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Labour Market Policy Thematic Review 2018: An in-depth analysis of the emigration of skilled labour

Bulgaria



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1 Introduction: the demographic and labour market situation in Bulgaria

The number of Bulgarians dispersed to 60 destination countries all over the world has doubled during the past 25 years (1990-2015). Based on UN data¹, the number of Bulgarian emigrants has increased rapidly since 2000, since it was estimated at 615 000 in 1990 (mid-year), 689 000 in 2000, 1 136 000 in 2010, and 1 176 000 people in 2015. In 2015, the numbers of Bulgarians were greatest in Europe and Asia – more than 90 % of the total (more than 570 000 people in European countries, and 510 000 in Asia, see Table 1).

More than 270 000 Bulgarians are registered in Southern Europe, primarily in Spain, Greece and Italy. More than 190 000 are registered in Western Europe, primarily in Germany, Belgium, France and the Netherlands. More than 76 000 are in Northern Europe, mainly in the UK, and about 30 000 in Eastern Europe including Romania, Russian Federation, Czech Republic. The large number of Bulgarian emigrants in the Asian region is due mainly to the emigration of Bulgarian Turks into Turkey. Relatively compact Bulgarian communities have also formed in Israel, Cyprus and Kazakhstan.

Eurostat data confirm the preferences of Bulgarian citizens towards certain European countries, such as Germany, Spain and Greece. According to this data, 662 000 Bulgarian citizens lived in European countries in 2016 (639 000 of them live in EU Member States) – no information is available regarding the UK, Malta and Cyprus for this year. But if data concerning the country of birth were used rather than data concerning citizenship, the numbers would decline by half (some of the countries did not provide such information).

The main receiving countries are Germany, Spain and Greece, where respectively 36 %, 20 % and 12 % of the Bulgarian migrants have settled. They make up 6-7 % of the EU citizens residing in the first two countries, but more than 38 % of those in Greece (Table 2). Their allocation by gender in the main receiving countries is relatively balanced, except for countries such as Italy where men account for only 37 %, and the Czech Republic where women account for 38 %. The percentage of Bulgarians of active working age (69 %) is lower than that of the citizens of other EU Member States (77 %) residing abroad. However, it is significantly higher than the share of people of active working age in Bulgaria (61 %). From 2008-2016, the population of active working age in Bulgaria declined by more than half a million people (or by 6.5 %) (NSI, Bulgaria).

The IAB² database provides an idea of the qualification of migrants by main receiving countries. **Overseas destination countries and the UK attract highly qualified migrants from Bulgaria more than most EU countries.** Albeit, Bulgarian highly qualified specialists find countries such as France, Switzerland and Ireland more attractive than Southern European countries. (Figure 1)

¹ Source: United Nations, Department of Economic and Social Affairs, Population Division (2015).

² Institute for Employment Research (Bundesanstalt für Arbeit), a special office of the Federal Employment Agency (Bundesagentur für Arbeit/BA), Nuremberg (www.iab.de).

2 Emigration of skilled labour

Based on OECD data for 2015, Bulgarian emigration reached 13.7 % of the population. It accounted for 0.92 % of the entire foreign-born population in the 35 receiving countries reporting data to the OECD. According to that data for 2010–11, the share of people with higher education in the Bulgarian population abroad reaches 26.5 % and this share is 20 % for those staying in Bulgaria. OECD-DIOC³ data for 2010-11 also show that 16 % of Bulgarians with high educational attainment (ISCED 5A/5B/6 levels) are outside the country (0.5 % of the entire foreign-born population with high educational attainment in the respective receiving countries). This compares to Poland where almost 18 % of people with higher educational attainment are abroad, and to Romania where more than a quarter of the higher educated have emigrated.

The educational structure of Bulgarians abroad is more favourable than that of the population in Bulgaria and less favourable compared to other international migrants. Their professional status is indicative of a lower competitiveness compared with other migrants. It is no coincidence that more than half of Bulgarian migrants believe they are employed in positions below their qualification level and a third work in elementary occupations.

The educational structure of Bulgarians abroad differs from those in Bulgaria and of the other migrants. The share of Bulgarian migrants with high educational attainment (23 %) is higher than the people left behind (16 %) and lower than the other foreigners (28 %) while the share of those with lower educational attainment (ISCED 0/1/2) is almost the same as in the home country and higher compared with the other communities (41 compared to 35 %). Women generally have higher education levels than men: respectively, 25 % compared to 20 % of the migrants from Bulgaria and 28 % compared to 27 % for the rest.

One-in-three Bulgarians of high educational attainment abroad is aged 25-34 years. Among the international migrants (from other countries) the highest relative share of people with high educational attainment is in 35-44 year-olds. But if among the foreigners aged 65+ the share of people with low education is 45 %, the share of Bulgarian migrants of that age reaches 71 % (51 % for 55-64 year-olds). Clearly, the latter is related to the profile of the labour market in the main receiving countries. In 2010-11, for Bulgarians those were Turkey, Spain and Greece (hosts up to 61 % of the Bulgarian population abroad), while for one in every two international migrants, the leading receiving countries were the USA, Germany, and the UK.

A connection can be made between the educational degrees (ISCED 4 groups – ISCED 0/1/2; ISCED 3/4; ISCED 5A/5B; ISCED 6) of Bulgarians abroad and the length of their stay there. For people with ISCED 0/1/2 (Pre-primary/Primary/Lower secondary education) most stayed abroad for up to five years – 38.6 % (11.4 % for up to one year and 27.2 % for one-five years). For people with ISCED 3/4 ((Upper) secondary/Post-secondary non-tertiary education) and ISCED 5A/5B (first stage of tertiary education – Bachelor and Master) most stayed abroad for five-10 years (37 % and 32 % respectively). And one in two with ISCED 6 (Second stage of tertiary education – PhD) lived abroad for 10-20 years.

³ OECD Statistics, DIOC 2010_2011 (<http://www.oecd.org/els/mig/dioc.htm>)

The educational structure of Bulgarian migrants (ISCED 4 groups), compared to their employment status confirms that higher educational attainment also relates to higher employment rates (and respectively lower unemployment rates). 76 % of the holders of ISCED 6 (PhD) were employed, compared to 8 % who were unemployed. This ratio is slightly less favourable for those with bachelor and master's degrees – ISCED 5A/5B, at 72 % employed and 10 % unemployed. For those with general and vocational secondary education, the employment rate is 63 %, the unemployment rate 15 %.

Employment levels for migrants from Bulgaria by educational degrees are slightly higher than those for other migrants – by about 1-3 percentage points, except for migrants with ISCED 6 (PhD), where employment levels of the Bulgarian migrants are 2.5 % lower. At the same time, unemployment rates for Bulgarians compared to other migrant communities is generally also higher– 20 % compared to 8 % for people with educational level ISCED 0/1/2; 15 % compared to 7 % for ISCED 3/4; 10 % and 5 % for ISCED 5A/5B; and 8 % and 3 % for the highest educational level (ISCED 6). The share of inactive people varies respectively between 32 % and 15 % for Bulgarians and 46 % and 18 % for all other migrants.

Overall, the structure of education and occupations of Bulgarians abroad appears less favourable than the same structures of all other migrants. The top three most common professions among Bulgarians (ISCO 1 d) are:

1. Elementary occupations – in practice, one-in-three Bulgarians abroad is engaged in such
2. Service and sale workers (17.5 %)
3. Craft and related workers (13.5 %).

While the top three professions among other foreigners are:

1. Service and sale workers (17 %)
2. Professionals (15 %)
3. Technicians and associated professionals (14 %).

28 % of Bulgarians of high educational attainment (ISCED 3 groups – High level) are engaged as Professionals; 17 % and 15 % are engaged in Elementary occupations and as Service and sale workers. From all other foreigners of high educational attainment, 43 % are engaged as Professionals; 20 % as Technicians, and 8 % as Clerical support workers. Those engaged in Elementary occupations are an exception at slightly more than 2 %. For people with medium educational attainment, one-in-three Bulgarians is engaged in Elementary occupations, 22 % as Service and sale workers, and 17 % as Craft and related workers. The situation is similar for other foreigners for the latter two occupations (21 % and 16.5 %) but different for Technicians (more than three times higher share: 15.8 %) and for the Elementary occupations (9 %), see Table 3.

Bulgarian migrants are more often overqualified for their position than other foreign-born communities. Nearly half the Bulgarian migrants of high educational attainment believe their employment meets the educational level attained – 48 % (not overqualified), while others believe they are engaged in occupations not matching their qualification. For all other foreigners this proportion is 64 % to 35 %. **In most of the major receiving countries for Bulgarians, they are much more likely to be engaged in positions requiring lower qualification than those from other communities.** Belgium, Austria, Israel, Australia and Sweden (Figure 2) are the exceptions. The relationship between employment and educational attainment for

Bulgarians, is more balanced in some European (Switzerland, Sweden, Belgium, France) and in most overseas receiving countries. At the same time, in the receiving countries of Southern Europe – particularly in Spain and Greece – only between 19 % and 26-27 % of Bulgarian specialists with high educational attainment have jobs matching their educational level. This mismatch between education and employment is generally more apparent among women (particularly in the receiving countries of Southern Europe – Spain, Italy and Greece) than among men. In Canada and the Netherlands, however, this proportion favours women (Figure 3).

There is no evidence to suggest that highly qualified Bulgarians – with higher and vocational secondary education – are more strongly motivated to migrate. Instead, people with a general secondary education degree or with basic education are more strongly motivated. The motivation for migration is highest among undergraduates – in practice, half (47 %) are inclined to leave Bulgaria for different periods of time. The motives for emigration differ substantially, however, among the various educational and professional communities in Bulgaria.

The willingness to leave is similar for Bulgarians holding different educational degrees. According to data from a representative sample survey by the ERI at the BAS⁴ (sample size 3 907 15–65 year-olds) conducted in 2013, between 23 % and 25 % of respondents with higher and vocational secondary education would emigrate. That share for people with general secondary education or primary and pre-primary education is respectively 26 % and 27.5 %. The shares of people with higher and secondary education, who want to settle in another country or leave to work for more than one year, do not exceed 18 %. For respondents with primary and pre-primary education, this share is above 22 %. The motivation for long-term work abroad is highest among specialists with secondary vocational training (9.5 % compared to 6.2 % for higher education graduates). 8 % of respondents with vocational secondary education express the motivation for a short-term engagement abroad (given 5.7 % for higher education graduates, see Figure 4).

The inclination to migrate by professions (ISCO 1d) is highest for Craft and related trades workers (28 %), Plant and machine operators (22 %), and Technicians and associate professionals (21 %) and is lowest for Managers (14 %), Professionals (17.5 %), and Elementary occupation holders (17.3%). The people who most frequently state an intention to settle abroad are Technicians and Clerical support workers – more than 10 % and 8% respectively declared such intention (during the sample survey referred). And those who intend to work abroad for more than one year are typically Craft and related trade workers (12.4 %), Service and sales workers (8.2 %), and Plant and machine operators (7.6 %). Thus, 1-in-10 of the Technicians (ISCO Skill level 3) and of the medium-qualified Craft workers (ISCO Skill level 2) in Bulgaria is inclined either to settle in another country or to reside abroad long-term. Short-term placements abroad are most attractive to people such as Skilled agricultural workers (8.5 %, see Figure 5).

The influx of foreign students into the country so far does not compensate for the outflow of Bulgarian students (Zareva, forthcoming). Based on Eurostat data, the number of Bulgarian students abroad (bachelor's or equivalent level, master's and doctoral or equivalent level) reached almost 22 000 in 2013 and 2014 and fell to

⁴ Economic Research Institute at the Bulgarian Academy of Sciences. (See Richter, M., Ruspini, P., Mihailov, D., Mintchev, V. and M. Nollert, (eds.). Migration and Transnationalism between Switzerland and Bulgaria. Springer, 2017.)

about 20 000 in 2015. This is about 8 % of the students in the country. The number of mobile students studying in Bulgaria (bachelors and masters) is only half of that – between 11 000 and 12 000 in 2013-15, which corresponds to 4.3-4.6 % of students in Bulgaria. More than 80 % of Bulgarian students (undergraduate level) are studying in four countries – the UK, Germany, the Netherlands, and Austria – and more than 70 % of those enrolled in master's programmes are again in the UK, Germany, Austria and also in France. One half of the doctoral students are training in two countries – the UK and France. Bulgaria enrolls students primarily from Greece and Turkey.

As shown by several sample surveys (including the survey of ERI at the BAS, 2013), students in Bulgaria have the strongest motivation to emigrate. One out of two (47 %) intended to leave the country for various lengths of time in 2013. Specifically, 36 % of students stated an intention to leave the country for longer periods: 15 % stated the intention to emigrate for good (to settle in another country), 13 % wanted to work abroad for more than one year, while 8 % referred to leaving to continue their education (Mintchev et al., 2017).

Several essential points can be outlined about the perception of the importance of the main motives for migration by respondents from different educational groups. The assessment of factors for leaving, depending on the educational level and the profession, is based on micro-data from the survey of potential migration conducted in 2013, which also included interviews with migrants who had returned to the country (ERI at the BAS, 2013).

For people with higher education, better pay (although 70 % define it as very important) and the ability to support their families in Bulgaria (42 %) are not as important as they are for other groups. Respondents with lower levels of education more often indicate these as very important factors. Opportunities for professional fulfilment and education abroad interest more people with higher education than those with general and vocational secondary education – but is lower than for respondents with primary and pre-primary education (by about 3 % to 7 %). Clearly, the latter group comprises the respondents who are at the start of studying for a degree and searching for professional fulfilment. The statement, 'I do not wish to continue living in Bulgaria', is used to test perceptions about the public environment and administrative capacity of the country. For 17 %- 21 % of respondents within any educational category, the picture is not optimistic (lack of perspectives, unclear regulations, bad public environment, crime, corruption practices, etc., see Table 4).

The motivational factors, from the viewpoint of various professions (ISCO 1d) reveal a colourful picture. For Managers and Professionals, the motive of 'better pay' is not as important as it is for other occupations. For Technicians and associate professionals and Skilled agricultural workers it is exceptionally important: 93 % for the former and 89 % for the latter. Professional fulfilment is also relatively more important for these groups. The motive, 'To support my family in Bulgaria' is very important for respondents with lower-skilled occupations (agricultural occupations) than for higher skilled occupations (Managers) (72 % for the former and 37 % for the latter). Disappointment with the overall conditions in the country is expressed most often by Plant and machine operators, Clerks, and Managers – about one quarter of whom state that, generally, they do not wish to continue living in Bulgaria (Table 5).

The duration of the stay abroad is different for various educational and professional categories. According to the empirical survey referred here (ERI at the BAS, 2013), 37 % and 36 % of returnees with higher and secondary vocational education stayed abroad for up to three months during their last visit. The duration of

the stay was between 3 and 12 months for 31 % of higher educated and for 42 % of the returnees with secondary vocational education. The share of higher education graduates who stayed for more than one year was 32 % (compared to 22 % from those with secondary vocational education). Obviously, despite the conditionality of such assessments, people with higher education have experienced more very short-term stays (up to three months), while those with secondary vocational education have experienced more stays lasting between 3-12 months (Figure 6).

One-in-two respondents who have stayed abroad, with professions corresponding to ISCO skill level 3-4 (Managers and Professionals), preferred to stay there for up to three months, whereas the share of Skilled agricultural workers who have stayed for a short time exceeds two-thirds. The Technicians and associate professionals preferred longer stays – the last stay abroad for 40 % was more than one year. One-in-two working in Craft and related trades and Plant and machine operators, likely with medium-level qualifications, chose to stay from 3-12 months (Figure 7).

The expectation that high-skilled Bulgarian migrants will return is unrealistic.

Such an assessment may be made using data from the sample survey among Bulgarians residing in Spain conducted in 2011⁵. The share of people with higher or secondary vocational education who would return to Bulgaria is insignificant – 3-4 % compared to 5.2 % for the total sample. 5 % of people with higher education declare that they would move to another country (2.8 % on average for the sample). Despite the recent decline in the Bulgarian population in Spain (from 170 000 to 130 000 people), these results are clear enough. The intention to return from Spain is more clearly expressed by professions involving medium-level qualification (ISCO Skill level 2) - Clerical support workers (9.5 %), Plant and machine operators (7.1 %), and Craft and related trades workers (6.4 %); 5.1 % of the Technicians and associate professionals (ISCO Skill level 3) would move to another country (given only 2.9 % on average for the sample).

The share of Bulgarian households with return migrants increases. The spread of return migration can be assessed based on micro-data from sample surveys of the potential migration and of returned migrants conducted consecutively in 2007, 2011 and 2013. The number of households to which migrants returned was estimated at nearly 300 000 in 2007, reached 411 000 in 2011 and exceeded 470 000 in 2013. This represented respectively 10 % of the households in Bulgaria in 2007, nearly 14 % in 2011 and more than 15 % in 2013. Considering the number of returned migrants per one household, their total in the country can be assessed, respectively, from 380 000 in 2007 to more than 690 000 in 2013 (Mihailov et al., 2007; Mintchev et al., 2012; Mintchev, Boshnakov, Richter, and Ruspini, 2017) (Table 6). The relatively high percentage of households with returned migrants (and the effective doubling of the assessed number of people from 8 % of the active working age population in the country in 2007 to 15 % in 2013) is indicative not so much of a reduction of the migration pressure, but rather of increased dynamics of circular migration. Two-thirds of people returning from abroad in that period stated that they intend to go abroad again.

⁵ ERI at the BAS, sample survey conducted in Spain in 2011; sample size: 506 Bulgarian citizens living in 25 randomly selected settlements around the country. (See Mintchev, V., Markova, E., Misheva, M., Zareva, I., Balkanska, I., Boshnakov, V. and I. Kaltchev (2012). Bulgarian emigration: theories, policies, empirical studies. Sofia: Ikopis.)

3 Emigration of skilled labour and its impact on domestic economies beyond the labour market

The emigration of highly qualified personnel very positively impacts receiving countries but has a highly debatable effect on South-Eastern European countries. Research shows that the outflow of highly qualified young people from a country that needs to catch up, such as Bulgaria, puts the modernisation of institutions under strain, limits business development and exerts an upwards pressure on social expenditure. Based on existing assessments, the emigration and the deteriorated professional structure of the workforce are holding back the average annual GDP growth in most of Central and Eastern Europe. In 2012, the cumulative real GDP growth would have been higher by between 2.3 percentage points in Hungary and 7.6 in Bulgaria if the emigration that occurred between 1995 and 2012 had not happened (IMF, 2016).

The migration of a highly qualified workforce impacts the fiscal system by limiting revenues from direct taxation. This part of the budget becomes dependent on taxes on consumption, the collection of which is often problematic in Bulgaria (20 % lower collection rate in Bulgaria compared to EU-28). The share of social expenditures increases. The public debate concerning the social system affects issues such as the mechanism of determining the minimum wage and the minimum social insurance thresholds. Decisions on those parameters are routinely postponed, which perpetuates the inferior standards, frequently commented on by the media, which the system maintains.

The unsatisfactory results of innovation in the country are due to systemic problems in the sector (related to the organisation of the system, e.g. absence of sustainable result-based financing) and to under-financing. This is a permanent push factor for emigration of highly qualified personnel.

Migrant transfers are a positive consequence of emigration. Bulgaria receives a considerable volume of worker remittances. Their share in GDP remains more limited in comparison to other countries in the region. According to the Bulgarian National Bank data for 2013, transfers from abroad (compensation of employees and worker remittances) amounted to EUR 1.186 billion in 2007 and to EUR 1.127 billion in 2012, and as a share of GDP they were respectively 3.9 % and 2.8 %.

Empirical research shows that the transfers are oriented at the less developed regions of the country (NUTS 2) – e.g. the North Central region (ranking second to last in terms of development level) absorbs one quarter of the transfers (5.1 % of the regional GDP), while the South West region, including the capital Sofia, receives 17 % of them (only 0.58 % of GDP). They are used mainly for consumption and to a lesser extent for business initiatives. This limits their impact to overcoming the existing regional disparities (Mintchev, Shopov, Kaltchev, and Boshnakov, 2016).

The emigration of highly qualified personnel from Bulgaria has a contradictory effect on the value of transfers. From the micro-data available (ERI at the BAS, 2013) it is clear that people with higher educational attainment who stayed abroad had a more favourable income structure compared to the rest, but much fewer of them transferred funds to their relatives in Bulgaria.

The shares of people with higher and secondary vocational education who said that they had transferred funds, are one-third for the former and a half for the latter, given a share of 57 % of people with secondary general education. The results obtained by professional groups (ISCO 1d) show that only a quarter of Professionals and one-third

of Technicians and associate professionals had transferred such funds. The share of Managers is also low (35 %). The share of Plant and machine operators (61 %), Service and sales workers (53 %), and Elementary occupations (52 %) who transferred funds to Bulgaria was considerably higher. The transfers from Bulgaria to abroad are limited and their recipients are most often people with higher education – nearly 10 % (given 5.2 % on average for the sample). The people who received transfers from Bulgaria during their stay abroad generally worked in highly qualified professions – thus, more than 17 % of Professionals and more than 11 % of Technicians and associate professionals received such transfers. Nearly 1-in-10 skilled agricultural workers also received funds from the home country. This did not apply to Plant and machine operators and Elementary occupations (Figure 8, Figure 9).

These results are not fully supported by the data from the survey conducted in Spain in 2011, where only 39-40 % of people with higher and secondary vocational education transferred any funds, and the share of the others (those with secondary general and primary education) who did so varied from 28 % to 33 %. Professionals made almost no transfers (83 % did not do so), while half of agriculture workers supported their relatives in the home country (Mintchev and Boshnakov, 2016).

4 Emigration of skilled labour and its impact on labour market conditions

The economic crisis and the subsequent instability predetermined that the number of employed fell rapidly between 2008-2012. The increase in employment after 2012 highlighted economic recovery, which was, however, insufficient due to ongoing decline and an ageing population in Bulgaria. The analyses lack evaluation of the impact of emigration – and particularly the emigration of highly qualified personnel – on labour supply (MLSP Report, 2017).

Since the start of the crisis, the number of people employed (aged 15+) fell from 3 361 000 in 2008 to 2 934 000 in 2012-13. Since then, there has been a slight increase in employment – in 2016 it reached 3 017 000. The employment rate (for the population aged 15+) fell from 50.8 % in 2008 to 46.6 % in 2011 and 2012; in recent years it stabilised at about 49 % (Figure 10).

The sectoral allocation of employment has developed unevenly. For example, the number of jobs in traditional sectors has fallen. Initially, some were redirected to service sectors with relatively lower labour productivity; later, there was an increase in employment in sectors with higher value added.

In 2008-2012, the employment expressed in absolute figures declined most in the traditional economic sectors – Manufacturing, Construction, and Agriculture – respectively by 166 000, 134 000 and 62 000 people. The contraction of the number of people employed in those sectors reached 22 % in the Manufacturing industry and 40 % in Construction. Only in Administrative and support service activities, Electricity supply, and Water supply activities did the dynamics remain positive. For Administrative and support services, employment increased by more than 30 000 (nearly 44 %) and in the other two by about 2 000 each (about 2 % of the people employed in both sectors). The positive change did not then completely offset the drastic decline in many other sectors. The clearest positive changes are seen in Professional, scientific and technical activities; Information and communication; Transportation and storage; Human health and social work activities. In absolute figures, the increase during 2012-2016 was more than 32 000 in the first sector (nearly 42 %), and about 20 000 in the second and third sectors (respectively, an increase by more than 28 % for ICT and more than 11 % for Transportation and

storage). The increase in employment in Human health and social work activities also exceeded 11 % (slightly more than 16 000 people). Overall, the pre-crisis employment level in these sectors has been surpassed, but the position of sectors such as Manufacturing and Education continued to decline – by about 15 000 people in each (2.4 % in industry and 8.2 % in education) (Figure 11).

Employment levels among educational groups vary considerably. This is indicative of the problems in the labour market in achieving a balance between the demand and supply of skills and qualifications. Among the seriously affected are not only the low-skilled but also those with secondary vocational education.

During 2008-2012, employment levels fell in all education categories without exception. Yet, for people with higher and with secondary general education the decline was smallest – by 19 000 for the former and by about 27 000 for the latter – representing respectively 2.3 % and 4.2 % of employed individuals in these groups in 2008. The crisis hit personnel with secondary vocational education hard – their numbers fell by nearly 200 000 (a drop of 14.7 %). The workers with the lowest qualification (primary or unfinished secondary) were most affected – employment for them shrunk by more than 36 %.

The recovery of the market after 2012 benefitted those with secondary general education and particularly those with higher education. Employment among the latter increased by about 142 000 (or by about 17 %). The number of employees with secondary general education increased by about 35 000 people (or by nearly 6 %). The situation continued to be difficult for those with secondary vocational education – their numbers declined by nearly 86 000 (or by more than 7 %). According to MLSP, this was due to 'substituting employment' where jobs normally requiring secondary vocational education are taken by those with higher education. This is also a result of the ongoing restructuring of the Manufacturing sector during the post-crisis period (Figures 13, 14, 15).

A general overview of the impact of emigration on employment by educational degree is provided by OECD data for 2010–11. In terms of educational structure, the share of Bulgarians abroad with higher education reaches 26.5 % and 20 % for those staying in Bulgaria. One-in-three Bulgarian migrants employed abroad has higher educational attainment, but the share of people with such education in the home country is lower (28 % of those employed). 41 % of those employed abroad and nearly 60 % of those employed in Bulgaria have medium-level education. It is indicative that the Bulgarians with higher and secondary education employed abroad constitute respectively 15 % and 8.5 % of the employees with the same education degrees in Bulgaria. This is the root cause of the difficulties experienced by companies in hiring staff with appropriate skills, frequently discussed by the Bulgarian media (Table 7).

The shift in structure of the Bulgarian labour force by occupational groups during the period led to a drastic decline in low-skilled jobs. Craft and related trades workers and Clerks were replaced most often by Service and sale workers. That these professions do not imply high qualification undermines the stability of the market. The positive trend of increasing numbers of highly qualified personnel is gradually taking place, which is indicative of an improvement in the qualification level of the workforce.

During the crisis years 2008-2012, when employment in the country fell by nearly 430 000 people, those engaged in Elementary occupations (jobs not requiring particular qualifications) and Craft and related trades workers were hit the hardest. The number of low-skilled people fell by 140 000 (by 32 %) and for Craft and related

trades workers – by about 123 000 (23 %). Service and sale workers, and Professionals (ISCO 1 d) remained in good shape and slightly compensated for the overall collapse in employment. The number of those employed in such occupations increased by more than 110 000 for the former (by 21 %) and by more than 34 000 for the latter (by about 8 %). In 2012-16, the positive trend for Professionals continued – their number increased by more than 63 000 (an increase of 14 % compared to 2012). In contrast, a contraction of employment was seen (by about 9 000 people, or 1.4 %) in Service and sale workers. The demand for Craft and related trades workers and Clerical support workers continued to fall, albeit less than during the previous period (Figures 15 and 16).

The share of Bulgarians with professions requiring high and medium-level qualifications is generally lower among those abroad than those employed in the home country. The OECD-DIOC data used here allow a comparison of the professional structure of the Bulgarian population abroad with the domestic labour force. The observed controversial disparity is because one-in-three Bulgarians abroad is employed in an Elementary occupation.

If the professional structure was reviewed without taking them into account, a similar picture would emerge. The share of occupations in categories requiring high qualification (e.g. Professionals, Technicians and associate professionals) is higher in Bulgaria, albeit by only a few percentage points. Other professions are more frequently encountered abroad such as Service and sales workers and Craft and related trades workers, while others such as Plant and machine operators are more frequently encountered in Bulgaria (Table 8). A more detailed look at the professions – ISCO 2d (ISCO 2008 occupation) – shows, for example, that 14 % of the ICT Professionals and 7 % of the ICT Technicians are abroad. More than 5 % of the Legal, Social and Cultural Professionals and lower shares for the Science and Engineering and Health Professionals (3.3 % and 2.4 %) are also abroad.

The dynamics of domestic job vacancies reflected the evolution of the labour market during the crisis. NSI registered between 14 321 (in 2013) and 18 466 (Q4 of 2016) job vacancies⁶. In the 4th quarter of 2016, vacancies exceeded their annual average number from 2010. However, the structure of job vacancies by sectors varies over the years. Thus, in 2010 the greatest number of job vacancies were registered in Public administration – 3 685 vacancies (or 21.5 % of the total), while in 2016 (4th quarter) the highest number of vacancies was in Health and social work activities – 3 851 vacancies (20.9 %). The share of job vacancies in the Public administration and in Manufacturing has declined steadily, while increasing in Health and social work activities, Transportation and storage, Wholesale and retail trade, and Accommodation and food service activities. (Figure 16).

Nevertheless, the distribution of job vacancies by professions remains stable over the years (2010-15). Yet, if in 2010 the top three categories were Professionals (26.2 % of all job vacancies), Technicians and associate professionals (15.5 %), and Plant and machine operators (15.5 %), in 2015 the ranking was slightly different – Professionals (30 %), Plant and machine operators (16.8 %), and Service and sales workers (15.9 %). In 2015, compared to 2010, the greatest increase in demand was seen in Service and sales workers, Professionals, and Elementary occupations – respectively

⁶ The monitoring of individuals hired, hours worked, salaries and of other labour costs by the National Statistical Institute (NSI) provides information regarding the jobs available in the country by activities and professions.

by 47 %, 17.4 %, and 12.6 %. While for Technicians and associate professionals and Clerical support workers the drop in registered jobs was the most drastic, respectively 43.5 % and 31.2 %. i.e., the domestic demand for highly qualified specialists is supplemented by a demand for medium-level and low-skilled personnel, as many as 1-in-10 registered job vacancies do not require any qualifications (e.g. Elementary occupations, see Figure 17).

The Bulgarian economy has limited potential to attract high skilled migrants.

This is evident from the comparison between job vacancies by professions (NSI, 2010) and the breakdown, also by professions, of the number of Bulgarians abroad (based on OECD-DIOC 2010-11 data). In 2010, registered job vacancies represented 19-20 % of Bulgarians employed abroad as Professionals and Technicians and associate professionals, and between 12 % and 14 % of those employed as Managers, Clerical support workers, and Plant and machine operators.

For other professions, this percentage is small (2-5 %), indirectly confirming the statement that emigration exacerbates the deficit of professions requiring high and medium-level qualifications in the home country. It also limits opportunities for the low-skilled who then also consider emigration (Table 9).

The emigration of highly qualified personnel exerts an upward pressure on salaries in the home country.

While this is a way to compensate for the shortage of workers possessing certain skills, the receipt of funds from abroad also encourages people who have stayed at home to raise their wage expectations (IMF, 2016). It is no coincidence that the rate of growth of remuneration in Bulgaria is among the highest in the EU. It remains unclear how far this is due to the deficit in a range of professions generated by emigration, or to the low starting base. But the cumulative increase in wages of the employed and the nominal cost per unit of labour (UCL index) in 2013-15 poses certain risks for the fragile competitiveness of the Bulgarian economy.

The income inequality in Bulgaria is among the highest in the EU.

The ratio between the richest and poorest quintile increased from 6.1 in 2012 to 7.9 in 2016. That the difference between income inequality measures before and after taxation and payment of social transfers is among the lowest in the European Union highlights problems with the fiscal and social welfare systems. The elderly population in the country is exerting pressure for better social benefits, which the system cannot provide because of the outflow of people of active working age.

It is unlikely that the counter-stream of immigrants will balance the outflow of qualified personnel in the near future.

Considering that in 2016 only 195 people settled in the country under the EU Blue Card system, the process is in its infancy. Unlike the 1990s, since 2001 the country has seen a more significant influx of immigrants. If in the period 2001-2011 Bulgarian citizens who had stayed abroad predominated among them, after that the citizens of third countries became more numerous (Kaltchev, forthcoming). Despite the positive trends, the migration balance remains negative and the intensity of emigration high.

This means that between 1992 and 2011, the number of immigrants into the country reached 18,450 (given a gross emigration of 211 000 people). 7 913 held Bulgarian citizenship, 1 444 individuals held Bulgarian and foreign citizenship and 9 069 people only foreign citizenship. The intensity of emigration⁷ exceeded many fold the intensity

⁷ Intensity of emigration/immigration is measured by the average annual number of out-migrants/in-migrants per 1 000 of average annual population in the country.

of immigration: 25.7 % to 2.3 %. In 2001-11, the number of immigrants reached 131 000 people (given a gross emigration of 179 000 people). Most, 110 000, held Bulgarian citizenship, 8 037 held Bulgarian and foreign citizenship and 13 210 only held foreign citizenship. The intensities of emigration and immigration were more closely aligned – 23.4 % compared to 17 %. Since 2007, in conjunction with several information systems, NSI began to publish annual data concerning external migration, taking into account the declared change in domicile at home or abroad. The available information includes a limited number of indicators – gender, age and citizenship of those who have settled in Bulgaria and who have given up their residence in the country. During 2011-16, the number of emigrants reached 134 000, with 110 000 immigrants. The migration balance remains negative (-24 000 people). More than a half of those who have settled in Bulgaria are non-EU citizens (nearly 60 000), about 40 000 are Bulgarian citizens, and 10 000 are from another EU Member State. The intensity of emigration during that period was 18.6 % and immigration was 15.3 %.

5 Actions undertaken by Member States to address the outflows of skilled labour

The State Agency for Bulgarians Abroad and the Ministry of Labour and Social Policy (MLSP) are the agencies overseeing policy addressing the outflow of skilled labour. Since 2007, the Agency has run the initiative 'A Career in Bulgaria. Why Not?' and holds an annual forum to discuss employment exchange, this year being its 10th anniversary. Typically, 1 000–1 200 participants attend, many of whom have been educated in the UK, Germany or the US. The event is co-organised by 'Here & There' and 'Back 2 BG', NGOs set up by highly qualified young Bulgarians who have graduated abroad and are looking for professional opportunities in their home country.

Their mission is to maintain a network of highly qualified young Bulgarians, most of whom graduated abroad, and potential employers – local and international companies, state institutions, etc. It is difficult to assess the actual impact of this and similar forums – since their importance is somewhat symbolic. Nonetheless, they bring the issue to the attention of the relevant institutions and to the public and enable the sharing of professional success stories of young Bulgarians who have returned from abroad. The Agency (initially, in tandem with JobTiger company) uses the forums to establish and maintain contacts with people who have been educated abroad and to study their attitudes and interests. This information is summarised and regularly made available to the Parliamentary Committee on the Policies for Bulgarians Abroad.

In 2006 the Ministry of Labour and Social Policy instigated a network of Labour and Social Policy Offices (LSPO). They form part of the diplomatic missions of the Republic of Bulgaria in the European countries with larger Bulgarian communities. Currently, eight such offices are functioning with the Bulgarian Embassies in: Austria (Vienna), the Swiss Confederation (Bern), The Hellenic Republic (Athens), the Republic of Cyprus (Nicosia), the UK and Northern Ireland (London), Ireland (Dublin), the Kingdom of Spain (Madrid), the Federal Republic of Germany (Berlin). The heads of the offices are experts from the European Affairs and International Cooperation Directorate of MLSP. The purpose of the LSPOs is to support the implementation of Bulgaria's policy in the area of free movement of workers and the related coordination with the social security systems in the EU, to manage labour migration and to protect the interests of Bulgarian citizens in the labour and social sphere. Currently, these offices are running the following main activities:

- assistance for the labour mobility/migration and integration of workers – Bulgarian citizens;

- protection of the interests of Bulgarian citizens, engaged in employment in the territory of the respective states;
- providing information on the terms and procedure of engaging in employment in the territory of the respective states;
- developing the bilateral cooperation and contractual basis of the respective states with the Republic of Bulgaria in the field of labour and social policy.

The LSPOs provide information to Bulgarian and EU citizens, if the latter want to settle in Bulgaria. Also, proposals are under discussion to include further options to:

- provide information about the conditions for return to Bulgaria with the aim to find a job in the country;
- facilitate access to information from the Employment Bureaus in Bulgaria and the professions employers are looking for;
- clarify terms for setting up a business.

The transposition of EU *acquis* concerning the freedom of movement into Bulgarian legislation was initiated by the Act on Entering, Residing and Leaving the Republic of Bulgaria by EU Citizens and their Family Members. The provisions concerning the 'Single permit for long-term residence and work' and the stay of citizens of third countries for the purposes of highly-qualified labour employment were transposed by the Foreigners in the Republic of Bulgaria Act (FRBA, effective since 24 December, 2013). The Employment Protection Act (EPA) (effective since 1 January, 2002) enabling the EU *acquis* in the area of labour migration and the free movement of persons was introduced.

The Labour Migration and Labour Mobility Act (LMLMA) adopted in 2016 codified the subject matter, previously dealt with by various normative acts.

The latter Act prescribes the regulation of access to the labour market for workers – citizens of third countries; the exercise of the right to free movement; the employment of Bulgarian citizens during their free movement within the EU and the European Economic Area; the bilateral regulation of employment with third parties. This Act balances Bulgarian legislation with the directives concerning the rights provided for free movement of workers; the terms of facilitation of the process of entry and stay of citizens of third countries for the purposes of employment as seasonal workers, and as part of intra-corporate transfers.

Some provisions of the Regulation on Implementation of LMLMA caused debate between the employers' organisations and the MLSP.

Employers insisted that the requirements for hiring citizens of third countries for seasonal employment were too stringent (e.g. documents certifying education levels or declarations concerning the citizens of such countries working at the companies). Ministry representatives indicated that they had received more than 500 requests from employers for a total of 2 700 seasonal workers from countries such as Ukraine, Turkey, Moldova, Russia (primarily in the sphere of tourism). This led the Bulgarian authorities to propose bilateral agreements for workforce exchange with Ukraine, Moldova, and Armenia. These were welcomed by the employers' chambers but criticised by the trade unions. These agreements are difficult to consider as a long-term solution to the labour shortages problem. The recruitment of highly qualified specialists under the Blue Card system appears purely symbolic. According to data from the Employment Agency in 2016, such authorisations were issued to 195 people – citizens of 22 countries outside the EU.

Several provisions of the Act on the Policies for Bulgarians Domiciled Outside the Republic of Bulgaria, adopted in 2000⁸, also address the problem albeit indirectly. The Act envisages making it easier for Bulgarians, who are not Bulgarian citizens, to obtain access to the appropriate institutions, to engage in business activities and to receive education. These include offering material and other support for settling in Bulgaria (e.g. use of land from the state or municipal land reserves; obtaining beneficial credit for purchasing real estate and equipment), and for accessing education (offering the opportunity to apply for programmes to part-fund study costs). Initiatives from the Ministry of Education and Science are aimed towards the same goal, including the recent establishment of a Directorate on 'Educational Policies for Bulgarians Abroad'. In 2016, the quotas for enrolment of Bulgarians, who are not Bulgarian citizens, was increased from 400 to 1 000 students for studies in bachelor's and master's degree programmes, and from 12 to 20 for doctoral students.

6 Conclusions

The educational structure of Bulgarians abroad is more favourable than the population in Bulgaria and less favourable compared to other international migrants. The professional status of emigrants is indicative of a relatively lower competitiveness compared with other migrants. But the relative share of Bulgarians engaged in highly qualified professions abroad is significantly lower than in the home country, with a third employed in Elementary occupations. It is no coincidence that more than half of Bulgarian emigrants consider their job positions to be below their qualification level.

In summary, there is no evidence to support that highly qualified Bulgarians have a stronger motivation for migration. Nevertheless, 1-in-10 in the professions of Technicians and related professionals (ISCO skill level 3) intends to leave the country for good, and 1-in-10 in the professions of Craft and related trade worker (ISCO skill level 2) intend to leave for more than one year. In this respect, domestic students have a much higher motivation for migration. In practice, almost half are inclined to leave the country for various periods of time.

The duration of the stay abroad is different for the various educational and professional categories – individuals with higher education more frequently experience short-term stays (up to three months), while those with secondary vocational education experience stay for medium duration (3-12 months). One-in-two of the Managers and Professionals prefer short-term stays abroad, and 40 % of the Technicians and associate professionals prefer periods of more than one year.

The relatively high percentage of households with return migrants indicates less of a reduction of migration pressure in Bulgaria and more the strong dynamics of circular migration. Monetary transfers are one of the few positive consequences of emigration for a country such as Bulgaria. Although significant in volume, remittances as a percentage of GDP are far below the respective levels in most countries of the region. Empirical research indicates that remittances are oriented mainly towards the less-developed regions (such as the North Central region) and are used mainly for consumption. Therefore, the country needs to develop policies for the use of monetary transfers for investment and development at regional level. The emigration of highly qualified specialists has a contradictory impact on the

⁸ Published by State Gazette, No.30 of 11 April 2000, amended in SG No.58 of 26 July 2016.

value of transfers. More highly educated people certainly experience a more favourable income structure, but a relatively smaller proportion transfer funds to their relatives in the home country compared to the other educational groups.

The labour market situation has improved since 2012. Jobs in the traditional sectors of the economy have been declining. Initially, some were redirected to service sectors with relatively lower workforce productivity, but has recently been increasingly directed to sectors with higher added value (e.g. ICT; Professional, scientific and technical activities). The different employment levels of the various educational groups are indicative of problems in achieving a balance between the demand and supply of skills. Among those seriously affected are those with low qualifications and secondary vocational education. The re-orientation by professions has led to a substantial reduction of low-skilled jobs. Some professions with medium-level qualifications (e.g. Craft and related trades workers; Clerks) are being replaced by professions not requiring higher qualifications (Service and sale workers). There is also a positive trend of increasing highly qualified personnel (e.g. Professionals).

The Bulgarian economy has limited potential to offer 'options for return' for Bulgarians abroad. This is highlighted by the fact that registered job vacancies in the country represent 19-20 % of the Bulgarians employed abroad as Professionals and Technicians, and 12-14 % of those employed as Managers, Clerical support workers, and Plant and machine operators.

The State Agency for Bulgarians Abroad and the Ministry of Labour and Social Policy are stepping up their efforts to tackle issues concerning labour mobility and labour migration (including highly qualified personnel). The forum initiative 'A Career in Bulgaria - Why Not?' is a positive example. But it would be advisable to strengthen the offices of the labour attachés of MLSP at Bulgaria's diplomatic missions and to expand their functions in the provision of information about opportunities in the Bulgarian labour market.

Targeted national legislation to address the emigration of skilled labour (the Labour Migration and Labour Mobility Act) was enacted a year ago. In this context, it was positive that the MLSP considered proposals from employers' organisations for amending some provisions of the Regulation on the Implementation of this Act. This concerned provisions which complicated the opportunities for seasonal employment and intra-corporate transfers when hiring citizens of third countries.

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Annex

Table 1. Number and relative share of Bulgarian emigrants by major destination area

Major area of destination	1990		1995		2000		2005		2010		2015	
	Nr	%	Nr.	%	Nr	%	Nr	%	Nr	%	Nr.	%
WORLD	615 400	100	649 928	100	689 584	100	913 736	100	1 136 455	100	1 176 390	100
Developed regions	120 916	19.6	164 641	25.3	212 227	30.8	422 753	46.3	629 085	55.4	659 533	56.1
Developing regions	494 484	80.4	485 287	74.7	477 357	69.2	490 983	53.7	507 370	44.6	516 857	43.9

Africa	3 952	0.6	2 494	0.4	1 720	0.2	2 041	0.2	3 207	0.3	4 328	0.4
Asia	487 886	79.3	480 285	73.9	473 214	68.6	486 947	53.3	502 483	44.2	510 672	43.4
Europe	109 463	17.8	137 152	21.1	164 651	23.9	359 482	39.3	548 986	48.3	571 001	48.5
Latin America and the Caribbean	2 646	0.4	2 508	0.4	2 423	0.4	1 995	0.2	1 680	0.1	1 857	0.2
Northern America	11 453	1.9	27 489	4.2	44 546	6.5	59 841	6.5	76 499	6.7	84 544	7.2
Oceania	0		0	0	3 030	0.4	3 430	0.4	3 600	0.3	3 988	0.3

Source: <http://www.un.org/en/development/desa/population/migration/data/estimates2/estimates15.shtml>

Table 2. Bulgarian emigrants by major destinations in EU (2016)

	Number	Relative share by destination (%)	Relative share of EU-28 citizens (%)
Germany	228 734	35.8	6.0
Spain	130 501	20.4	6.7
Greece	78 696	12.3	38.1
Italy	58 001	9.1	3.8
Belgium	31 251	4.9	3.6
Austria	22 357	3.5	3.6
Netherlands	21 941	3.4	4.8
France	21 080	3.3	1.4
Czech Republic	11 004	1.7	5.6
Denmark	8 207	1.3	4.3
Portugal	6 722	1.1	6.4

Source: Eurostat

Table 3. Bulgarian migrants and other foreign born by educational attainment and occupation 2010-11

	Bulgarian migrants				Foreign born			
	Low	Medium	High	Total	Low	Medium	High	Total
Managers	1.1 %	2.4 %	6.2 %	3.3 %	3.3 %	5.6 %	11.6 %	6.8 %
Professionals	0.5 %	1.7 %	27.6 %	10.0 %	1.1 %	5.0 %	43.4 %	15.3 %
Technicians and associate professionals	1.9 %	4.7 %	11.5 %	6.2 %	4.5 %	15.8 %	20.5 %	14.2 %
Clerical support workers	1.9 %	4.6 %	8.2 %	5.0 %	6.2 %	13.8 %	8.3 %	10.1 %
Service and sales workers	13.4 %	21.6 %	14.8 %	17.1 %	20.9 %	21.0 %	7.8 %	17.0 %
Skilled agricultural, forestry and fishery workers	8.6 %	3.0 %	0.8 %	3.8 %	10.2 %	3.6 %	0.9 %	4.6 %
Craft and related trades workers	14.4 %	17.2 %	8.6 %	13.5 %	18.2 %	16.5 %	3.4 %	13.1 %
Plant and machine operators, and assemblers	9.2 %	12.2 %	5.7 %	9.2 %	12.2 %	9.4 %	1.8 %	7.9 %
Elementary occupations	49.1 %	32.6 %	16.7 %	32.0 %	23.6 %	9.3 %	2.3 %	11.1 %
Total	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %

Source: Author's calculations, based on OECD Stat DIOC_2010_2011_File_D

Table 4. Motivational factors by educational attainment

Share of respondents indicating "Very important" reason to leave Bulgaria	Higher payment	Better Professional realisation	Ensuring desired education	To support my family in Bulgaria	Foreign citizenship	I just do not want to live in Bulgaria anymore
Basic or lower	75.1 %	48.4 %	47.9 %	50.8 %	9.3 %	17.4 %
Secondary general	76.6 %	40.0 %	38.6 %	53.2 %	11.7 %	21.3 %
Secondary vocational	80.0 %	40.6 %	32.0 %	50.1 %	9.7 %	18.9 %
Higher	69.9 %	44.9 %	40.8 %	41.7 %	10.5 %	18.3 %
Total	76.2 %	42.9 %	38.0 %	48.6 %	10.1 %	18.8 %

Source: Author's calculations using unpublished data from the 2013 ERI at the BAS survey (survey conducted in the framework of the Bulgarian-Swiss project 'Migration and Transnationalism between Switzerland and Bulgaria: assessing social inequalities and regional disparities in the context of changing policies' / IZEBZO-142979).

Table 5. Motivational factors by occupations (ISCO 1d)

Share of respondents indicating "Very important" reason to leave Bulgaria	Higher payment	Better professional realisation	Ensuring desired education	To support my family in Bulgaria	Foreign citizenship	I just do not want to live in Bulgaria anymore to live in Bulgaria
Managers	59.4 %	40.0 %	40.6 %	37.5 %	18.8 %	20.0 %
Professionals	65.8 %	43.5 %	39.5 %	46.0 %	8.8 %	16.7 %
Technicians and associate professionals	93.5 %	48.4 %	29.0 %	51.6 %	22.6 %	18.8 %
Clerical support personnel	73.5 %	33.3 %	32.4 %	39.4 %	6.3 %	23.5 %
Service and sales workers	74.6 %	39.7 %	39.5 %	45.8 %	9.2 %	15.4 %
Skilled agricultural, forestry and fishery workers	89.5 %	52.6 %	52.6 %	72.2 %	11.1 %	22.2 %
Skilled workers and related craftsmen	79.0 %	36.2 %	34.6 %	57.1 %	11.3 %	15.2 %
Plant / Machine	79.2 %	36.2 %	27.3 %	46.8 %	4.3 %	26.1 %

operators and assemblers						
Elementary occupations	76.3 %	28.6 %	21.6 %	45.9 %	5.4 %	16.2 %
Total	74.8 %	39.4 %	35.8 %	48.5 %	10.1 %	17.8 %

Source: Sample survey, ERI at the BAS, 2013

Table 6. Estimates of the number of return and current migrants in/from Bulgaria

Annual average (last 5 years)	2007	2011	2013
Relative share of households with return migrants*	10.1 %	13.7 %	15.5 %
Number of households with return migrants	294 345	411 896	470 783
Return migrants per household	0.133	0.158	0.229
Number of return migrants	384 494	474 304	693 745
Relative share of households with current migrants**	7.4 %	7.1 %	10.7 %
Number of households with current migrants	213 908	212 189	326 285
Current migrants per household	0.097	0.090	0.159
Number of current migrants	280 435	269 604	483 990

Source: UNPA sample survey 2007; ERI at the BAS sample survey 2011; ERI at the BAS sample survey 2013

*Return migrant is an individual who has resided abroad for a period at least 3 months during the last five years, and at the time of the survey is located in Bulgaria;

**Current migrant is an individual who, at the time of the survey, resides abroad.

Note: The number of current migrants is lower in comparison with the data from other sources as the sample surveys referred here do not account for the migrants who no longer have relatives in the country.

Table 7. Bulgarians employed abroad and BGR residents employed in Bulgaria by educational attainment, 2010-11

Educational attainment	Low	Medium	High	Total
Employed abroad	23.8 %	40.8 %	33.6 %	100 %
Employed in Bulgaria	13.3 %	58.4 %	28.1 %	100 %
Employed abroad as % of employed in Bulgaria	21.8 %	8.5 %	14.6 %	12.2 %

Source: OECD_DIOC_2010-2011

Table 8. Bulgarians employed abroad and in Bulgaria by occupation, 2010-11

	Bulgarians abroad		Residents in BGR	
	Nr	%	Nr	%
Managers	7 406	4.8	223 425	8.4
Professionals	22 545	14.6	429 156	16.1
Technicians and associate professionals	14 027	9.1	271 248	10.2
Clerical support workers	11 409	7.4	210 473	7.9
Service and sales workers	38 695	25.1	581 593	21.8
Skilled agricultural, forestry and fishery workers	8 575	5.6	125 785	4.7
Craft and related trades workers	30 686	19.9	424 041	15.9
Plant and machine operators, and assemblers	20 882	13.5	403 117	15.1
Total	154 225	100	2 668 838	100

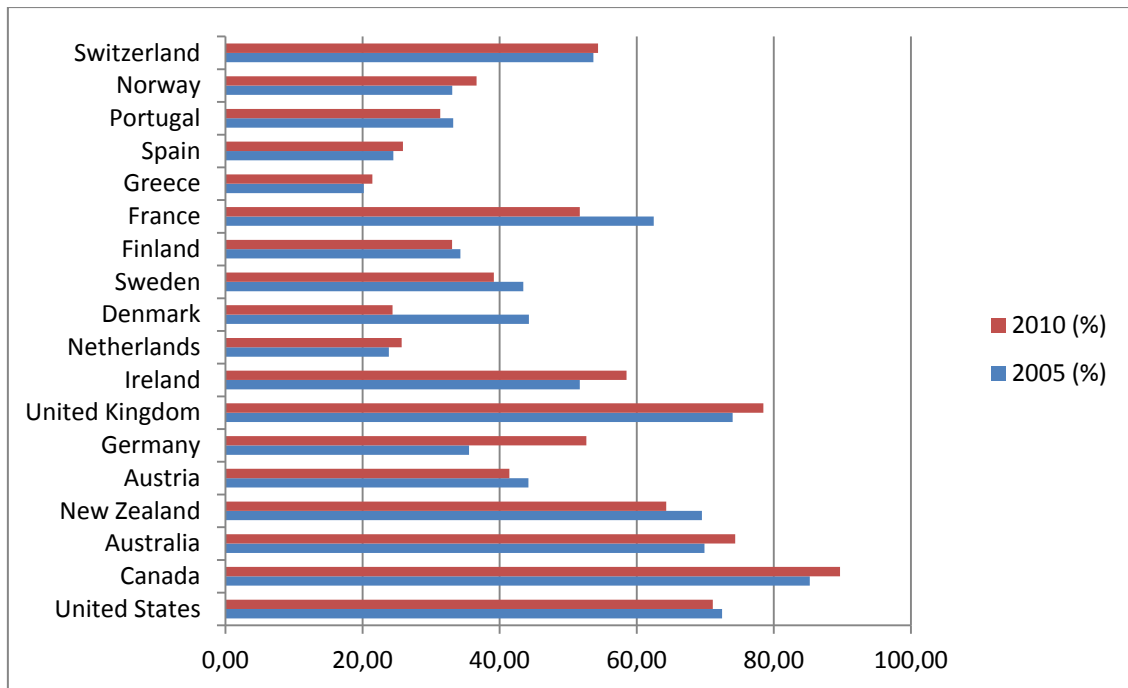
Source: OECD, DIOC, 2010-2011. Note: Excluding those employed in Elementary occupations

Table 9. Job vacancies and Bulgarian migrants by occupations

	BGR migrants by occupation, 2010-2011(Nr)	Job vacancies by occupation in Bulgaria, 2010(Nr)	Job vacancies by occupation in Bulgaria, 2015 (Nr)	JV as a share of migrants by occupation,2010 (%)
Managers	7 406	1 034	891	14.0
Professionals	22 545	4 494	5 274	19.9
Technicians and associate professionals	14 027	2 661	1 504	19.0
Clerical support workers	11 409	1 341	923	11.8
Service and sales workers	38 695	1 900	2 793	4.9
Skilled agricultural, forestry and fishery workers	8 575	115	83	1.3
Craft and related trades workers	30 686	1 466	1 478	4.8
Plant and machine operators, and assemblers	20 882	2 667	2 953	12.8
Elementary occupations	72 413	1 496	1 684	2.1
Total	226 638	17 174	17 583	7.6

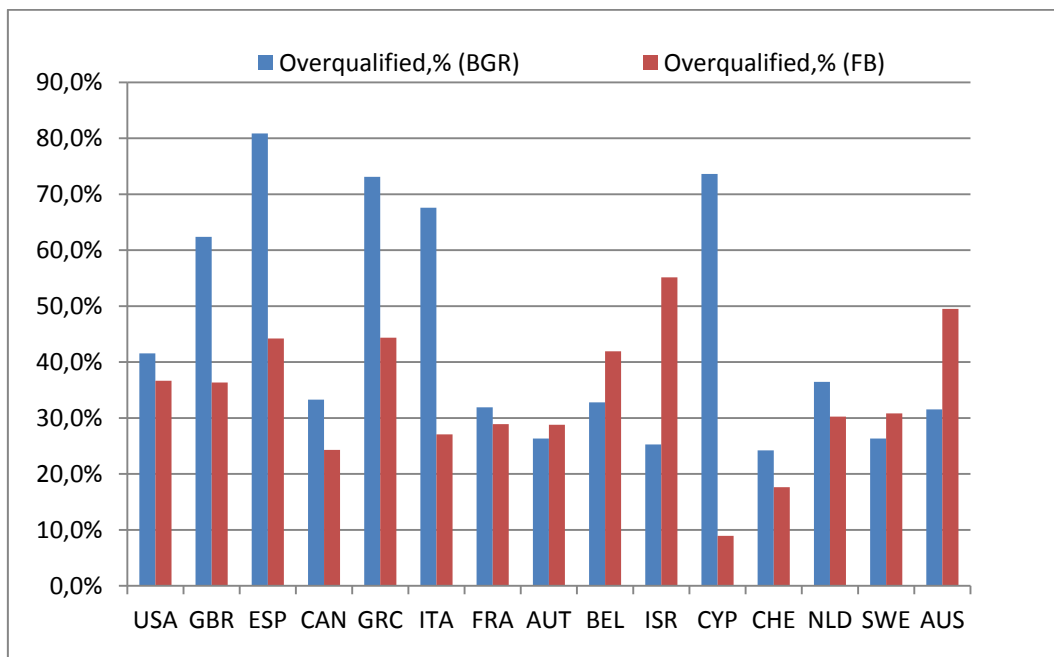
Source: OECD_DIOC; NSI, Bulgaria

Figure 1. Relative share of highly qualified migrants from Bulgaria by main destinations



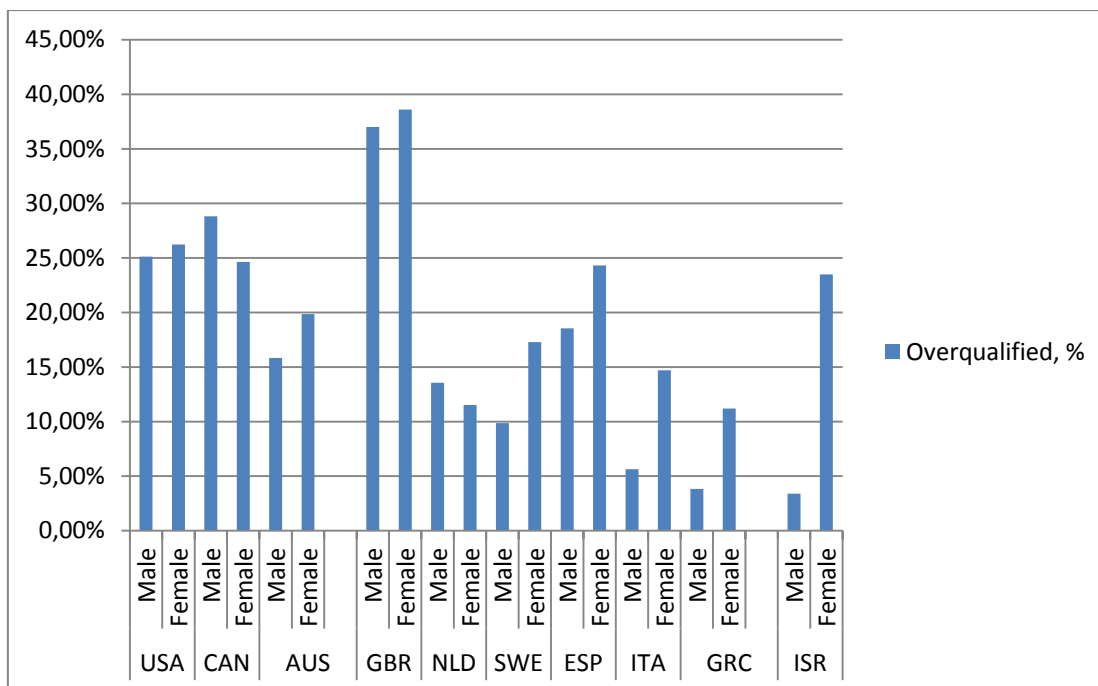
Source: IAB

Figure 2. Overqualified Bulgarian migrants and other foreign born by destinations (2010-11)



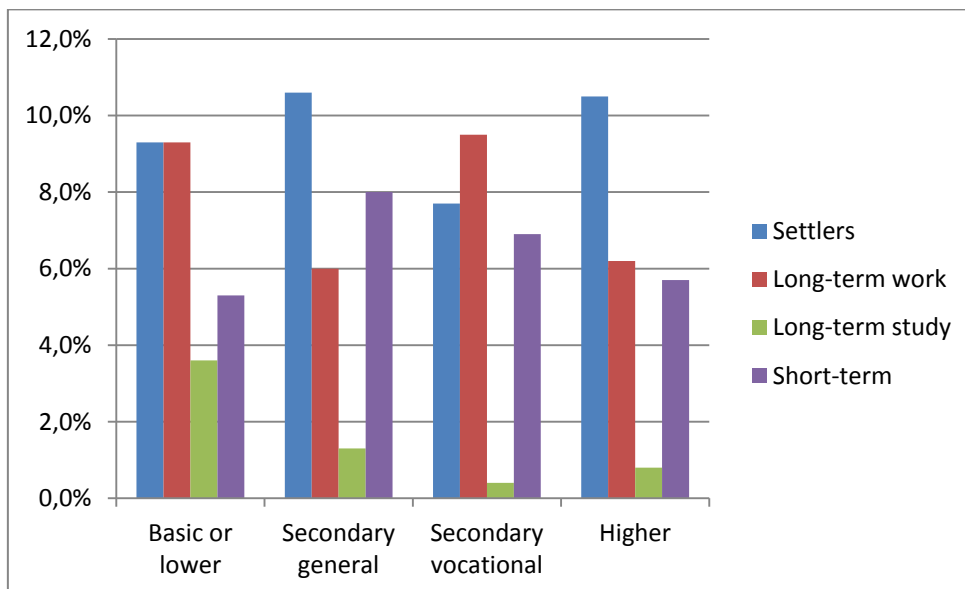
Source: OECD Stat DIOC_2010_2011_File_D

Figure 3. Overqualified Bulgarian migrants by gender and main destinations (2010-11)



Source: OECD Stat DIOC_2010_2011_File_D

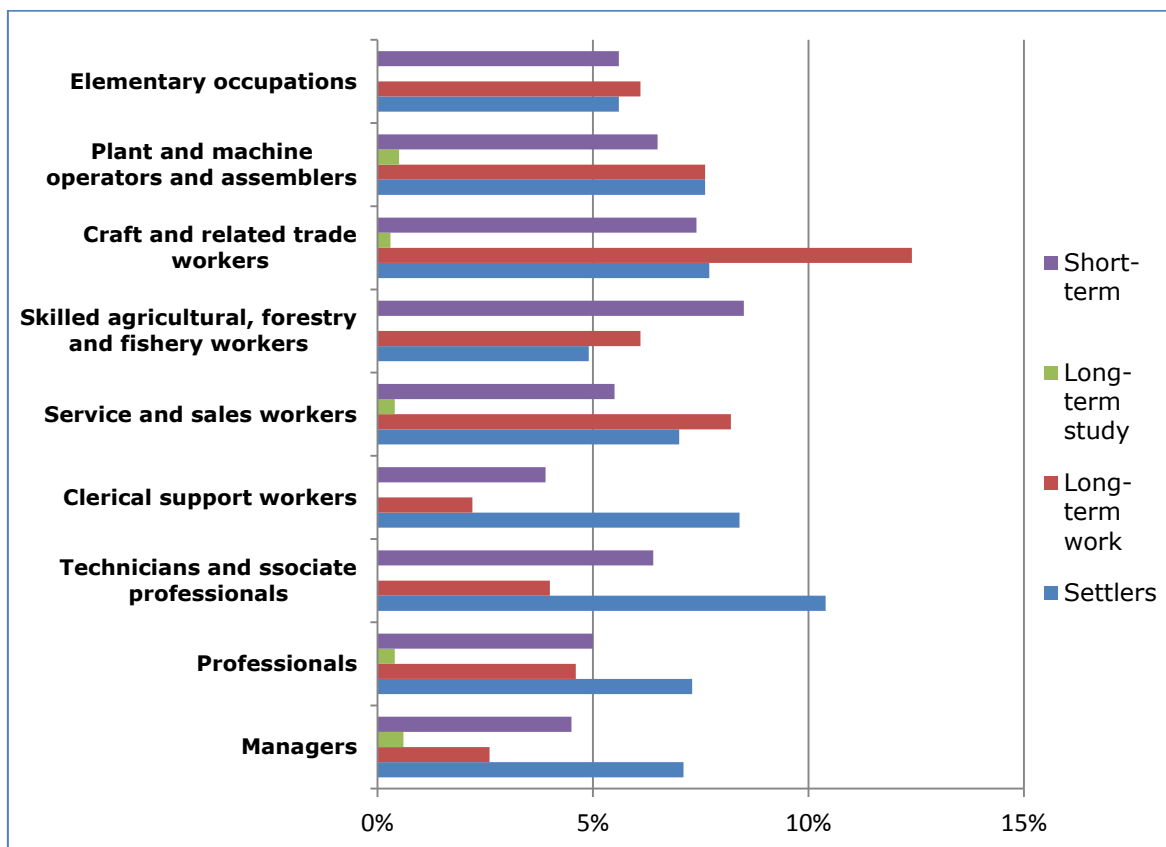
Figure 4. Migration attitudes by educational attainment



Source: Author's calculations using unpublished data from the 2013 ERI at the BAS survey (survey conducted in the framework of the Bulgarian-Swiss project 'Migration and Transnationalism between Switzerland and Bulgaria: assessing social inequalities and regional disparities in the context of changing policies' / IZEBZO-142979).

Note: "Settler" refers to an emigrant that has settled in a country as resident.

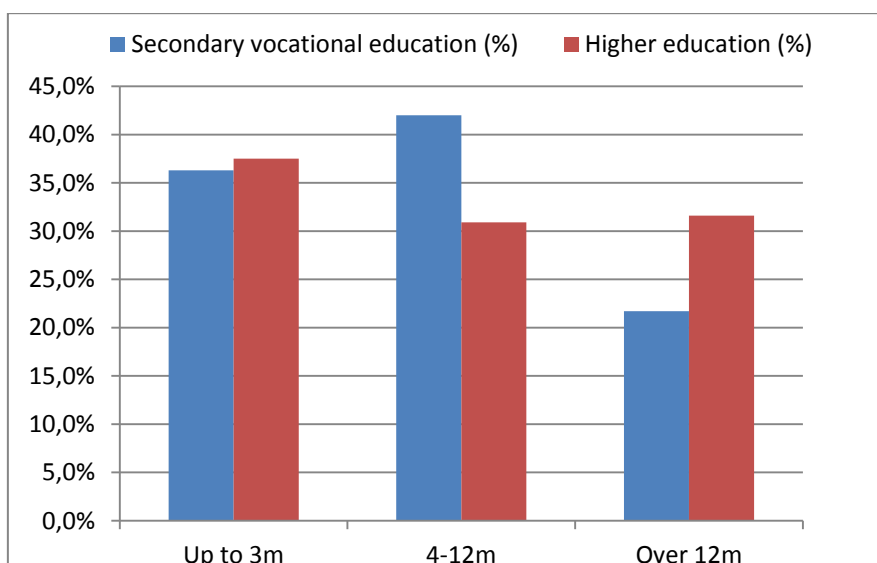
Figure 5. Migration attitudes by profession



Source: Author's calculations using unpublished data from the 2013 ERI at the BAS survey (survey conducted in the framework of the Bulgarian-Swiss project 'Migration and Transnationalism between Switzerland and Bulgaria: assessing social inequalities and regional disparities in the context of changing policies' / IZEBZO-142979).

Note: "Settler" means emigrant that has settled in a country as resident.

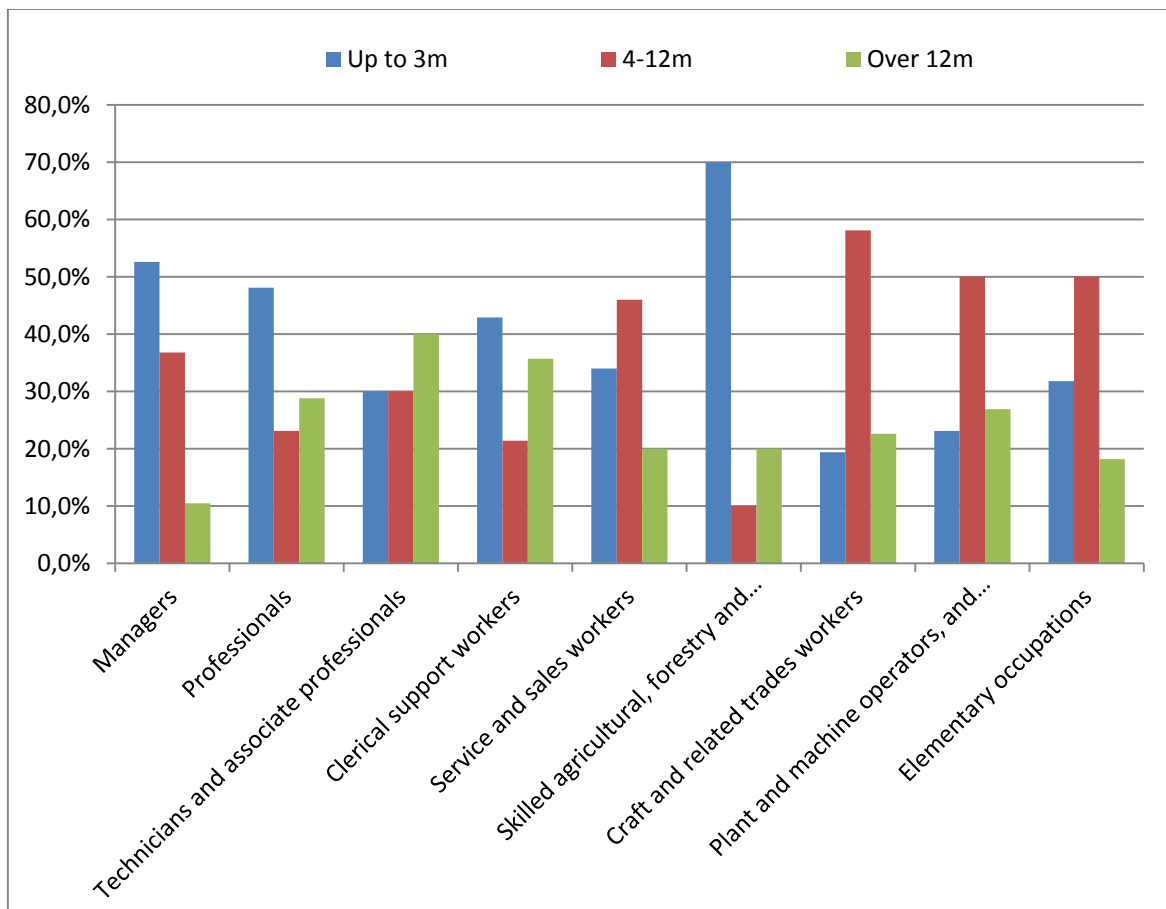
Figure 6. Length of stay abroad by educational attainment of Bulgarian return migrants (2013)



Source: Author's calculations using unpublished data from the 2013 ERI at the BAS survey (survey conducted in the framework of the Bulgarian-Swiss project 'Migration and

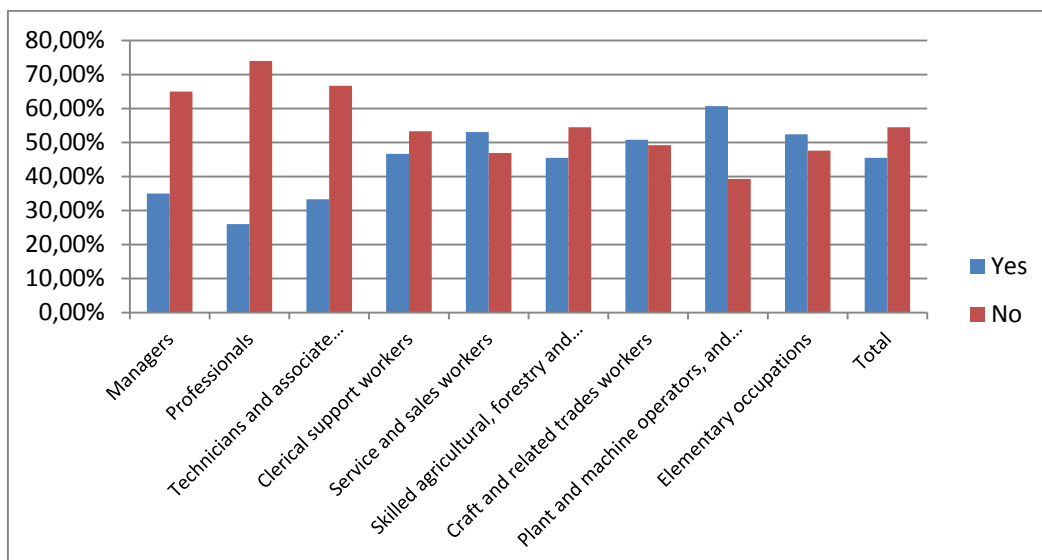
Transnationalism between Switzerland and Bulgaria: assessing social inequalities and regional disparities in the context of changing policies' / IZEBZO-142979).

Figure 7. Length of stay abroad by occupations of Bulgarian return migrants (2013)



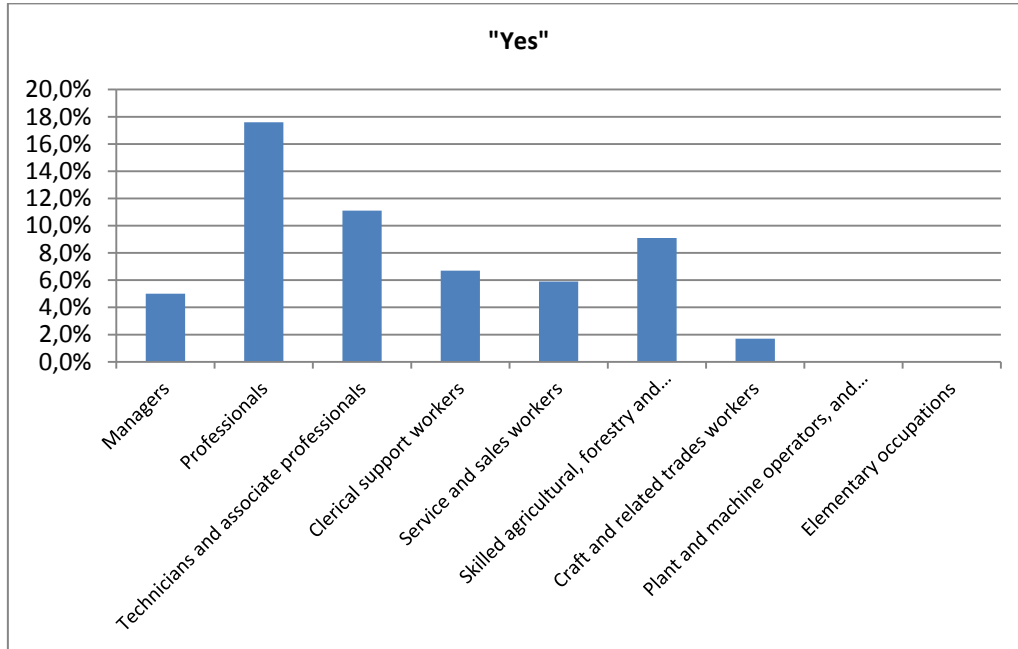
Source: Author's calculations using unpublished data from the 2013 ERI at the BAS survey (survey conducted in the framework of the Bulgarian-Swiss project 'Migration and Transnationalism between Switzerland and Bulgaria: assessing social inequalities and regional disparities in the context of changing policies' / IZEBZO-142979).

Figure 8. Transfers to Bulgaria by occupation – answer "yes"/"no"



Source: Author's calculations using unpublished data from the 2013 ERI at the BAS survey (survey conducted in the framework of the Bulgarian-Swiss project 'Migration and Transnationalism between Switzerland and Bulgaria: assessing social inequalities and regional disparities in the context of changing policies' / IZEBZO-142979).

Figure 9. Receiving transfers from Bulgaria by occupation - answer "Yes"



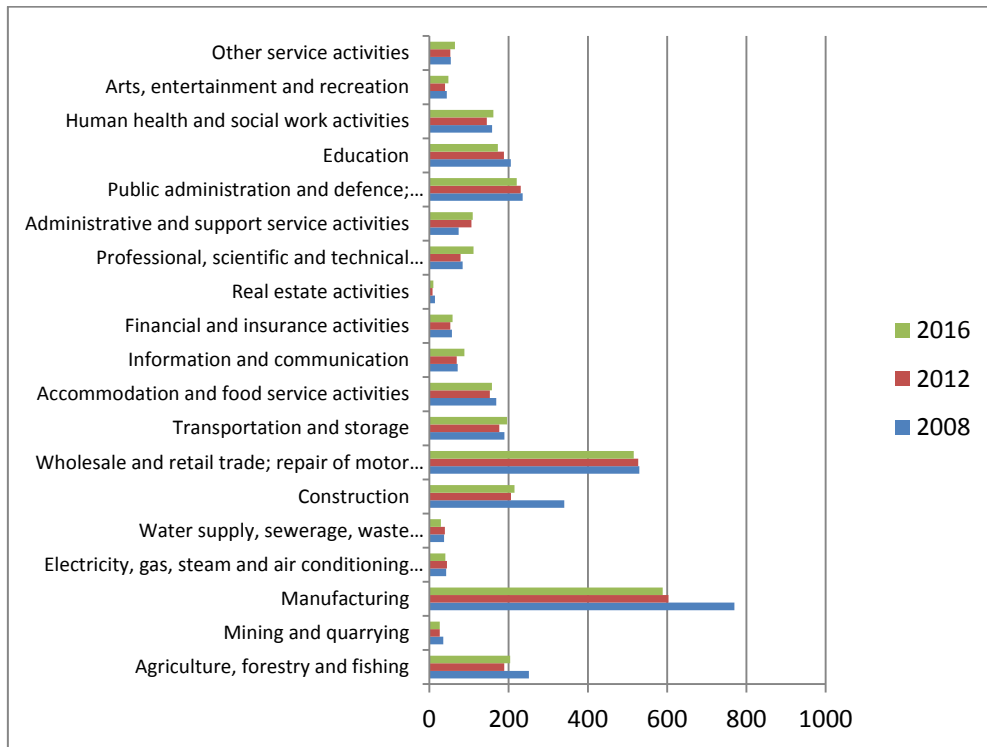
Source: Author's calculations using unpublished data from the 2013 ERI at the BAS survey (survey conducted in the framework of the Bulgarian-Swiss project 'Migration and Transnationalism between Switzerland and Bulgaria: assessing social inequalities and regional disparities in the context of changing policies' / IZEBZO-142979).

Figure 10. Employment level and employment rate in Bulgaria, 2008-16.



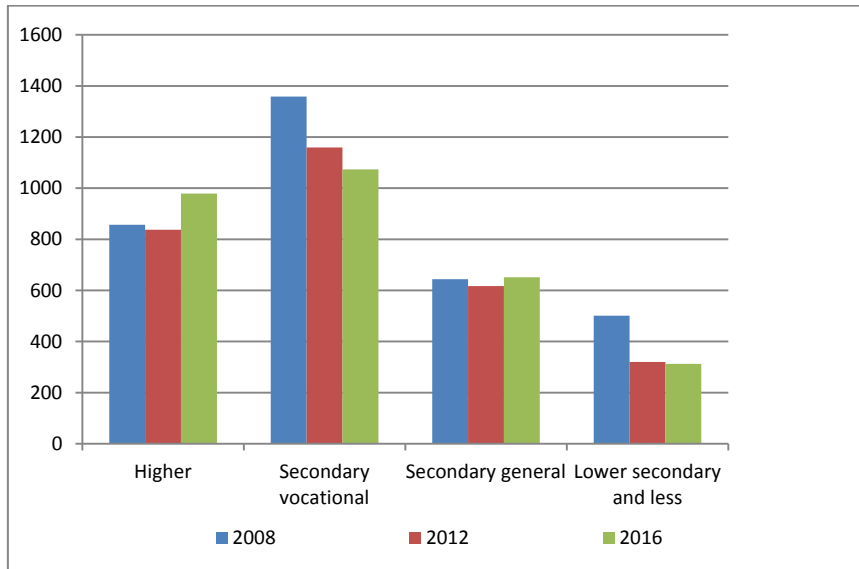
Source: MLSP, NSI, Bulgaria
 * Revised data - Break in series.

Figure 11. Employment by economic activities in 2008, 2012 and 2016 (000s)



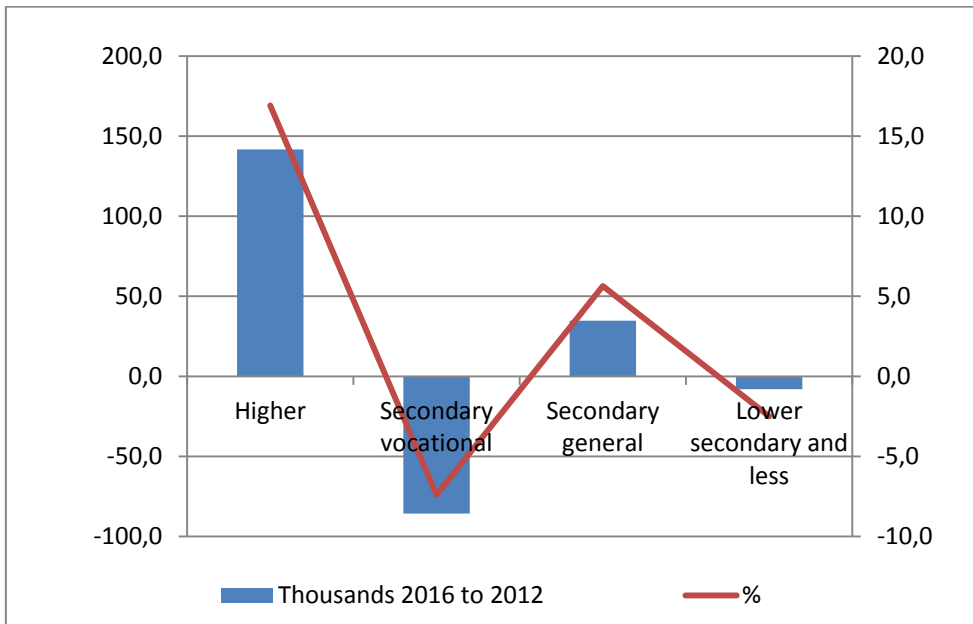
Source: MLSP, NSI, Bulgaria

Figure 12. Employment by educational attainment in 2008, 2012 and 2016 (000s)



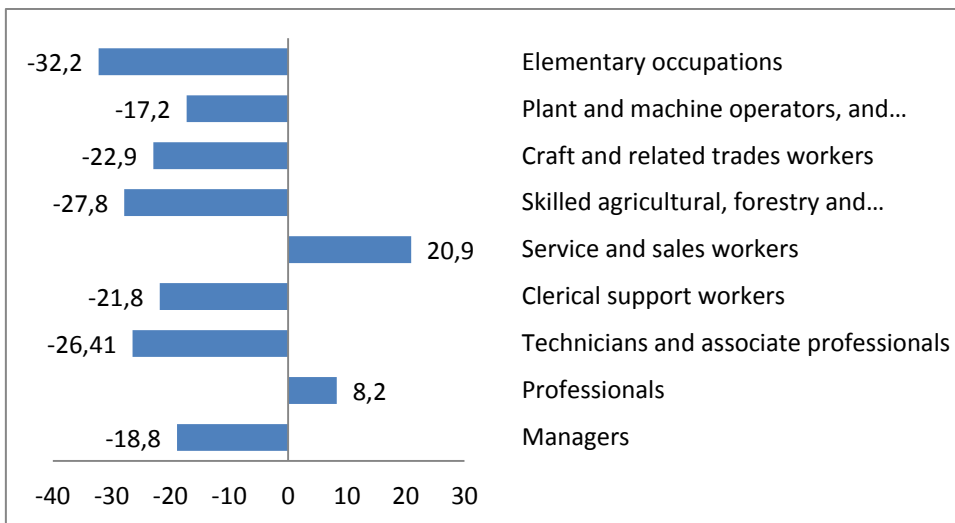
Source: NSI, Bulgaria

Figure 13. Changes in employment by educational attainment 2012-16



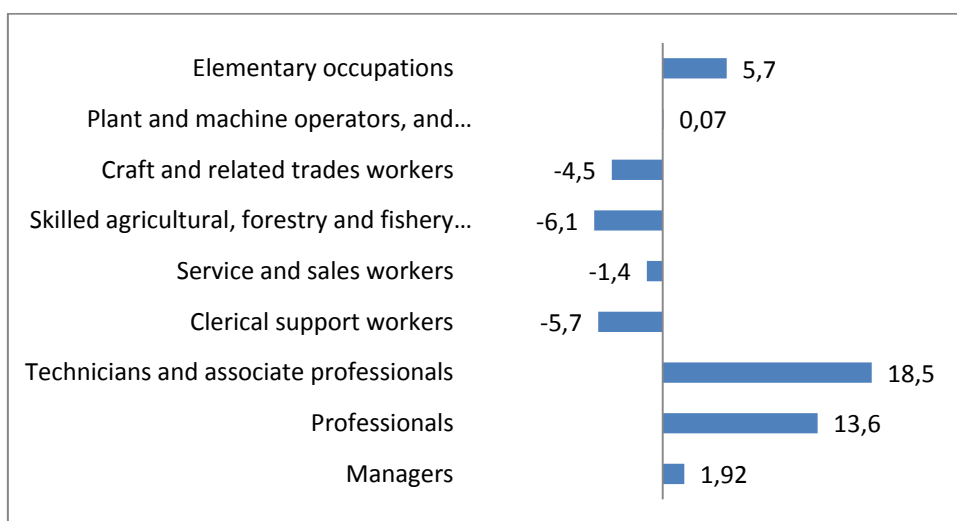
Source: NSI, Bulgaria

Figure 14. Changes in the employment by occupation (ISCO 1d), 2008-12 (%)



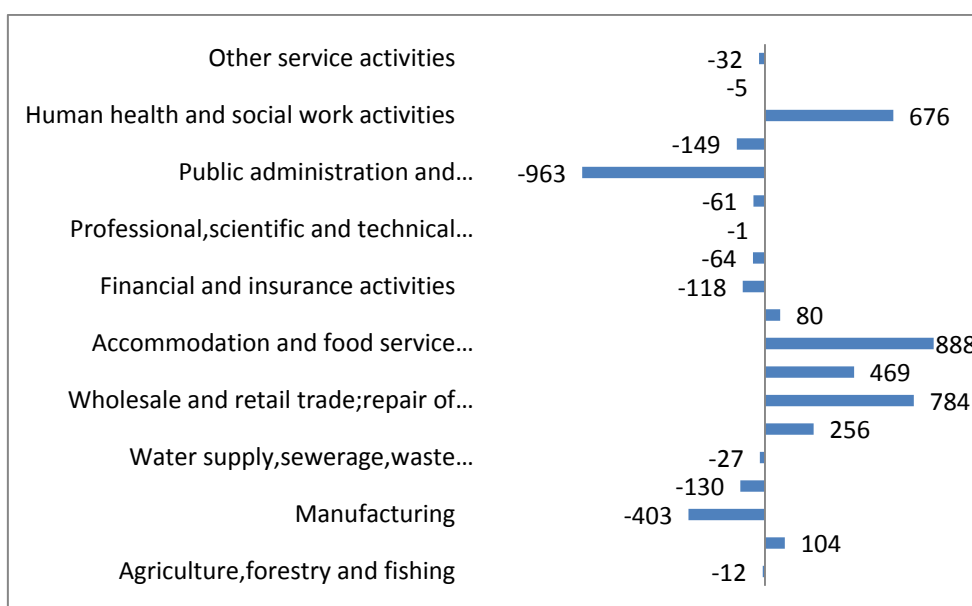
Source: NSI, Bulgaria

Figure 15. Changes in the employment by occupation (ISCO 1d), 2012-2016, (%)



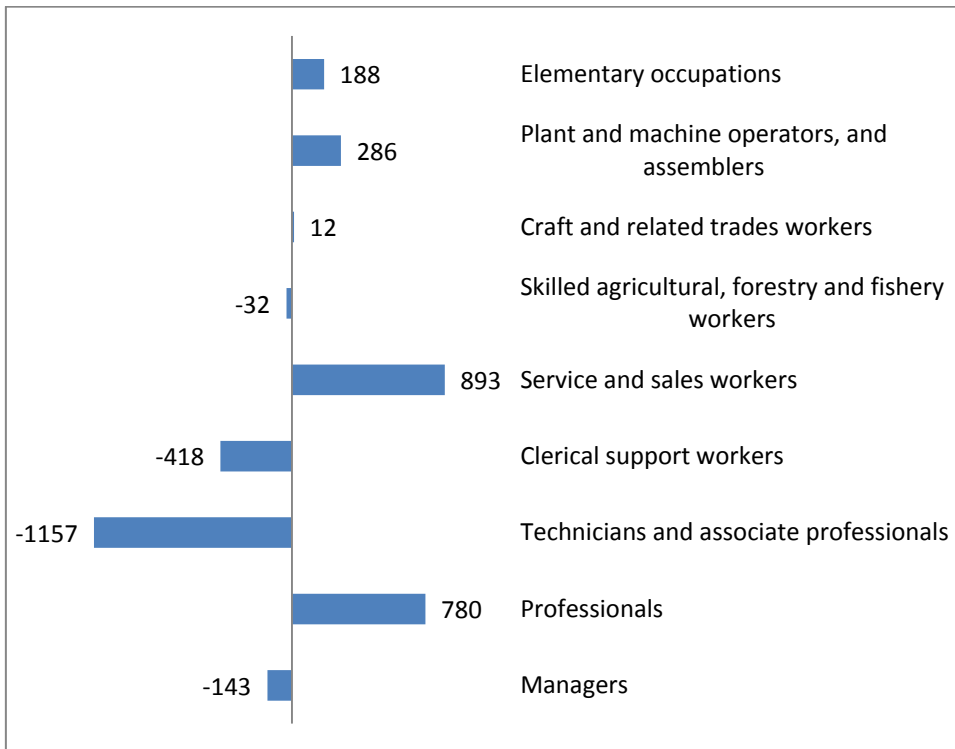
Source: NSI, Bulgaria

Figure 16. Changes in the number of job vacancies by economic activities in Bulgaria, 2010-16



Source: NSI, Bulgaria

Figure 17. Changes in the number of job vacancies by occupation in Bulgaria, 2010-16



Source: NSI, Bulgaria

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