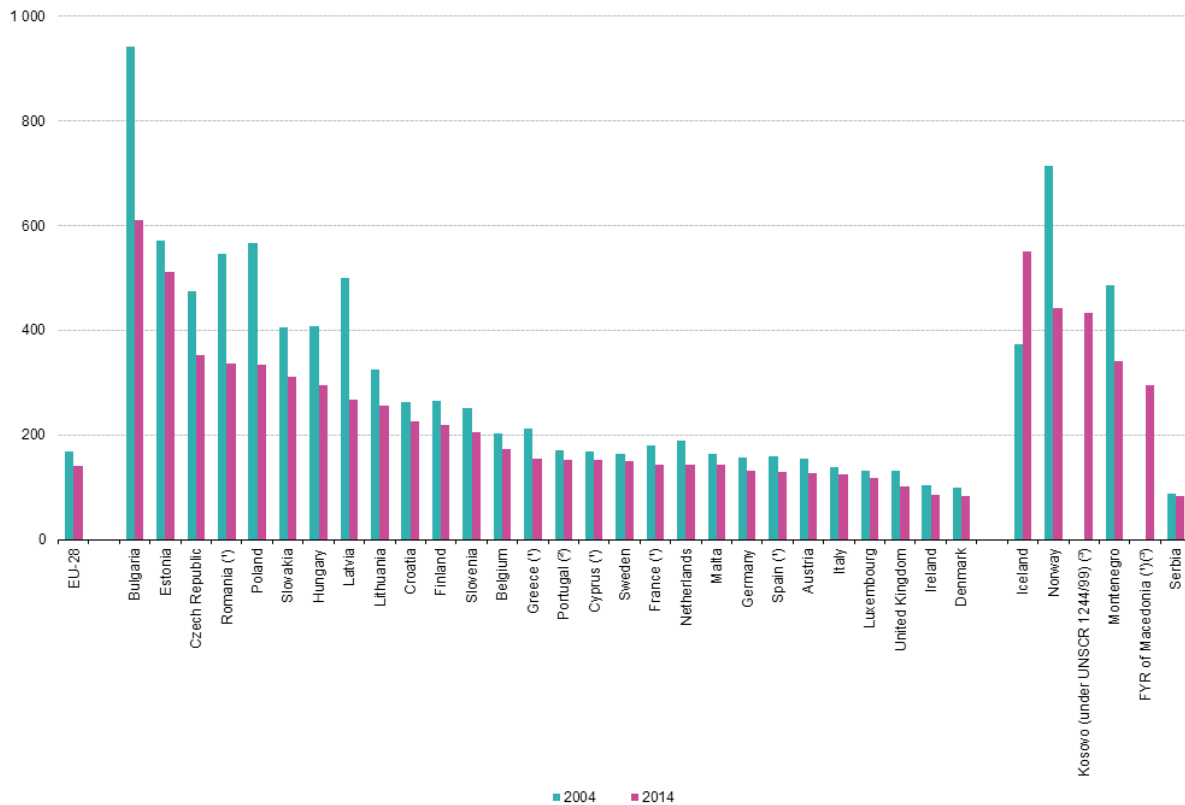
R&D investment is considered to be crucial for the innovativeness of the country. According to the Europe 2020 strategy, the national target is 1.5 % of GDP to be invested in R&D (while the European target is 3 % of GDP to be invested in R&D)²⁸. Even if a positive trend is observed, the last available data shows that the country is still far from the achieving that target (0,8% in 2014 compared to 0,57% in 2010).

Energy efficiency

Bulgaria is the less energy efficient country of the EU-28 (see fig 8). There are several indicators about the low energy efficiency in enterprises: for example the Bulgarian economy consumes with 77.34% more energy per unit of GDP than the average for EU-27, which is one of the factors limiting the productivity and competitiveness of enterprises in Bulgaria (OPIC, 2014, 45).

²⁸ http://ec.europa.eu/europe2020/europe-2020-in-your-country/bulgaria/progress-towards-2020-targets/index_en.htm

Figure 8 Energy intensity of the economy, 2004 and 2014 (kg of oil equivalent per 1 000 EUR of GDP)



(*) 2014: provisional.

(*) 2014: estimate.

(*) 2004: not available.

Source: Eurostat (online data code: tsdec360)

Source: Eurostat²⁹

In addition, Bulgaria made significant efforts to reach the EU 2020 targets in terms of renewables and for several years supported their development with rather generous measures³⁰, at the expense of traditional energy production, fact that was criticised by different stakeholders, trade unions³¹. For 2016, the energy mix in Bulgaria includes 18% of renewables in 2016³².

In summary to this section, Bulgaria has number of advantages, but still its performance in the field of industry is poor and the country is placed among the 'modest and stagnating or

²⁹ [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Energy_intensity_of_the_economy,_2004_and_2014_\(kg_of_oil_equivalent_per_1_000_EUR_of_GDP\)_YB16.png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Energy_intensity_of_the_economy,_2004_and_2014_(kg_of_oil_equivalent_per_1_000_EUR_of_GDP)_YB16.png)

³⁰ See Kirov, 2012

³¹ See CITUB, 2014, p. 14

³² <http://www.nsi.bg/en/content/5068/share-renewable-energy-gross-final-energy-consumption>

declining competitiveness' group, together with Slovenia, Croatia, Malta, and Cyprus in the 2014 "Member States' Competitiveness Report: Reindustrialising Europe"³³.

3. Human resources and skills

The human resources development and skills acquisition in the industry are crucial for its development and particularly relevant from a trade union perspective³⁴. The sections below examine the situation in Bulgaria in terms of demographic development, skills supply, wages and working conditions and social dialogue.

Demographic change

Bulgaria is one of the countries in the world most seriously hit by the demographic challenge. As a result of emigration and negative growth, Bulgarian population has decreased during the transition years. In addition, it is increasingly aging. Different recent demographic forecasts³⁵ provide rather pessimistic scenarios about the demographic developments in Bulgaria. The Eurostat projections for the period 2010-2060 state that the population of Bulgaria will decrease by nearly 27% and the share of the population over 65 will reach over 32.6%. According to the World Bank estimates, from 2012 to 2050 Bulgaria will have the most rapidly shrinking working age population in the world.

Thus, the demographic crisis is one of the major weaknesses of the Bulgarian industry in terms of labour force and skills supply. This negative trend is particularly visible in some regions of the country. In addition, the ageing population is a pressure for the social security system.

Skills supply

Traditionally, in Bulgaria there is an understanding that the human resources are well trained and qualified. Most of the available indicators confirm this conclusion. Secondary school (secondary education) and college/university (tertiary education) attainment of Bulgarian men and women rose in the last decade (Eurostat, NSI). The Europe 2020 Strategy focuses on the skills increase. Among the national targets for Bulgaria it is set that at least 36% of 30-34-year-olds should complete third level education (ISCED levels 5 and 6) in 2020 (the European target is 40%). In 2015 with 32,1% Bulgaria is not far from reaching the target.

But if general skills levels are high, there are indications for the existence of specific skills gap. The Industrial Performance Scoreboard of the European Commission suggests that in 2011 Bulgaria had a lower share of employees (14%) with high qualifications in manufacturing than the EU27 average of 20%. This fact is also visible from multiple studies

³³ http://ec.europa.eu/growth/industry/competitiveness/reports/ms-competitiveness-report_en

³⁴ Including ETUC, IndustryAll

³⁵ Eurostat, News Release, 80/2011 - 8 June 2011, Population projections 2010-2060

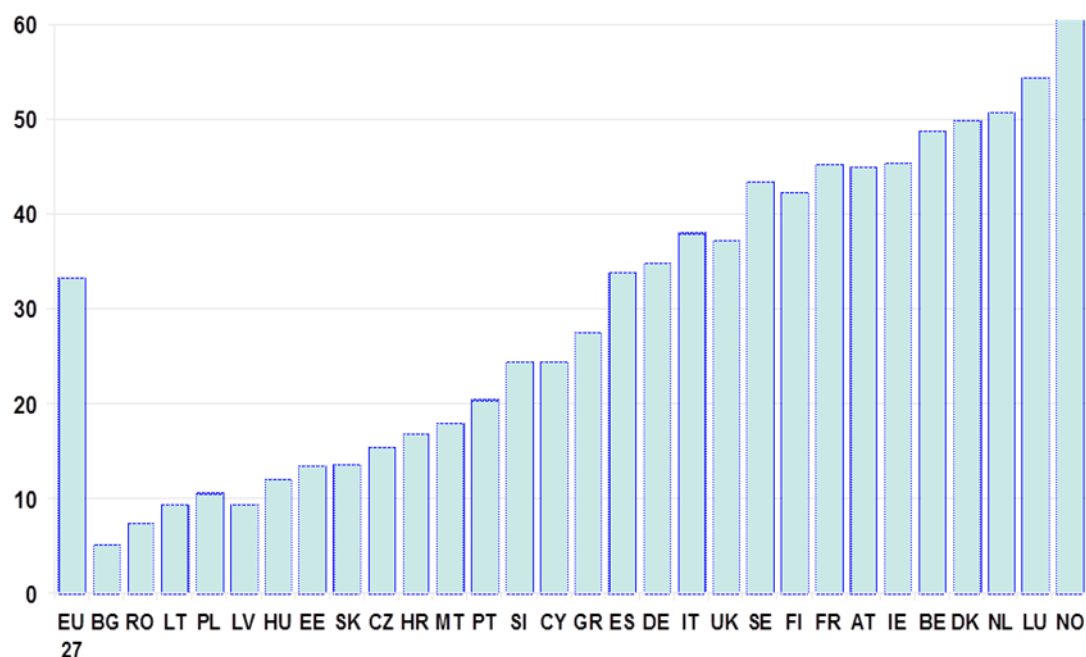
and analyses concluding that several sectors in the country lack qualified labour force³⁶. Although some attempts to address the situation have been done: the recent introduction of the dual vocational education system (with few pilot projects going on since 2015); the implementation of analytical tools for the mismatches (e.g. the initiative of employers' competence.bg); the increasing role of social partners in setting the educational standards to better respond the labour market needs (through the National Agency for Vocational Education and Training NAVET), the situation is still problematic.

In summary, the educational attainment of the labour force is increasing (opportunity), but still a number of sectors and professions suffer the deficit of qualified labour and this is a weakness and potential threat for the Bulgarian industry (for example investors that could change their decisions because of the lack of qualified people).

Wages and working conditions

Bulgaria has the lowest labour costs in the EU (figure 9). Compensation of employees (that includes gross wages and social security contributions paid by employers) in Bulgaria had been one tenth of the level Luxembourg had but it was also one seventh of the EU average.

Figure 9 Yearly compensation per employee in the EU27, Croatia and Norway, 2010 (Euro, thousands)



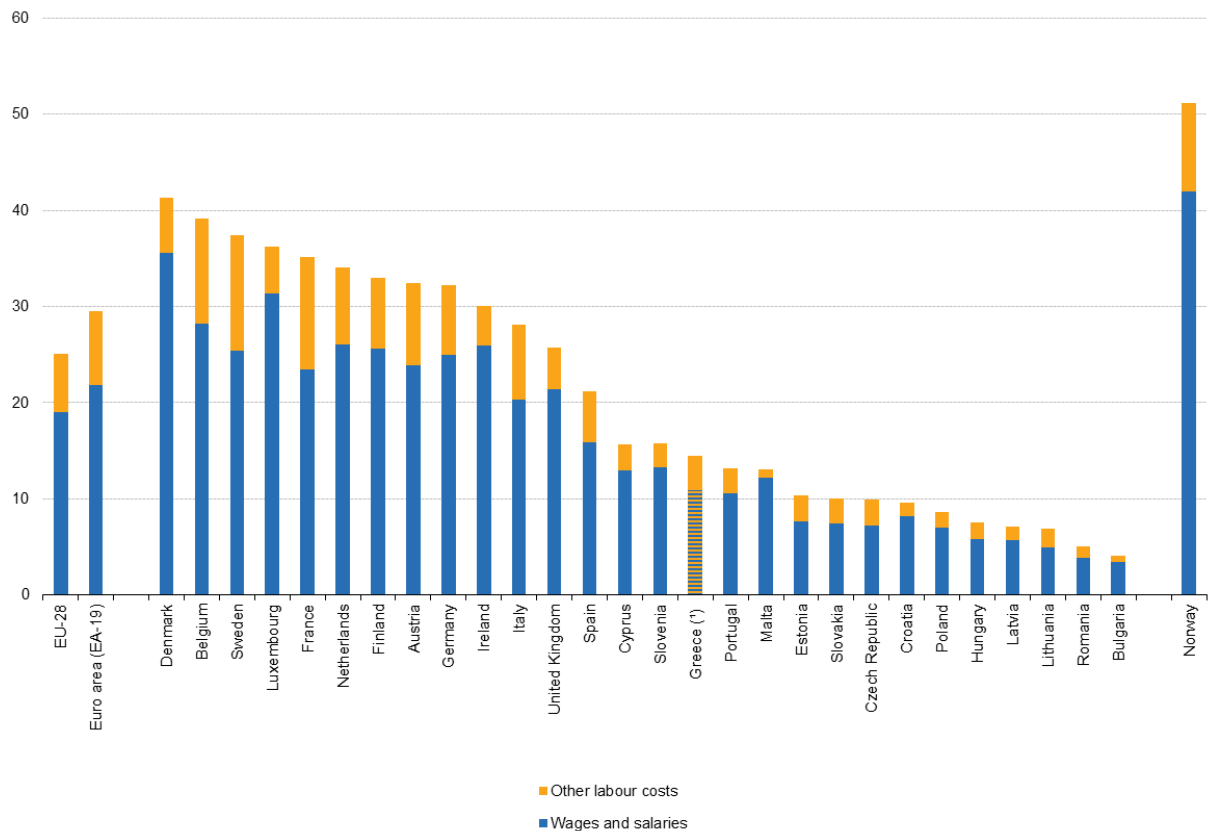
Source: Ameco database³⁷

³⁶ See for example Ramboll, Bottleneck Vacancies in Bulgaria, ec.europa.eu/social/BlobServlet?docId=12645&langId=en; <http://www.segabg.com/article.php?id=753710>

³⁷ In Drahokoupil and Galgoczi, 2014

The most recent Eurostat data (fir. 10) confirms the fact that wages in Bulgaria are confirming the fact about the low wage.

Figure 10 - Estimated hourly labour costs, 2015 (EUR)³⁸



Note: Enterprises with 10 or more employees. NACE Rev. 2 Sections B to S excluding O. Provisional data.
 (*) 2014. Only the total labour cost is available.
 Source: Eurostat (online data code: lc_lci_lev)

The cost competitiveness in terms of wages could be strength of the economy in the short term, according to many economic observers. However in the medium and long term wages are expected to increase (and have increased during the recent years). From a trade union perspective however, low wages could not lead to sustainable economic development and decent work.

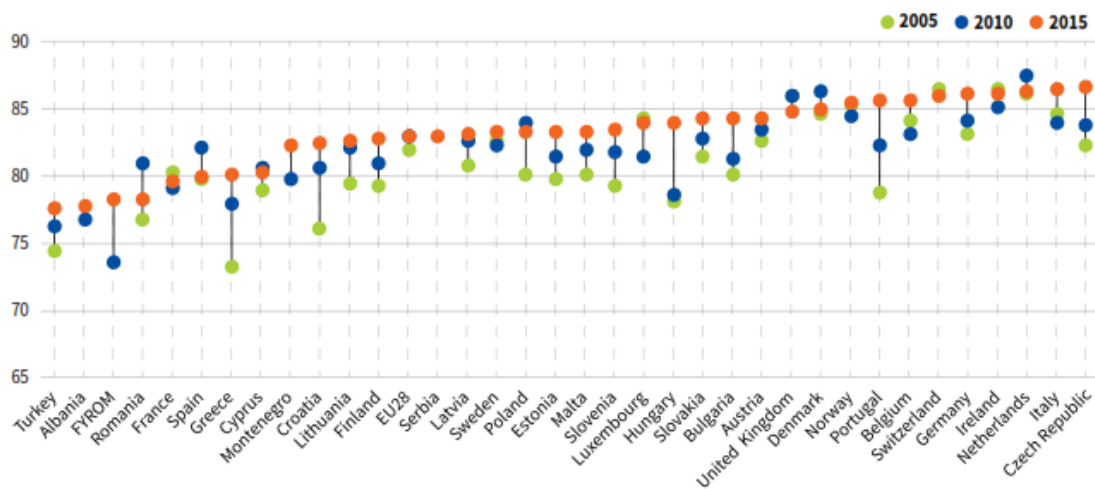
Working conditions in Bulgaria have certainly improved during the last years, but still the situation in number of sectors is risky. The general public perception is that working conditions deteriorate: 65% of Bulgarians say their working conditions are bad and 47% say

³⁸ [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Estimated_hourly_labour_costs,_2015_\(EUR\)_V4.png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Estimated_hourly_labour_costs,_2015_(EUR)_V4.png)

they deteriorated in the past five years, according to a recent Eurobarometer survey³⁹. The number of accidents, according to the national statistics is relatively stable in terms of the number of accidents and working days lost⁴⁰. The decreased number of accidents could be caused by the employment shrinkage, underreporting or improvement of working conditions, but there is no information to explain such trends.

The finding from the 5th wave of the European Working Conditions Surveys (EWCS) from 2010⁴¹ confirm that it is possible to see that countries in Eastern Europe are mainly dominated by poor balanced and low quality jobs (ref. Eurofound 2010, p. 51). Hence, jobs in these countries are mainly lower quality jobs while the percentage of good jobs is very limited⁴². Examples from different quality of work elements illustrate this trend. Still the job discretion level is the lowest for the transitional countries. In terms of cognitive demands (defined as category of job demand that impinge primarily on the brain processes involved in information processing - e.g. the difficulty of the work) they manage better only compared to the South-European (SE) model (including Greece, Italy, Spain and Portugal). The environmental risks are higher in the CEEC, the physical demands (category of job demand primarily associated with the musculoskeletal system) are also very high, after the countries from Southern Europe. Only in few areas the situation is better, compared to other regions in Europe, namely in terms of work intensification – it is the lowest within the transition countries among all models. The newly published first results from the 2015 EWCS confirm the large share of low quality jobs but also illustrate some improvements, e.g. concerning the physical environment (see fig. 11).

Figure 11 Physical environment index (0–100), by country, 2005–2015



³⁹ http://ec.europa.eu/public_opinion/flash/fl_398_fact_bg_bg.pdf

⁴⁰ <http://www.eurofound.europa.eu/observatories/eurwork/comparative-information/national-contributions/bulgaria/bulgaria-working-life-country-profile>

⁴¹ The 6th EWCS wave results, carried out in 2015, will be available soon

⁴² See also: Convergence and Divergence of Job Quality in Europe from 1995 to 2010. A report based on the European Working Conditions Survey, EUROFOUND, http://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1521en.pdf Convergence /Divergence Report

Source: Eurofound⁴³

With few exceptions, wages in the Bulgarian industry are low, compared to all the other EU countries and working conditions are still problematic even if some elements are improving compared to previous studies.

Social dialogue

European level statistics point to collective wage bargaining coverage of between 23% and 37% within private sector establishments and suggest a fall in coverage over the past decade⁴⁴. In manufacturing coverage is about 30–35%, according to CITUB data.

In parallel to the wage bargaining, trade union are involved in the negotiation of the minimal thresholds for the social security⁴⁵. Since 2002 this system addressed successfully the informal practices in companies. Usually in most of the branches these minima have been negotiated, for the rest settled by the Ministry of Labour and Social Policy. However during the summer of 2016, employers withdrew from the negotiations.

The collective bargaining in Bulgaria is carried out at sectoral level and at company level. Data suggests that collective bargaining coverage is decreasing over the last years. Trade unions have difficulties in number of companies, because of the antiunion attitudes of domestic or local employers.

4. Re-inventing industrial policy?

Stakeholders, including the government, businesses, and research institutions need to find effective mechanisms to agree on priorities, coordinate the required policies, and take action on education, on supporting innovation, and on research priorities to steer the economy towards activities with higher value added. ⁴⁶

After the end of the Socialist State plan, in early 1990s, in Bulgaria there was a widely shared belief that the invisible hand of the market is sufficient to regulate all the problems. For a couple of years the industry was considered by many policy makers as a burden for the

⁴³ https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1634en.pdf

⁴⁴ <http://www.eurofound.europa.eu/observatories/eurwork/comparative-information/national-contributions/bulgaria/bulgaria-working-life-country-profile>

⁴⁵ Minimum insurance income by economic activities and professions should not be lower than the amount of the national statutory minimum wage. The social partners have reached an agreement on minimum insurance income for 2014 for 58 of the 85 economic activities. In the other activities the MII was set by the Minister of Labour. The minimum insurance income for 2015 is available on the webpage of the National Revenue Agency.

⁴⁶ <http://ec.europa.eu/DocsRoom/documents/6723/attachments/1/translations>

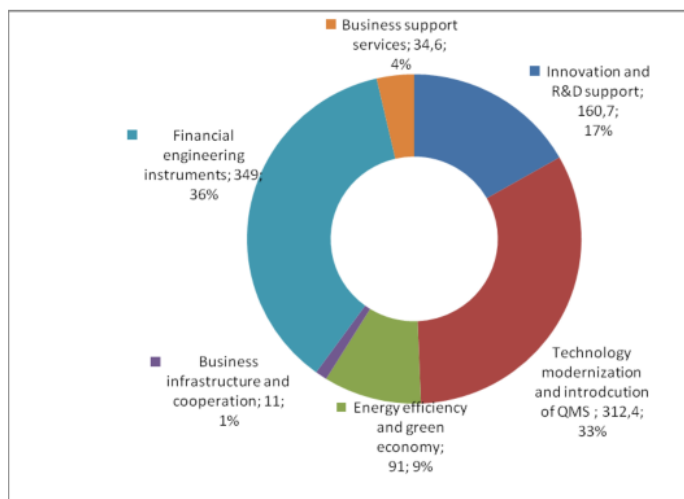
economy⁴⁷. In this period stakeholders were focused on privatization, as if the property change would automatically bring economic and social development.

The European integration of the country stimulated the interest in programming, including in the domain of the industry. In parallel with the different national development strategies, the operational programmes for the EU structural funds have been adopted. The most relevant for the industrial development are certainly those concerning competitiveness.

The Operational Programme "Development of the Competitiveness of the Bulgarian Economy" (OP DCBE) was one of the seven operational programmes under the National Strategic Reference Framework for the period 2007-2013. During the first programming period for Bulgaria under the OP Competitiveness 2007-2013 the amount of 1,162,216 thousand euros has been allocated, out of which 987 883 thousand (85% of the funds) financed by the EU under ERDF and 174 332 thousand (15% of funds) by national co-financing (OPIC, 2014).

The OP DBCE is now followed by the Operational Programme "Innovativeness and Competitiveness" (OPIC). The OPIC 2014-2020 strategy, as a part of the implementation of the EU structural and investment funds (ESIF) in Bulgaria, according to the Partnership Agreement 2014-2020, is closely related to the objectives for Growth and Jobs and Bulgaria's contribution to achieving the three complementary types of growth according to the "Europe 2020".

Figure 12 - Areas of support under Operational Programme "Development of the Competitiveness of the Bulgarian Economy" 2007- 2013



Source: OPIC, 2014: 33

This Operational programme is considered as 'an essential tool' for the implementation of two national strategies objectives: National Strategy for Promotion of Small and Medium-size

⁴⁷ This period was characterised as one with 'deficit of strategic perspective' (Zhelev, 2014).

Enterprises 2014 – 2020 (representing the vision of the Republic of Bulgaria on state support for SMEs in line with the EU policy) and the Innovation Strategy for Smart Specialisation of the Republic of Bulgaria (RIS3) aiming at ensuring an effective and coordinated management of innovation processes.

Other programmes⁴⁸ relevant to the industrial sector are the Operational Programme Human Resources Development (OPHRD), as well as well as programmes for regional development, agriculture and rural regions, science and education, environment and so on.

The strategy of OPHRD is based on three pillars – achieving of higher rates of and quality employment; reducing poverty and promoting social inclusion; Modernisation of public policies, as well as on the identified basic needs of the target groups of the Programme. OPHRD addresses the social element of the main goal of Europe 2020 – smart, sustainable and inclusive growth, namely fostering the economy through high rates of employment leading to social and territorial cohesion.

Table 1 Priority Axes of OPIC 2014

<p>PRIORITY 1. Technological development and innovations</p> <p>1.1. Technological development and innovations (—smartll growth) – Thematic Objective 1 of the Common Strategic Framework;</p> <p>PRIORITY 2. Entrepreneurship and Capacity for SMEs growth;</p> <p>2.1. Access to finance for supporting entrepreneurship – Thematic Objective 3 of the Common Strategic Framework;</p> <p>2.2. Capacity for SMEs to grow – Thematic Objective 3 of the Common Strategic Framework;</p> <p>PRIORITY 3. Energy and resource efficiency</p> <p>3.1. Energy technologies and energy efficiency – Thematic Objective 4 of the Common Strategic Framework;</p> <p>3.2. Resource efficiency – Thematic Objective 6 of the Common Strategic Framework.</p> <p>PRIORITY 4. Removing bottlenecks in security of gas supplies</p> <p>4.1. Improving energy efficiency and security of supply through the development of smart energy transmission systems - Thematic Objective 7 of the Common Strategic Framework</p>

⁴⁸ See more at <https://www.eufunds.bg/>

While EU structural funds measures in the concrete operational programmes are certainly beneficial for the development of the sectors, covered by the IndustriAll Europe and EFFAT affiliates in Bulgaria, it should be acknowledged that their resources are limited.

During the recent years there has been also a gradual change in the understanding of the role of the industry and the need of re-industrialization/ renaissance of the industry. Several strategic national documents have been adopted (for summary see “The Renaissance of the Industry in Bulgaria. Overall Analysis”, CITUB 2014). For example, in accordance with the EC's call for the revival of industry Bulgarian Government, represented by the Ministry of Economy and Energy (MEE), prepared a draft “Action Plan for the reindustrialisation of Bulgaria for the period 2014-2015”. The areas for intervention in these policy documents follow the EU priorities, including: human capital and skills, access to finance, innovations and R&D in the industrial companies, business environment, entrepreneurship, internationalization, investments. 20 concrete measures target the improvement of the functioning of the Bulgarian industrial companies. The major one is the successful entry of Bulgaria in the context of the common European policy, as the country cannot (or at least it would be very difficult) conduct an independent industrial policy and due to resource constraints and eventual conflicts with EU legislation on state aid (CITUB p. 14).

In 2011, the Ministry of Economics presented a sectoral strategy for attracting investments⁴⁹. In this document have been identified areas and clusters with the potential for development. As a leading sectors for investment are set: electronics, ICT outsourcing, agriculture and food, transport equipment and machinery, healthcare and pharmaceuticals, chemical industry.

Other strategic documents, such as the Smart Specialisation Strategy of the country⁵⁰ focus on areas such as Mechatronics and clean technologies; Information and communication technologies; Biotechnology; Nanotechnology; Creative industries, including cultural; Pharmacy and Food industry.

InvestBulgaria Agency (IBA), the government institution providing information, contacts and project management support to potential investors, states several advantages for investment in the country (table 2) but their focus is cost competitiveness, something which is not sustainable from a trade union perspective.

⁴⁹ http://www.saveti.government.bg/c/document_library/get_file?p_l_id=10822&folderId=37412&name=DLFE-1415.pdf

⁵⁰ https://www.mi.government.bg/files/useruploads/files/innovations/ris3_26_10_2015_bg.pdf

Table 2 Investment advantages of Bulgaria

Bulgaria is strategically located and provides access to the following markets:

South-East Europe – a 122 million inhabitant, high growth market

EU – Bulgaria offers the lowest cost ,

zero tariff access to a 500 million inhabitant market CIS, Middle East and North Africa

Bulgaria offers a combination of political and macroeconomic stability and incentives for doing business:

Stable parliamentary democracy; EU, NATO and WTO member

Bulgaria's currency is fixed to the Euro under a currency board arrangement

Lowest tax rate and one of the lowest labor costs in the EU coupled with special incentives for investors

EU funding – more than €8 bn in EU funds over the next years

Source: InvestBG⁵¹

These examples underline the fact that Bulgaria still misses a long term strategic vision for the development of the industry, as it has been pointed out in the analysis of CITUB⁵². Already in 2014, CITUB analysis recommended the adoption of such strategy, on the basis of large consultations with stakeholders (social partners, academia) and sectoral strategies for the sectors with good perspectives. The document proposes number of consensual criteria for the selection of such sectors. In terms of the selection, the consensus criteria are: the creation of high value-added products; positions in global markets; prospects for growth; available technologies; attractiveness for investment; resource availability, the availability of inter- and intra-sectoral links along the value chain; skilled workforce and creating opportunities for the creation of new jobs in the branches and related industries/services.

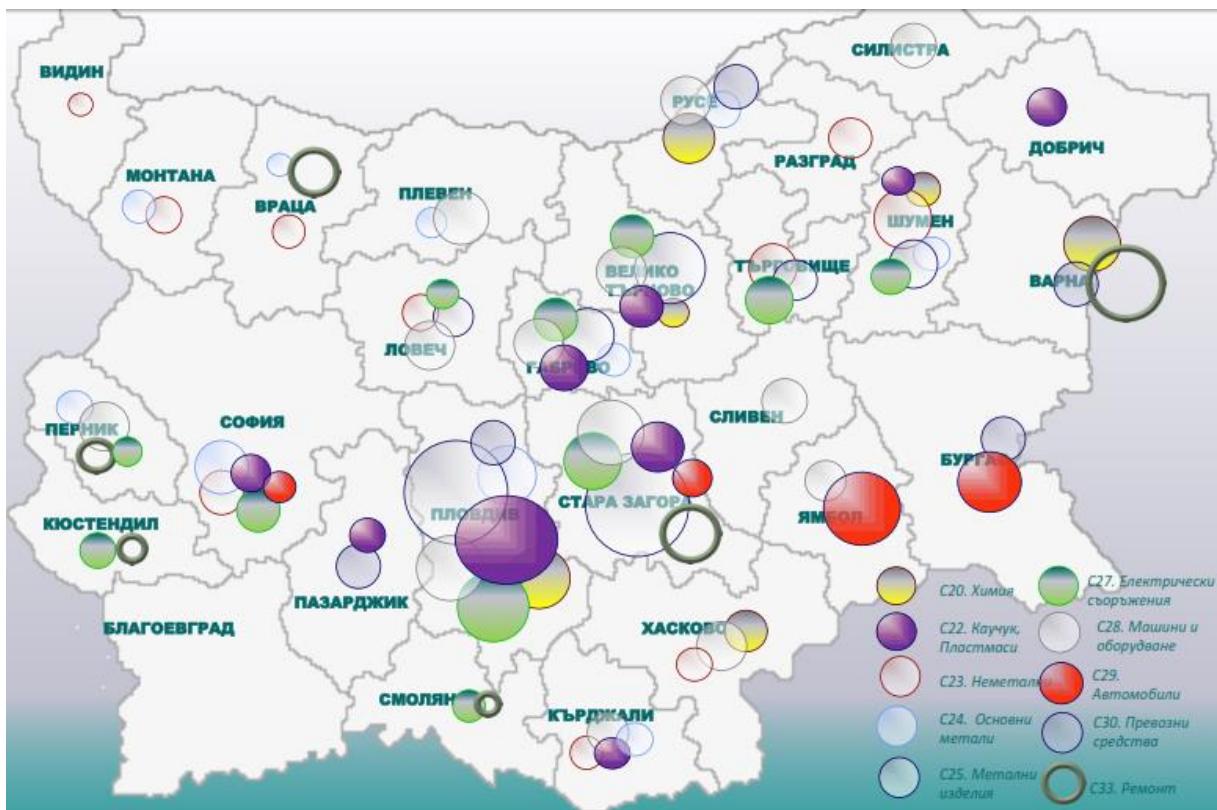
The clear objective for value chain and technological upgrade could certainly take inspiration from the classification of the Bulgarian industrial branches as high, medium (see fig. 10) or

⁵¹ <http://www.investbg.government.bg/en/pages/economic-structure-111.html>

⁵² CITUB, 2014, Vazrajdane..., op. cit.

low, according to their technological level. Even if during the last years there is a positive increase of the high and medium high technology industrial production, the catch-up rate is lower than in many CEEC (table 10 in Annexe). In addition, In Central and Eastern Europe the transition led to large regional development disparities. These disparities reflect the development of the different economic sectors and gave ground to scholars arguing for the so called segmented capitalism (Mako and Illesy). Recent data on Bulgaria suggest that those differences are deepening: few regions have reached the pre-crisis levels, while others are still stagnating⁵³. The fig. 13 provides illustration of these regional concentrations of industries, e.g. around Plovdiv, Stara Zagora, Varna and so on.

Figure 13 Regional Specialization of medium technology level production



Source: Ministry of Economy⁵⁴

However the increasing role of social partners in the industrial policy formulation is not self-evident. According to a recent Eurofound study, “the role of social dialogue in industrial policies in Bulgaria is limited as the Labour code clearly defines its scope – the labour and living standards issues”. The authors underline that social partners, and especially trade unions, are rarely invited to participate in consultations the structures dealing with the industrial policy.

⁵³ <http://www.regionalprofiles.bg/var/docs/RP2016BG.pdf>

⁵⁴ https://www.mi.government.bg/files/useruploads/files/businessenv/rs_map_2012_bg_r.pdf

The table 3 suggests that the role and involvement of social partners is marginal or limited in most of the tools related to industrial policy at the different governance levels.

Table 3 Social partners involvement in industrial policy instruments/interventions at different government levels (3 = high degree of involvement, 2 = involvement to some extent, 1 = low degree of involvement, 0 = no involvement.)

Policy instruments:	National level	Regional level	Local level
Public investment programmes:	0	0	0
Infrastructure	1	1	1
Construction	0	0	1
building renovation	1	1	1
Other			
Innovation programmes	1	0	0
Support for R&D	1	0	0
Cluster promotion	1	0	0
Export promotion	1	0	0
Internationalisation of SMEs	1	0	0
Improvement of access to finance:			
Loan	1	0	0
loan guarantee programmes	1	0	0
venture capital funding	0	0	0
Other	0	0	0
Public procurement policies	1	0	0
Tax and duty policies	3	0	0
Adapting the skills base	3	3	3
Subsidies for restructuring/ bail-out of companies in crisis	1	0	0
Social plans in case of restructuring. Training/re-training	2	2	3 (relates to company level)
Investment incentives	1	0	0
Energy efficiency/ energy shift	2	1	0
Energy supply security	1	0	0
Access to raw materials	0	0	0
Prices of energy and raw materials	2	0	0

Others, please specify below:			
removal of regulatory barriers to competition	3	0	0

Note: In the most of these policy instruments are involved mainly the employer organisations. However in most cases their involvement consists of statement

Source: Eurofound⁵⁵

However, if involvement of social partners in general is low, there are number of positive practices in particular branches (metal, metallurgy – see examples in Annexe 3)

5. SWOT - Overall Industry

This section summarizes the strengths, weaknesses, opportunities and threats for the Bulgarian industry.

Strengths	Weaknesses
Macroeconomic stability (Currency Board)	Corruption practices and ineffective judicial system
Relatively predictable and favourable fiscal policy	Demographic crisis and ageing population
Privatisation and restructuring completed for most of the industrial sectors	The share of exports in Bulgaria is lower than the CEE average
Existing heavy and light industry	In terms of the share of complex sectors in exports, Bulgaria has the lowest value among CEECs.
High foreign direct investment (FDI) penetration	FDI composition does not seem to support a modernisation and reindustrialisation process.
High Degree of population with higher or secondary education	Highest energy intensity of its GDP in the EU
Available climate and natural resources for agriculture and tourism	Productivity per worker is the lowest in the EU
Cost Competitiveness (lowest labour costs in the EU) – in the short run	Bulgaria score in terms of innovation is the lowest in the EU
Increasing share of high and medium-high technology industrial production	Outdated technologies
Development of clusters	Educational and skills mismatches
Development of renewables	

⁵⁵ <http://www.eurofound.europa.eu/observatories/eurwork/comparative-information/national-contributions/bulgaria/bulgaria-role-of-social-dialogue-in-industrial-policies>

<p>Solid social partnership in several sectors</p>	<p>Unbalanced energy production policy</p> <p>Low anticipation capacity for tackling restructuring in most of the branches</p> <p>Large share of informal economy Need for new public procurement legislation and practices</p> <p>Improving, but still problematic infrastructure</p>
<p>Opportunities</p> <p>EU membership provides access to the Single Market and also an important signalling effect to investors regarding essential legal guarantees.</p> <p>Absorption of EU funds</p> <p>Infrastructure improvement</p> <p>FDI, especially in high-value added sectors</p> <p>ICT development</p> <p>Tourism as a driver</p> <p>Bio-agriculture</p>	<p>Threats</p> <p>Global/European economic crisis and slow down</p> <p>Challenges for public finances because of ageing (social security)</p> <p>Shortages of well qualified specialists</p> <p>Growing global competition</p> <p>Non-compliance with environmental requirements</p> <p>Political Instability</p> <p>Non reformed judicial system</p> <p>Lack of feed-back from the labour market to the (vocational) education and training</p>

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Annexes

Annexe 1 Statistical Data

Table 4 Key Economic Indicators of Bulgaria (2011 - 2016)

	Мерна единица	2011	2012	2013	2014	2015	2016	
Реален сектор								
Брутен вътрешен продукт								
Брутен вътрешен продукт	млн. лв.	80 759	82 040	82 166	83 634	88 571	Q3	24 631
Брутен вътрешен продукт	%, YoY	1.9	0.0	0.9	1.3	3.6	Q2	3.5
Крайно потребление	млн. лв.	63 116	66 642	64 969	66 496	69 672	Q3	17 160
Бруто капиталобразуване	млн. лв.	17 339	18 001	17 534	17 928	18 768	Q3	4 508
Износ на стоки и услуги	млн. лв.	47 704	49 882	53 122	54 373	56 781	Q3	17 306
Внос на стоки и услуги	млн. лв.	47 400	52 485	53 459	55 161	56 650	Q3	14 343
Инфлация								
Изменение спрямо предходен период, %	%	2.8	4.2	-1.6	-0.9	-0.4	IX	-0.5
Средногодишно изменение, %	%	4.2	3.0	0.9	-1.4	-0.1	IX	-0.8
Безработица								
В края на периода (по данни на А3)	%	10.4	11.4	11.8	10.7	10.0	IX	7.8
Промисленост								
Индекс на пром. пр-во в края на периода	% (2010 = 100)	106.7	114.2	112.0	113.5	108.9	IX	112.9
Индекс на пром. оборот в края на периода	% (2010 = 100)	117.9	121.7	117.5	122.2	115.3	IX	120.0

Source: Ministry of Economics⁵⁶

Table 5 EU-28 countries industrial production annual change 2001 - 2014

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EU-28	4.5	0.2	-0.5	0.5	2.4	1.5	4.1	3.6	-1.8	-13.9	6.8	3.1	-2.1	-0.5	1.1
EA-19	5.1	0.3	-0.5	0.3	2.1	1.5	4.2	3.8	-1.8	-15.1	7.3	3.4	-2.4	-0.7	0.8
Belgium	..	5.2	0.5	2.6	7.3	3.6	6.3	6.8	3.6	-10.1	11.1	4.1	-2.1	0.9	1.0
Bulgaria	..	2.1	4.7	12.9	12.5	7.1	6.3	9.6	0.4	-18.4	2.1	5.9	-0.2	-0.1	1.7
Czech Republic	..	7.6	1.9	3.7	9.7	4.3	8.7	10.6	-2.3	-13.1	8.2	5.9	-0.8	0.1	5.0
Denmark	..	1.8	1.4	-0.1	-1.1	3.1	3.2	-2.6	-1.7	-14.8	2.0	1.9	0.1	0.4	0.8
Germany	5.6	0.2	-1.0	0.5	3.1	3.5	5.7	6.1	0.0	-16.3	10.9	7.2	-0.3	0.2	1.3
Estonia	..	8.5	8.7	11.4	9.6	11.0	10.1	6.4	-4.8	-23.9	22.9	19.7	1.5	4.2	2.4
Ireland	14.3	11.0	8.2	5.7	1.2	4.0	3.1	5.2	-2.2	-4.5	7.5	-0.4	-1.5	-2.2	20.9
Greece	..	-3.4	0.2	0.5	0.7	-1.6	0.8	2.3	-4.2	-9.7	-6.1	-5.8	-2.1	-3.2	-2.0
Spain	4.4	-1.4	0.0	1.3	1.6	1.0	3.9	1.8	-7.6	-15.8	0.8	-1.7	-6.9	-1.7	1.3
France	3.7	0.4	-1.6	-1.2	1.4	0.5	1.2	1.3	-3.2	-14.2	5.1	2.4	-2.6	-0.6	-1.2
Croatia	1.4	6.4	4.9	3.3	2.5	5.0	4.3	5.1	0.7	-8.9	-1.5	-1.2	-5.3	-2.0	1.4
Italy	4.2	-1.2	-1.4	-0.7	-0.2	-0.7	3.6	1.7	-3.4	-18.7	6.8	1.2	-6.3	-3.2	-0.5
Cyprus	..	4.8	1.8	-0.1	1.5	0.8	0.5	4.7	4.4	-9.4	-1.7	-7.7	-9.6	-13.5	-0.9
Latvia	..	10.8	7.3	8.0	6.4	7.5	6.5	1.5	-3.2	-18.0	14.4	8.8	6.2	-0.4	-0.9
Lithuania	-1.2	14.0	4.5	14.6	11.1	7.8	5.0	1.9	4.7	-13.8	6.1	6.6	3.7	3.3	0.2
Luxembourg	..	4.7	4.8	5.2	4.8	2.7	2.4	-0.3	-5.1	-16.0	8.7	2.0	-5.6	-4.1	6.1
Hungary	..	4.0	3.2	6.5	6.9	7.2	10.6	8.1	-0.8	-17.5	10.3	5.7	-1.4	1.5	7.1
Malta	..	-6.8	0.3	4.8	-0.7	-5.5	7.4	7.2	-4.5	-14.1	8.6	-0.1	5.4	-5.3	-5.7
Netherlands	..	1.1	1.0	-1.3	4.6	0.4	2.1	4.1	0.7	-7.6	7.8	-0.7	-0.5	0.5	-3.0
Austria	9.2	3.3	0.7	2.0	6.1	4.3	7.7	5.9	1.3	-11.3	6.7	6.8	-0.3	0.8	0.8
Poland	..	0.5	1.4	8.8	13.0	4.3	12.1	9.5	2.7	-3.9	11.1	6.7	1.2	2.3	3.4
Portugal	..	1.7	0.4	-1.0	-4.2	-3.5	3.1	0.1	-4.1	-8.6	1.6	-1.0	-6.1	0.5	1.8
Romania	..	4.2	0.2	-0.9	1.5	-1.7	9.9	10.1	1.9	-5.1	4.9	7.9	2.5	7.5	6.3
Slovenia	7.2	3.5	2.1	0.9	3.8	4.6	6.4	7.2	1.7	-17.8	6.9	2.1	-0.5	-1.4	1.7
Slovakia	..	3.6	7.0	15.5	3.6	-0.8	15.7	16.8	14.6	-15.6	8.2	5.3	8.0	5.2	3.7
Finland	8.8	0.0	1.4	0.0	4.9	-0.9	10.4	4.8	0.7	-17.8	5.3	1.7	-1.5	-3.2	-2.1
Sweden	..	-0.5	0.2	1.6	4.5	2.3	3.6	4.0	-3.0	-17.8	8.7	2.6	-1.2	-4.6	-1.7
United Kingdom	1.9	-1.6	-1.7	-0.8	0.5	-0.2	0.7	0.1	-3.0	-8.4	3.1	-0.6	-3.0	-0.2	1.5
Norway	3.1	-0.4	-0.2	-1.8	-1.2	-0.3	-2.1	-1.3	0.2	-3.5	-5.4	-4.5	2.7	-5.0	3.6
Montenegro	..	..	..	..	..	..	..	..	..	..	..	-10.2	-7.1	10.6	-11.4
FYROM	..	-3.1	-5.3	4.7	-2.2	7.0	5.9	3.9	5.1	-8.7	-4.8	6.9	-2.8	3.2	4.8
Serbia	..	0.6	1.6	-2.9	6.0	1.2	4.4	4.0	1.1	-12.5	1.1	2.5	-2.6	6.0	-6.6
Turkey	..	..	..	..	..	..	7.3	8.5	-1.1	-10.4	12.6	9.5	2.4	3.5	3.5
Bosnia & Herzegovina	..	..	..	..	..	..	..	7.1	11.0	-6.6	4.2	2.3	-3.6	5.2	0.1

.. not available

⁵⁶ https://www.mi.government.bg/files/useruploads/files/macrobuletin/bg_macro_bulletin_10-2016.pdf

Figure 14 Bulgarian industrial production



Table 6 Gross value added at basic prices, 2005 and 2015 (% share of total gross value added)

	Agriculture, forestry & fishing		Industry		Construction		Distributive trades, transport, accommodation and food services		Information and communication		Financial and insurance activities		Real estate activities		Professional, scientific, technical, administrative and support services		Public administration, defence, education, human health and social work activities		Arts, entertainment and recreation; other services (*)	
	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015	2005	2015
EU-28	1.7	1.5	20.1	19.2	6.1	5.4	19.2	19.0	5.0	5.0	5.4	5.2	10.7	11.3	9.8	10.8	18.4	19.1	3.4	3.5
Euro area (EA-19)	1.8	1.6	20.6	19.9	6.0	5.0	19.3	19.0	4.7	4.6	5.1	4.9	10.6	11.4	10.0	10.8	18.3	19.4	3.5	3.5
Belgium	0.9	0.6	20.2	16.3	4.9	5.6	21.3	19.7	4.1	4.2	5.6	6.2	8.9	8.6	11.5	13.9	20.4	22.5	2.2	2.3
Bulgaria	8.5	5.1	22.3	23.0	6.0	4.7	21.4	21.0	3.8	5.4	5.9	7.7	10.4	10.5	4.3	5.6	15.5	14.5	2.0	2.5
Czech Republic	2.4	2.5	31.0	32.1	6.7	5.7	19.9	18.4	4.9	5.1	3.2	4.2	8.0	8.4	6.5	6.6	15.0	14.9	2.4	2.1
Denmark	1.3	1.1	20.8	18.7	5.4	4.5	20.1	18.8	4.3	4.6	5.2	6.4	9.6	10.3	7.6	8.8	22.1	23.1	3.4	3.6
Germany	0.8	0.6	25.5	25.9	3.9	4.6	16.5	15.8	4.6	4.8	5.3	4.1	11.2	10.9	10.7	11.1	17.3	18.2	4.3	4.0
Estonia	3.5	3.4	21.2	21.2	8.6	6.2	24.6	21.5	4.7	6.0	3.9	4.0	9.8	10.1	7.7	9.1	13.3	15.9	2.8	2.6
Ireland	1.2	1.0	24.6	39.1	9.8	2.5	15.8	12.8	6.9	8.1	9.7	6.3	6.7	6.7	8.1	9.6	15.2	12.3	2.1	1.5
Greece	4.8	4.0	13.5	12.6	6.4	2.6	25.8	25.4	3.9	3.2	4.7	4.4	11.6	17.2	5.7	5.5	19.5	21.0	4.2	4.1
Spain	3.0	2.5	18.9	17.0	11.6	5.5	22.7	24.5	4.5	4.2	4.7	3.9	8.0	11.7	6.6	7.6	16.2	18.7	3.9	4.4
France	1.9	1.7	16.0	14.1	5.5	5.4	18.2	17.7	5.4	5.0	3.8	4.5	12.5	12.8	12.2	12.8	21.5	23.0	3.0	3.0
Croatia	5.0	4.3	21.3	21.2	7.8	5.0	22.7	21.8	4.8	4.4	5.9	6.7	8.8	10.3	6.4	8.1	14.5	15.2	2.8	3.1
Italy	2.2	2.3	20.0	18.8	5.9	4.9	20.7	20.5	4.5	3.6	5.1	5.5	11.9	14.0	9.4	9.3	16.8	17.1	3.5	4.0
Cyprus	2.7	2.4	10.1	7.9	10.0	2.6	28.3	28.7	4.1	4.7	6.0	9.4	9.6	11.1	6.4	8.9	19.2	20.2	3.6	4.0
Latvia	4.3	3.3	16.2	16.4	6.7	6.5	30.4	25.2	4.6	4.8	4.4	4.6	9.4	12.5	6.0	7.7	15.1	15.7	2.9	3.3
Lithuania	4.8	3.3	24.9	22.6	7.8	7.6	28.2	32.5	4.1	3.2	2.2	2.2	6.4	6.3	5.1	6.0	14.3	14.3	2.3	2.0
Luxembourg	0.4	0.2	10.8	5.8	5.8	5.5	15.9	16.6	5.9	6.7	26.5	28.4	9.3	7.2	8.6	12.1	14.7	15.6	2.0	2.0
Hungary	4.3	3.6	25.7	27.4	5.7	4.4	17.3	18.3	5.1	5.1	4.6	3.6	7.6	7.8	8.1	9.2	18.5	17.6	2.9	3.0
Malta (*)	2.2	1.4	16.2	11.4	7.3	4.4	23.8	22.7	5.4	5.9	7.6	7.1	6.5	5.5	7.8	12.3	18.3	18.8	4.9	10.5
Netherlands	2.0	1.8	18.5	15.4	5.5	4.6	20.2	21.0	5.1	4.8	6.8	7.4	6.7	5.9	12.8	14.7	20.0	21.8	2.5	2.6
Austria	1.4	1.3	23.3	21.9	7.0	6.4	22.9	22.9	3.6	3.5	4.8	4.2	9.2	10.1	8.0	9.4	17.0	17.4	2.8	2.8
Poland	3.3	2.8	25.2	26.1	7.6	8.1	25.4	25.4	4.4	3.8	4.0	4.0	6.0	5.3	6.4	7.5	15.3	14.7	2.3	2.3
Portugal	2.6	2.4	17.7	17.3	6.9	4.6	22.3	25.1	3.9	3.1	6.6	5.4	8.7	12.4	6.4	6.9	22.4	19.9	2.5	2.9
Romania	9.5	4.8	28.2	26.4	7.8	8.5	21.0	17.9	4.5	6.4	2.3	3.9	8.4	9.1	3.4	8.3	12.5	11.7	2.4	3.0
Slovenia	2.6	2.4	27.6	27.3	6.5	5.5	19.3	20.4	4.0	4.2	4.5	4.2	7.6	6.9	8.3	10.0	16.7	16.5	3.0	2.7
Slovakia	3.6	4.0	29.5	25.2	6.6	9.2	23.0	22.0	3.9	4.5	4.2	4.1	6.8	6.7	5.9	7.2	13.7	13.6	2.7	3.6
Finland	2.6	2.5	27.1	20.6	6.4	6.3	17.1	15.9	5.0	5.8	2.7	2.9	10.2	12.7	6.6	8.5	19.6	21.8	2.7	3.1
Sweden	1.1	1.4	24.2	20.1	5.5	6.4	17.1	17.0	5.4	5.7	4.3	4.5	8.6	8.1	7.8	9.8	23.2	24.0	2.7	3.0
United Kingdom	0.6	0.7	15.4	13.3	6.6	6.1	18.3	18.6	6.3	6.5	7.6	7.2	12.5	13.0	10.5	12.3	18.5	18.4	3.7	3.9
Iceland (*)	5.7	6.2	14.1	17.7	10.8	5.5	16.4	17.8	5.6	4.7	8.6	7.7	9.5	10.3	6.7	7.6	20.1	19.5	2.4	3.0
Norway	1.6	1.8	37.8	28.3	4.7	6.4	15.0	15.4	4.0	3.9	3.9	4.8	7.0	7.3	5.5	7.5	18.4	22.6	2.0	2.0
Switzerland	0.9	0.7	21.7	20.0	5.1	5.5	20.7	20.5	4.3	4.1	11.9	9.6	1.0	1.0	7.8	10.1	18.0	19.2	8.7	9.2
Montenegro (*)		10.0		13.5		4.2		26.8		5.2		5.9		8.0		4.9		19.1		2.5
FYR of Macedonia	11.3	11.2	17.6	18.0	6.2	8.1	18.6	21.4	4.3	3.8	2.8	3.6	16.3	14.0	1.8	3.9	17.0	13.3	4.1	2.7
Albania (*)	21.5	22.9	11.1	14.7	17.5	10.0	19.4	18.1	5.2	3.2	2.5	2.9	8.4	7.1	2.2	5.8	10.5	12.7	1.7	2.7
Serbia	12.0	8.4	23.6	25.7	5.7	5.7	17.9	18.1	3.7	5.1	2.3	3.8	11.6	10.9	4.6	5.7	14.8	13.6	3.7	3.1
Kosovo (*)		14.3		19.4		7.3		20.3		2.4		4.8		10.8		2.4		17.6		0.7

(*) Includes also activities of household and extra-territorial organisations and bodies.

(*) Industry and professional, scientific, technical, administrative and support services: break in series.

(*) 2014 instead of 2015.

(*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

Source: Eurostat⁵⁷

⁵⁷ http://ec.europa.eu/eurostat/statistics-explained/images/5/5d/Gross_value_added_at_basic_prices%2C_2005_and_2015_%28%25_share_of_total_gross_value_added%29_YB16.png

Table 7 Employment in Industry (selected years)

	2011	2013	2015
Total	2965,2	2934,9	3031,9
Extractive Industry	26,3	26,0	25,7
Manufacturing	593,0	576,4	597,7
Electricity, gas and steam production and distribution	42,9	39,9	39,4

Source : NSI 2016

Table 8 Average number of the employed

Economic Activity	2012			2015		
	Total	Public Sector	Private Sector	Total	Public Sector	Private Sector
Total	2218718	558445	1660273	2254768	536846	1717922
Agriculture, forestry and fishing	68887	11629	57258	70915	11968	58947
Mining and quarrying	24641	7108	17533	24617	7406	17211
Manufacturing	491233	6391	484842	512315	5448	506867
Electricity, gas, steam and air conditioning supply	31812	15407	16405	30248	14791	15457

Source: NSI, 2017

Table 9 Number of persons employed by enterprise size class, manufacturing

	Total (thousands)	SMEs	Micro	Small (% of total)	Medium-sized	Large
EU-28	29 700.0	59.0	13.7	19.8	25.4	41.1
Belgium	514.3	55.1	11.3	19.3	24.5	44.9
Bulgaria	524.0	67.9	11.4	23.0	33.5	32.1
Czech Republic	1 212.5	57.2	15.4	15.0	26.8	42.8
Denmark	354.1	54.3	8.4	19.0	26.9	45.7
Germany	7 220.3	46.8	6.8	15.8	24.3	53.2
Estonia	104.6	75.0	12.2	23.9	39.0	25.0
Ireland	.	.	.	.	.	.
Greece	289.2	79.3	41.2	15.6	22.5	20.7
Spain	1 736.7	71.1	20.7	26.7	23.8	28.9
France	3 006.0	55.7	14.8	18.7	22.3	44.3
Croatia	261.7	62.1	16.0	19.7	26.4	37.9
Italy	3 733.7	76.6	24.5	30.1	22.1	23.4
Cyprus	28.8	87.4	35.4	30.1	21.9	12.6
Latvia	120.8	75.9	13.4	24.6	37.8	24.1
Lithuania	197.9	69.5	11.2	22.9	35.4	30.5
Luxembourg	33.6	45.3	4.1	14.2	27.0	54.7
Hungary	664.7	55.3	12.7	17.0	25.6	44.7
Malta	.	.	.	.	.	.
Netherlands	681.6	68.0	15.1	21.8	31.1	31.6
Austria	617.4	51.7	8.8	17.3	25.6	48.3
Poland	2 347.5	58.2	15.4	14.5	28.3	41.8
Portugal	637.4	79.7	19.4	30.1	30.2	20.3
Romania	1 166.3	55.0	8.0	18.4	28.6	45.0
Slovenia	188.8	60.3	16.2	16.0	28.1	39.7
Slovakia	440.5	54.2	18.6	12.5	23.1	45.8
Finland	352.0	52.7	10.4	18.0	24.3	47.3
Sweden	635.8	52.7	12.2	17.6	22.9	47.3
United Kingdom	2 482.9	58.8	9.9	20.7	28.1	41.2
Norway	235.4	59.2	10.6	21.5	27.1	40.8
Switzerland	685.8	59.6	9.0	21.2	29.4	40.4

: - not available

Source: Eurostat (online data code: sbs_sc_ind_r2)

Source: Eurostat, 2016⁵⁸

⁵⁸ http://ec.europa.eu/eurostat/statistics-explained/images/3/38/Table_6a_Number_of_persons_employed_by_enterprise_size_class%2C_manufacturing_%28NACE_Section_C%29%2C_2013.png

Table 10 Industrial Production – Level of Technology

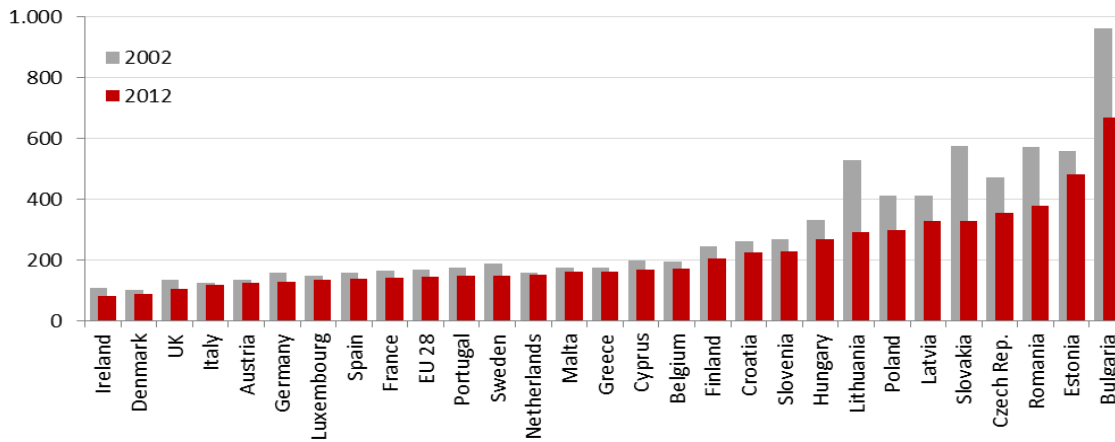
Table 1: Industrial production according to level of technology, annual average growth rates (%) 2005-2011
working day adjusted

	Technology level			
	High	Medium-high	Medium-low	Low
EU-27	3.3	1.0	-0.4	-0.7
EA-17	3.8	0.7	-0.8	-1.0
Belgium	5.1	0.6	0.4	1.0
Bulgaria	1.9	3.8	-0.1	-1.4
Czech Republic	5.4	7.3	1.5	-1.4
Denmark	1.4	1.4	-3.1	-3.2
Germany	6.6	2.3	1.8	0.1
Estonia	35.1	6.8	-0.1	-1.4
Ireland	3.6	3.4	-7.4	-1.1
Greece	-2.6	-5.7	-5.3	-4.9
Spain	1.5	-2.5	-5.0	-2.9
France	1.4	-1.7	-1.8	-1.1
Italy	-0.4	-2.2	-2.7	-1.8
Cyprus	-	-	-	-
Latvia	0.8	9.9	1.0	3.5
Lithuania	5.2	7.2	1.3	-0.1
Luxembourg	-	-	-	-
Hungary	4.6	4.0	1.0	-1.1
Malta	-	-	-	-
Netherlands	3.6	1.8	1.3	0.6
Austria	6.8	3.5	2.1	0.4
Poland	14.5	8.4	6.9	3.0
Portugal	-6.1	-3.1	-0.4	-1.5
Romania	1.7	12.7	3.5	1.7
Slovenia	-	-	-	-

Source: Eurostat⁵⁹

⁵⁹ <http://ec.europa.eu/eurostat/documents/3433488/5585612/KS-SF-13-001-EN.PDF/f68ec994-79d3-43f2-a7a9-787b73fdfe7e>

Figure 15 - Energy intensity of the economy – Gross domestic consumption of energy divided by GDP (chain-linked volumes – reference year 2005) – kilogram of oil equivalent (kgoe) per 1000 euros – 2002, 2012



Source:

Table 11. Real Labour Productivity

	(thousand EUR per person employed)			(EUR per hour worked)		
	2005	2010	2015	2005	2010	2015
EU-28	49.7	51.0	52.9	29.6	30.9	32.5
Euro area (EA-19)	55.7	57.2	59.0	34.4	35.9	37.8
Belgium	71.5	73.0	74.7	45.6	47.2	47.6
Bulgaria	7.8	9.1	10.0	4.7	5.5	6.1
Czech Republic	25.3	28.0	29.6	13.9	15.6	16.9
Denmark	75.2	75.5	76.5	51.0	52.6	52.6
Germany	55.3	56.6	58.2	39.2	40.7	42.5
Estonia	21.0	23.5	24.2	10.5	12.5	13.0
Ireland (*)	73.2	80.7	104.4	38.9	44.8	60.0
Greece	44.1	42.4	41.3	20.6	21.0	20.2
Spain	47.0	50.4	53.5	27.2	29.5	31.6
France	65.4	67.0	68.8	43.4	44.8	46.9
Croatia	24.8	22.6	23.3	.	11.6	12.7
Italy	59.7	58.3	57.2	32.9	32.8	33.2
Cyprus	42.1	43.4	43.8	22.8	23.4	24.4
Latvia	16.3	18.8	21.1	8.6	9.7	11.1
Lithuania	16.7	20.2	22.5	8.9	10.7	12.1
Luxembourg	102.5	99.3	100.4	65.9	65.3	66.6
Hungary (*)	20.2	20.8	20.9	10.1	11.7	12.0
Malta	.	.	.	.	.	.
Netherlands	63.3	64.7	67.5	44.1	45.5	47.5
Austria	63.4	63.9	64.5	35.9	38.3	40.1
Poland (*)	18.0	20.7	23.1	8.6	10.1	11.3
Portugal	30.1	32.5	33.4	15.9	17.2	17.9
Romania (*)	10.5	12.4	14.8	5.7	6.6	8.1
Slovenia	31.0	32.8	34.6	18.3	19.5	20.5
Slovakia	22.7	28.3	30.2	12.8	15.7	17.2
Finland	65.1	65.9	64.5	38.4	39.5	39.3
Sweden	69.0	72.1	74.7	43.0	44.1	46.3
United Kingdom	56.0	56.4	57.9	33.5	34.6	34.9
Norway	118.3	111.2	113.1	82.8	78.0	79.6
Switzerland	90.3	92.9	92.0	54.2	57.1	58.7
FYR of Macedonia	8.6	8.9	8.7	.	.	.

(*) Based on chain linked volumes, index 2010 = 100.

(*) 2011: break in series.

(*) Per hour worked, 2010: break in series.

(*) 2010: break in series.

(*) 2012: break in series.

Source : Eurostat⁶⁰

⁶⁰ [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Real_labour_productivity,_2005,_2010_and_2015_\(%C2%B9\)_YB16.png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Real_labour_productivity,_2005,_2010_and_2015_(%C2%B9)_YB16.png)

Table 12. Exports, imports of and trade balance of Bulgaria by sections of SITC, (2014 - 2015)

Sectors of SITC	Exports - FOB			Imports - CIF			Trade balance - FOB/CIF	
	2014	2015	Change compared to the same period of the previous year - %	2014	2015	Change compared to the same period of the previous year - %	2014	2015
	Million BGN			Million BGN			Million BGN	
Total	43 233.5	44 949.5	4.0	51 097.4	51 549.0	0.9	-7 863.9	-6 599.5
of which EU	26 921.1	29 049.4	7.9	31 512.3	33 157.2	5.2	-4 591.2	-4 107.8
Food and live animals	4 679.1	4 857.3	3.8	3 663.0	3 980.9	8.7	1 016.1	876.4
of which EU	3 168.4	3 260.5	2.9	3 069.2	3 184.3	3.8	99.2	76.2
Beverages and tobacco	869.3	823.9	-5.2	666.2	733.1	10.0	203.1	90.8
of which EU	296.5	288.2	-2.8	466.9	585.1	25.3	-170.4	-296.9
Crude materials, inedible (except fuel)	3 112.9	2 953.8	-5.1	4 207.0	4 230.3	0.6	-1 094.1	-1 276.5
of which EU	1 881.5	1 850.8	-1.6	2 597.8	2 453.2	-5.6	-716.3	-602.4
Mineral fuel, lubricants and related materials	5 610.7	4 859.5	-13.4	10 181.1	8 042.6	-21.0	-4 570.4	-3 183.1
of which EU	1 234.6	1 388.3	12.4	1 871.9	1 448.9	-22.6	-637.3	-60.6
Animals and vegetable oils, fats and waxes	440.8	471.7	7.0	182.9	177.9	-2.7	257.9	293.8
of which EU	333.9	323.1	-3.2	139.0	122.2	-12.1	194.9	200.9
Chemical and related products	3 945.3	4 437.3	12.5	6 542.2	7 238.4	10.6	-2 596.9	-2 801.1
of which EU	2 102.9	2 576.5	22.5	5 014.9	5 533.0	10.3	-2 912.0	-2 956.5
Manufactured goods classified chiefly by material	9 634.7	9 968.6	3.5	8 936.8	8 722.5	-2.4	697.9	1 246.1
of which EU	6 428.3	6 859.5	6.7	5 497.3	5 458.3	-0.7	931.0	1 401.2
Machinery and transport equipment	8 392.0	9 400.8	12.0	12 789.5	14 006.2	9.5	-4 397.5	-4 605.4
of which EU	6 137.3	6 891.9	12.3	9 915.2	11 136.3	12.3	-3 777.9	-4 244.4
Miscellaneous manufactured articles	6 437.3	7 058.2	9.6	3 659.8	4 137.9	13.1	2 777.5	2 920.3
of which EU	5 264.3	5 522.7	4.9	2 706.0	2 986.9	10.4	2 558.3	2 535.8
Commodities and transactions	111.4	118.4	6.3	268.9	279.2	3.8	-157.5	-160.8
of which EU	73.4	87.9	19.8	234.1	249.0	6.4	-160.7	-161.1

Source: NSI⁶¹

⁶¹ <http://www.nsi.bg/bg/content/7512/%D0%BF%D0%BE-%D1%81%D0%B5%D0%BA%D1%82%D0%BE%D1%80%D0%B8-%D0%BD%D0%B0-%D1%81%D1%82%D0%B0%D0%BD%D0%B4%D0%B0%D1%80%D1%82%D0%BD%D0%B0%D1%82%D0%B0-%D0%B2%D1%8A%D0%BD%D1%88%D0%BD%D0%BE%D1%82%D1%8A%D1%80%D0%B3%D0%BE%D0%B2%D1%81%D0%BA%D0%B0-%D0%BA%D0%BB%D0%B0%D1%81%D0%B8%D1%84%D0%B8%D0%BA%D0%B0%D1%86%D0%B8%D1%8F>

Annexe 2 List of Interviews

	Name	Trade union federation	Confederation	Date
1.	Valentina Vassilionova	Federation of the Independent Trade Unions in Agriculture (FNSZ/FITUA)	CITUB	August 2016
2.	Valentin Valchev	CITUB FNSM - KNSB Miners Federation of Independent Syndicates of Miners	CITUB	August 2016
3.	Vassil Yanachkov	CITUB Metalicy	CITUB	August 2016
4.	Dimitar Tabakov	Federation of the Independent Trade Unions of the Light Industry	CITUB	August 2016
4.	Rossitza Marinova	Podkrepa FLI Federation of Light Industry	CL Podkrepa	August 2016
5.	Ivan Ivanov	Podkrepa NF Chemistry Chemical Workers' Federation Podkrepa	CL Podkrepa	August 2016
6.	Stefka Primova	Syndical Federation Of Machinebuilders and Metalworkers	CL Podkrepa	August 2016
8.	Valia Borissova	Food Industry Federation	CL Podcrepa	Questionnaire filled, August 2016

In addition to the interviews carried on, e-mail exchanges have been realised with: National Labour Federation of Chemistry and Industry (Krassimir Krastev), who has discussed with Asen Asenov (NTUF Metal-Electro - CITUB)

During the seminar in Romania discussions are held with Anelia Ivanova, President of the Agriculture and Forest Industry Federation PODKREPA (NFZGS)

Despite several attempts, interviews could not be held with⁶²:

Federation of Nuclear Energy - Podkrepa –

Independent Trade Unions in the Food Industry (FITU-Food)

NF Metallurgy CL Podkrepa

Podkrepa SMF Miners

⁶² New attempts will be made

Annex 3 Sectors and regional specifics⁶³

Even if the detailed analysis of the sectors and economic activities covered by the trade union federations, members of IndustriAll and EFFAT in Bulgaria is beyond the remit of this report and is documented well elsewhere⁶⁴, some key features are presented here.

	Industrial Developments	Social Dialogue
Mining	In mining there are three main activities, coal mining, ore mining and non-metallic mining. The coal mining in the country is challenged by the climate agreements and the changes in the Bulgarian energy policy. The ore mining is developing well, there are examples of companies providing very good wages, excellent working conditions and social responsibilities. The non-metallic mining has both good examples.	There is good cooperation between trade unions and employers on issues of common interest, including in the domain of industrial policy.
Food Industry	It is an essential sector for Bulgaria. After the crisis and the positive performance in 2015, in 2016 there is a slowdown of exports and production. Among the few strengths of the food industry in Bulgaria is the fact that number of multinationals such as Coca Cola, Nestle, Mondelez, the leading world brewers produce here, introduce new technologies and quality products. The weaknesses are the following: the overall economy is catching up; there is lack of reforms in the economy and especially in the energy, a barrier to the whole economy; lack of judicial reform, leading to a denial of justice; bad business environment – large number of regulatory and licensing regimes, frequent changes in the legal and regulatory base; corruption at the highest levels of power; no real anti-trust legislation; high share of the grey economy (officially 35 percent but actually 50%.); slow or even almost no administrative reform, lack of e-government; amendments to public procurement legislation because of lobbying and causing corrupt practices and involvement of mafia structures; lack	Social partners are involved in industrial policy issues only formally, but de facto not. The sectoral tripartite councils are reduced to purely information bodies, discussing some labour issues and some elements in the social sphere. Trade unions in the sector believe this is not good, especially because in many cases unions have well prepared experts, able to formulate proposals for the development of industry and the economy. Trade unions (and social partners in general) often submit opinions, but they are rarely taken into account by the governments and the administration. Specific actions have been developed in the food industry – e.g. agreements between one of the trade union federations and a branch chamber in order to lobby for lower VAT for bread and pastry products

⁶³ This part will be further completed with relevant information (additional contacts with trade unions before and after the January 2017 meeting in Bucharest).

⁶⁴ See for example the sectoral analysis and the overall report “Vazrajidane na industriata v Balgaria. Obsht Analiz”, published by CITUB and several of its sectoral federations in 2014. According to the interviews carried out, the conclusions of those analysis are valid till the present moment.

	<p>of innovation and research for the industry, leading to loss of competitiveness; interfirm indebtedness; lack of education reforms leading to deficit in 179 professions, needed by the industry; lack of responses to digitalization.</p> <p>The major threats for the Bulgarian industry are related to the non reformed spheres – administration, education, judicial system, social system.</p>	
Agriculture	<p>The trends, investigated by CITUB in 2014 are the same. The polarisation in the structure of the agriculture is persisting: on the one hand there are larger farms where the employment is gradually replaced by machines; on the other hand there is a segment of small, auto-subsistent exploitations. In the sector there are financial tools available (EU funds) but the trend in Bulgaria is really negative. There are also big problems with the qualification of personnel.</p>	<p>Trade unions in the sector are active, they participate in the monitoring body of the programmes for the development of agriculture and rural regions and fisheries. They collaborate with employers, lobby, but it is difficult to obtain results.</p> <p>The main objective for trade unions is that the sector generates employment with decent working conditions. So they try to impact the EU structural funds in the sector in this way. Trade unions also have developed concepts for sectoral training funds.</p> <p>Trade unions have proposed criteria for employment creation in case of subsidies by the EU structural funds in agriculture.</p> <p>Trade unions also support the development of sub-sectors that are susceptible to create employment: such as crop and animal production, greenhouses and so on.</p>
Metal and Machinery Sector	<p>Well developing sector, several clusters (automotive), large contributor to the production and employment in manufacturing. The share in exports is 12,4% and it is increasing.</p> <p>The strengths of this sector includes: export potential; technological and human resources potential and traditions. The weaknesses are: low and medium value added products; labour intensive sector; moderate investment.</p> <p>The opportunities (CITUB, 2014) are: increasing market share and renewal of the product lines; cooperation and integration of the value chains of leading European producers; optimization of resources. The main threats identified are the lack of qualified employees and the return on investments.</p>	<p>There is good social partnership; good collective bargaining results, with some exceptions in subsidiaries of MNC (including from German or Austrian origin);</p> <p>Some of the greenfield investments are not members of the employer chamber; Joint projects of the trade unions together with the employers' chamber. Several concrete initiatives for skills developments, health and safety;</p> <p>There are problems with the flexibilisation of working time; Difficulties to extend CLA</p>

	Companies are in general in good condition, there are many that hire (including in the military production)	
Metallurgy	<p>The metallurgy sector is very important for the Bulgarian industry. Most of the companies are restructured (few exceptions of closures – Kremikovzi, OZK). Important investment has been made during the last several years. Metals represent between 15 and 18% of the industrial production of the country. The sector is export oriented, with strong presence of foreign companies. Corporate social policies and corporate social responsibility activities of most of the companies are good practices.</p> <p>Metalicy have developed SWOT analysis of the sector (Metalicy, 2014), focusing on its strengths such as: competitiveness of the companies, export orientation, good traditions; high value added products, developed social partnership and stakeholders relations. The main weaknesses are related to the low energy efficiency and the evolving environmental legislation leading to increasing compliance costs; the lower productivity (especially in the steel production).</p>	<p>The metallurgy is one of the sectors in the country with exemplary social dialogue and number of achievements in collective bargaining at sectoral and company level, information and consultation, health and safety, training and so on (Analysis of Metalicy). There are number of partnerships for the skills development including social partners, education providers, and universities. Social partners are active in number of EU funded projects, including for competence development. There are sectoral tools for anticipation of the needs for skills and jobs. In 2012 Metalicy Trade union federation has established and Industrial Observatory. There are several concrete directions of developing further the industry and its responsible embeddedness along the value chains (e.g. within subcontractors) and the territories (development of the local economy, stimulation of social enterprises).</p>
Light Industry	<p>Trade unions point out mainly the weaknesses of the sector. The intra and intersectoral linkages from the previous period do not exist. The sector is subcontracting work for foreign companies (and is vulnerable because of the global competition) The sector is with the lowest wages in the country. There is ongoing restructuring in some sub-branches – e.g. textile production, leather, etc. This is also the case of footwear, the textile production when most of the large companies have been closed, and so on. Employment is often fragmented, e.g. employees are hired to the execution of specific order, or they are pushed to take nonpaid leaves, the insecurity is high. There are a lot of enterprises in regions with high unemployment, where they could be the only employment opportunity for the population.</p>	<p>The trade unions are shocked by “the arrogant behaviour of employers, their unwillingness to sit at the table, disparaging attitude towards sectoral dialogue total disregard for economic realities and government policies (for example in the case of the MII). In some of the branches of the light industry, e.g. clothing employers are extremely fragmented. There is antiunion policy in some companies, e.g. new hires are asked to sign declaration that they will not join unions. Sectoral bargaining is not taking place in many of the branches, e.g. in clothing since 2008. There are some positive practices – e.g. large company of German investor in South-Western Bulgaria (Rollman). Industrial relations in these company are exemplar, but they have been boosted by a successful strike in 2007</p>

	<p>Part of the sector is working within the informal economy and they endanger those companies that are completely transparent.</p> <p>Working conditions in the sector are generally problematic. There emblematic cases of health and safety problems, e.g. in the footwear.</p> <p>Part of the managers (including first line managers) are not well prepared for their role.</p> <p>Work organisation is not satisfactory.</p> <p>Labour inspection is not functioning properly in case of violations.</p>	<p>There are also cases of company restructuring and localization to other regions in Bulgaria in order to circumvent collective bargaining.</p> <p>The judicial system is very long, in case of labour disputes, the procedures could take years and this discourages workers and activists to defend their rights.</p>
Chemical Industry	<p>While in 1989 the sector employs 2,7% of the labour force, it contributed to 25% of the industrial production. Twenty and something years after s 2.3% of the employed in the country work in the sector (and 8% of people in the industry) it contributes to 22% of the industrial production and about one fourth of the Bulgarian exports.</p> <p>The sector has high potential for development.</p> <p>It has suffered from the deindustrialization process. This process impacted the disqualification and demotivation of the labour force in number of regions.</p> <p>The leading companies are mainly subsidiaries of multinationals.</p> <p>The R&D capacity of the sector is almost destroyed (institutes, centres)</p> <p>The sector experiences deficit of qualified labour force.</p> <p>Anticipation capacity is needed.</p> <p>The sector is undermined by informal practices and precarisation of the labour force.</p> <p>In their analysis (2014), CITUB drafts number of recommendations for the sector development: introduction of green technologies; development of highly automated production; addressing the brain drain and the ageing of the employees; increased investment and state support for R&D activities; industrial policy with clear priorities; concrete innovation projects.</p>	<p>According to the interview held, there is different attitude towards collective bargaining by foreign, public and domestic employers. While subsidiaries of MNC and public companies sign regularly collective agreements, domestic employers refuse to sign.</p> <p>Trade union have lobbied for better treatments for employers investing in health and safety,</p>