

Bottleneck Vacancies in Bulgaria

Health care, ICT and manufacturing sectors affected

The majority of vacancies exist within health care, IT sector and manufacturing. Since 2008 the vacancies have decreased in size but the unsatisfied demand for high qualified labour force persists and affects almost all sectors.

Bottlenecks mainly in high-skilled occupations

Bottleneck vacancies mainly appear with high-skilled occupations, such as specific types of managers, engineers, specialist medical practitioners and IT personnel. There is also unmet demand within lower skilled occupations, notably within the tourism, trade and textile sectors.

All current bottleneck vacancies have been persistent or increasing since 2008.

The economic crisis and economic slowdown has decreased the demand as whole. At the same time it has induced a change in the qualification structure and increased the demand for high qualified personnel. As a consequence, the unemployment has grown although the unmet demand and the bottleneck vacancies persist.

Underlying reasons vary for bottlenecks

For bottlenecks within high skilled occupations, the main reason is a lack of qualified workforce (specialist medical practitioners, nurses, IT personnel, engineers). The lack of doctors and nurses is due to the significant flow of emigration of these specialists to other countries. The labour emigration influences also the offer of IT personnel on Bulgarian labour market. In lower skilled occupations, there exist unmet demand for experienced labourers. For instance, sewing workers, welders and drivers should have specialist competencies and good references.

No clear mitigation strategies

Bottleneck vacancies are a newly identified problem in Bulgaria. As a consequence the mitigation strategies for bottleneck occupations are not yet clarified. At national level some initiatives linking the education system with business have been undertaken. "Deficit professions" have been introduced in the subsidised vocational training. The state intervenes in the implementation of apprenticeships for students. Some opportunities have been created with the "Start to the career" programme.

Assessment of available evidence

 Medium. See page 5 for more information.



TOP 20 Bottleneck Vacancies in Bulgaria 2013*

Occupation (ISCO-08)	Development since 2008
Hotel and restaurant managers	→
Retail and wholesale trade managers	→
Agronomists	↗
Industrial and production engineers	↗
Civil engineers	↗
Electronics engineers	↗
Product and garment designers	↗
Specialist medical practitioners	↗
Nursing professionals	↗
Software and apps. developers [...]	↗
Database and network professionals	↗
Electronics engineering technicians	↗
Mechanical engineering technicians	↗
Administrative and executive secretaries	→
Hotel receptionists	→
Cooks	↗
Waiters	→
Welders and flamecutters	↗
Sewing, embroidery and related workers	→
Heavy truck and bus drivers	→

*Note: Occupations are not ranked due to the lack of quantitative information (see p. 5) Page 1

Top 20 Bottleneck Vacancies

The bottleneck vacancies have been identified using four main sources: Manpower employer surveys, 2011-2013, sector analysis reports on labour force competences developed by the Bulgarian Industrial Association, interviews with experts and statistical data of the National Statistical Institute and the Employment Agency.

Bottleneck vacancies mainly appear within high-skilled occupations, such as managers, engineers, medical specialists and IT personnel. The shortage of managers affects mostly the wholesale and retail trade and to some degree, accommodation and food service activities. Managerial positions are difficult to fill due to the lack of candidates with sufficient technical competencies.

The shortage of engineers has been increasing since 2008. It affects almost all sectors but it is mostly influential in the manufacturing, construction and information and communication sectors. The manufacturing sector also suffers in particular from a lack of electronics engineering technicians and mechanical engineering technicians.

Bottlenecks within less high skilled occupations appear in

particular in accommodation and food service activities. The lack of hotel and restaurant personnel is due to the high turnover in the sector as well as to the seasonality of the employment. Unfilled vacancies persist over the year but grow significantly before the beginning of summer season.

The lack of managers in fast developing sectors such as tourism and trade is caused by the lack of experienced people with qualification and skills relevant to the employers' requirements. For tourism personnel the demand sharply increases before the beginning of the summer season that makes the bottleneck.

Bottlenecks appear also in the manufacture of wearing apparel, with sewing workers in great demand in the sector. Almost all sectors are affected by the shortage of drivers.

The list has been compiled based on a Manpower employment survey 2013 and Bulgarian Industrial Association sector analysis of labour force competences. Occupations are not ranked due to the lack of quantitative information (see p. 5).

Rank	Bottleneck Vacancies ISCO-08	Skills level (ISCO-08)	Geographical aspects
-	Hotel and restaurant managers	HS	National
-	Retail and wholesale trade managers	HS	National
-	Agronomists	HS	Rural
-	Industrial and production engineers	HS	National
-	Civil engineers	HS	National
-	Electronics engineers	HS	National
-	Product and garment designers	HS	National
-	Specialist medical practitioners	HS	National
-	Nursing professionals	HS	National
-	Software and applications developers and analysts	HS	National
-	Database and network professionals	HS	National
-	Electronics engineering technicians	HS	National
-	Mechanical engineering technicians	HS	National
-	Administrative and executive secretaries	HS	National
-	Hotel receptionists	SNM	National
-	Cooks	SNM	National
-	Waiters	SNM	National
-	Welders and flamecutters	SM	National
-	Sewing, embroidery and related workers	SM	National
-	Heavy truck and bus drivers	SM	National

Main sectors with Bottleneck Vacancies

Sectors	Bottleneck vacancies
Accommodation and food service	Hotel and restaurant managers, hotel receptionists, cooks, waiters
Computer programming and data processing	Software and applications developers and analysts, database and network professionals
Human health and social work	Specialist medical practitioners, nursing professionals

Employers face recruitment difficulties in healthcare and social work sector, where there is a shortage of medical specialists and nurses and many hospitals particularly in small towns face serious difficulties.

The computer programming and data processing sector is developing rapidly despite the economic crisis, but its development is being hindered by a lack of IT specialists. Bottlenecks in the hospitality sector are due to seasonal demand and the shortage of qualified personnel.

Bottleneck problems in the service sector

The accommodation and food service sector is of significant importance for the Bulgarian economy, and has remained relatively unaffected by the economic crisis. The sector has slowly but steadily grown since 2008 until reaching the level of 144,000 people employed in 2011. Many institutions offering secondary and tertiary education propose programmes tailored to hotel and restaurants personnel.

Bottlenecks in the sector appear in particular at the beginning of the touristic season. Vacancies occur especially at middle management level and within occupations such as hotel receptionists, cooks and waiters. The main reasons for bottlenecks are the big demand and the lack of people with qualities and competencies that respond to the employers' requirements.

Main reasons for Bottleneck Vacancies

Lack of technical competencies

The main reason for bottleneck occupations is a lack of technical competencies. For engineering professions this can be partly explained by the transformation of the Bulgarian economy during the 90s when many specialists in the field lost their jobs. When new enterprises appeared several years ago, no specialists with relevant qualifications were left on the market. At the same time, young people have been unwilling to pursue this career. The lack of IT specialists is due simultaneously to the unpopularity of technical professions and the emigration of existing specialists to other countries. Bottlenecks in manufacturing are a consequence of the vocational training system lagging behind business needs.

Poor terms and conditions

For low qualified professions the main reasons are the unfavourable conditions (e.g. in the case of sewing workers) and the unsociable working hours (e.g. drivers). The shortage of personnel for hotels and restaurants is related to the seasonality of hirings and to the inability by candidates to match employers' requirements in terms of competencies. For medical specialists the shortage can be explained by emigration flows of doctors and nurses. The low wages and the unfavourable conditions in the sector explain the emigration to other countries in and outside EU.

Emigration of qualified workforce

In spite of the significant number of medical school graduates, the shortage of healthcare specialists—doctors and nurses, is persistent due to emigration. This phenomenon can be explained by the low wages in the country and the unattractive work conditions in the sector. The former is a common cause explaining the emigration flows in other highly qualified professions, e.g. IT specialists.

Initiatives to cope with Bottleneck Vacancies

Initiatives to mitigate bottlenecks are mainly carried out at the level of enterprises e.g. investing in the training in order to respond to skill gaps. However, employers' flexibility is reduced when it comes to highly qualified positions with managerial responsibilities, where the available labour force does not possess the expected competencies.

At the same time, mobility in the internal labour market is very limited: unemployed people are unwilling to move to other parts of the country to enter the job market.

Initiatives at the national level are mainly aimed at adapting the educational and training system to the employers' needs. Among these "soft" initiatives, the "Start to the career" programme, targeting young unemployed people, has had important results as it enabled many graduates to undertake a paid apprenticeship in public institutions or private businesses. However, given the size of the youth unemployment issue, its overall effects have been marginal.

Vocational competencies

In order to improve technical and soft competencies of graduates and align them with the employers' needs, a project that aims to develop and introduce an informational system for assessment of competences has been implemented since 2009. The project is based on the partnership between the biggest employers' association and the trade unions. The system named *MyCompetence* assists employers in the selection of personnel and in HR management. It is targeted to businesses, universities and vocational schools, public administrations as well as to jobseekers. Stakeholders have the opportunity to compare and harmonize standards of skills and competences related to different jobs.

Training

The programme "Start to the career" aims at creating opportunities for young unemployed people with secondary or tertiary level education to gain work experience and thus facilitate the transition from education to employment. The initiative is designed to prevent the loss of talents and the so-called "brain drain". Two groups are targeted by the programme: 1) Young people (up to 29 years old) with a university degree and without professional experience that are registered in PES, to be employed by public institutions. 2) Unemployed young people up to the age of 24 that must have graduated from vocational school within the past 24 months with no professional experience, to be employed by private companies.

Subsidized training

Active labour market policies are targeted to both employed and unemployed workers and are aimed at the acquisition of the required competences. The number of participants has been on the rise since 2011 reaching almost 180,000 beneficiaries. In 2012 over 84,000 unemployed people were successfully trained and gained access to the labour market, in addition to 37,000 already employed workers who benefitted from these programmes. In the same year the National Employment Agency implemented 17 programmes and 20 measures to boost employment, on top of the many schemes cofounded by the European Social Fund. The regional level has been active with 168 programmes.

Skill demand and supply

In Bulgaria forecasts of labour force needs are not conducted systematically, in fact there only exist one-off studies.

However, at the beginning of 2012, the Ministry of labour and social policy initiated a project called "Creation of a forecast system of needs of labour force with definite profile". The project will assist the planning of activities related to the vocational training and it is targeted to both employers and social partners. They will support the process of adaptation of the educational and training programmes to the real needs on the labour market, although the implementation of the project has experienced a 2 year delay.

Main sources used to identify Bottleneck Vacancies in Bulgaria

The bottleneck vacancies have been identified using four main sources:

- Manpower surveys on employment, 2011, 2012, and 2013, based on employers' opinion.
- 24 reports: Sector's analysis of labour force competences. Scarce jobs, professions (specialties), competences, (24 sector's analyses) developed by the Bulgarian Industrial Association.
- Interviews with experts on internal labour market.
- The statistical data of the National Statistical Institute and the Employment Agency (from the last quarter 2012)

The results from the four sources have been compared, in order to validate the findings and elaborate on the specific characteristics of each bottleneck vacancy.

Furthermore, explanations and reasons have been explored through desk research on press releases and news paper articles.

The mitigation strategies have been explored through the interviews and the desk research.

Overall, the data quality is assessed to be reasonable (medium).

The identification of the top 20 bottleneck occupations in Bulgaria faced serious difficulties. Quantitative information on the skill gaps is not available at the moment, with the exception of some researches which identify labour needs at 1-digit level of ISCO 08.

Two sources have been used for the development of the initial list of the 20 most important bottleneck occupations: the quantitative Manpower survey 2013 and the qualitative "Sector's analysis of labour force competences" (2012) made by the experts of Bulgarian Industrial Association.

Interviews with well-known experts in the field have also been conducted for the most important economic sectors. The latter have been used to complement, cross-check and verify the initial list: only occupations defined as bottlenecks by at least three of the interviewed experts have been included in the final list. The monthly bulletins and the annual surveys conducted by the National Employment Agency have been used as an additional validation technique.

Due to the lack of quantitative information the bottleneck professions could not be ranked.

Sources

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