



# SOFIA: ECONOMIC AND INVESTMENT PROFILE

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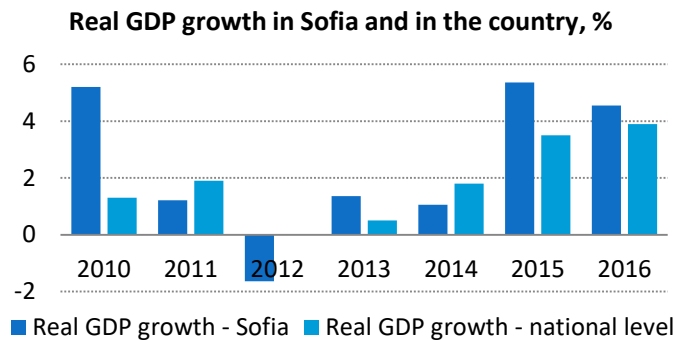
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## Abbreviations

<b>NEA</b>	National Employment Agency
<b>RIA</b>	Road Infrastructure Agency
<b>GDP</b>	Gross domestic product
<b>GVA</b>	Gross value added
<b>HEI</b>	Higher education institution
<b>TFA</b>	Tangible fixed assets
<b>IT</b>	Information technologies
<b>CPC</b>	Commission for Protection of Competition
<b>NSI</b>	National Statistical Institute
<b>PQA</b>	Professional qualification acquired
<b>FDI</b>	Foreign direct investment
<b>REI</b>	Regional Education Inspectorate
<b>SSGE</b>	Secondary school of general education

## Summary

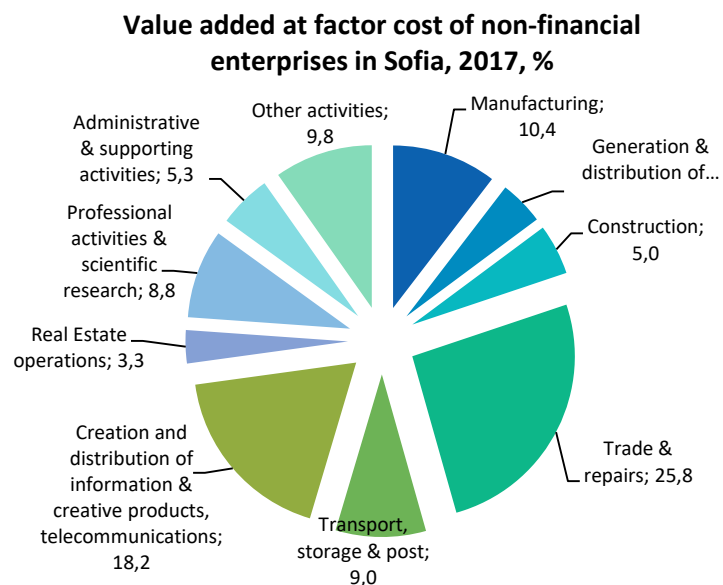


Source: NSI, Note: \*IME calculations

**Sofia is the biggest regional economy in the country.** About 40% of Bulgaria's GDP is produced in Sofia. The contribution of Sofia municipality to the national economy has been growing at a moderate but stable rate in recent years, which reflects the continuing concentration of economic activity in the Capital. **Sofia provides the highest living standard,** compared to the rest of the country.

Although Sofia was not spared by the economic crisis of 2008-2009, the recession was not as deep as in the rest of the country. Besides, the city managed to fully recover as early as 2010 and, since 2013, the economy of Sofia is expanding. **In the last two years – 2016 and 2017 – Sofia's economy marks a real GDP growth, significantly above the national average.**

Both the 2009 crisis and the last years of economic growth left a mark on the structure of the economy of Sofia region. The biggest change in the structure of Sofia's economy, that resulted from the 2009 recession, was the crisis in the construction sector. The sector shrank almost twice, reaching five per cent of the local economy in 2017 (according to preliminary data). At the same time, **the manufacturing industry has increased its weight in the local economy** after a series of investments in the areas of *Pharmaceuticals, Automotive, Cosmetics, Optics*, and so on. By 2017, the *Manufacturing industry* had a share of 10.4%, showing an increase of more than two per cent compared to its share before the crisis.

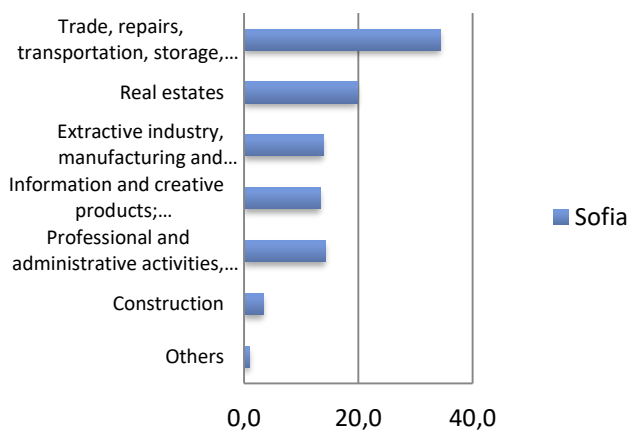


Source: NSI, Note: \*IME calculations

The same increase can be observed in the gross added value of the sector of **Administrative and supporting activities**, which include part of the **outsourcing industry** (the so-called service call centres). The other part of the outsourcing industry is included in the *Professional activities and research* sector. These two broad sectors of outsourcing, along with the IT industry (part of the *Creation and distribution of information and communication* sector), found favourable growth conditions in Sofia in the last few years due to the combination of educated workforce, knowledge of foreign languages and low labour costs.

Being the main economic centre in Bulgaria, it is no surprise that **Sofia attracts about half of the investments in the country**. According to the latest data, about 40% of the cost of tangible fixed assets and half of foreign direct investments were concentrated in Sofia region. By the end of 2017, the Capital had attracted € 12.2 billion of foreign investments or about € 9,200 per capita, which is nearly three times the average for the country.

Cumulative FDI by 31.12.2017, % of all



Source: NSI, IME calculations,  
Note: \*Preliminary data

investment, are the *Extractive industry, Manufacturing, Utilities, Real estate, IT and Outsourcing*. While real estate investments were made before the 2009 crisis, those in the *Extractive industry, Manufacturing, IT and business services* have been rising recently, in line with the rapid growth of these sectors.

**Sofia is also distinguished by a good absorption of EU funds**, which is a major source of public investment. By the end of June 2018, the Capital had absorbed BGN 3.6 billion. The largest beneficiary is the Metropolitan Municipal Company that manages the city's metro.

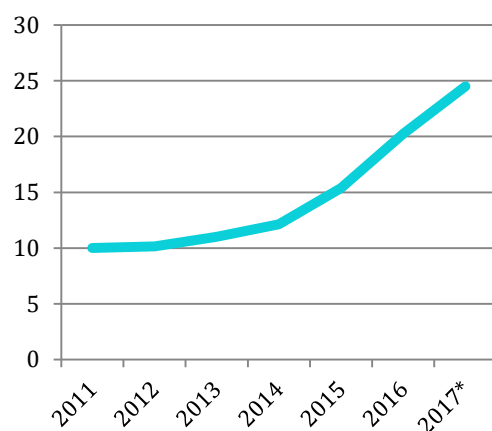
**The export revenue of Sofia-based enterprises has been growing rapidly since 2014, in line with the expansion of the city's economy**. About one-third of the country's export revenue is generated in the Capital. In 2017, the exports from Sofia exceeded BGN24 billion, indicating that a significant part of the city's economy is export-oriented.

While nearly 50% of the country's export revenue is generated in the *Manufacturing sector*, its share in Sofia is 18%. At the same time, the export generated by the sector of *Trade and Repairs* in Sofia reaches 44% of the total export revenue, compared to 26% for the country. The value of foreign exchange earnings from the *IT and Telecommunications sector* has a share of 14% in the total export revenue of the city's economy, compared to about six per cent in the national economy. There is also a difference in the sector of

**Given that services dominate the profile of the municipal economy; it comes as no surprise that most of the investments in Sofia are directed precisely towards the service sector**. The subsector of services, that attracts the largest share of investments in tangible fixed assets (29%), is the *Trade, repairs, transport, storage, post, hotels and restaurants*. Foreign direct investment (FDI) data also confirms the attractiveness of this sector for investments – 34% of all FDI by 2017 fall here. This is due to both the high income and consumption in the Capital and the fact that the city is a well-developed transport and logistics center.

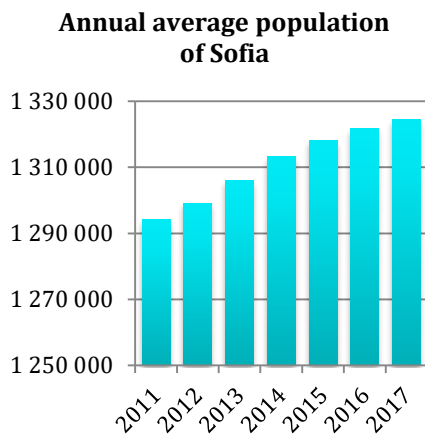
Other sectors, attractive for foreign

BGN equivalence of currency export revenue in Sofia, bln. BGN



Source: NSI, Note: \*Preliminary data

*Professional Activities and Research* – the share of their export earnings in the Capital is about six per cent compared to three per cent in the country.



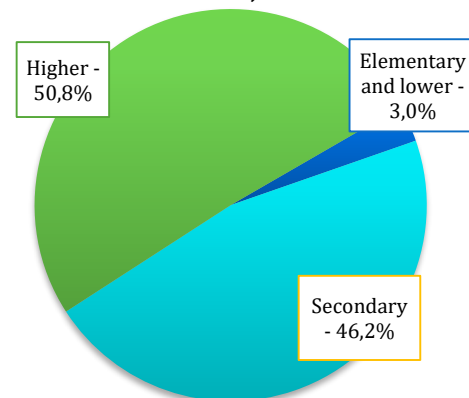
Source: NSI

As far as the workforce is concerned, **Sofia is characterised by a relatively young and highly educated workforce** and demonstrates the best demographic trends in the country. It is one of the six regions in the country, where more people settled in than left in 2017. The number of people, who moved to Sofia, is comparable to the number of people who moved abroad.

As a result, **the Capital not only continues to account for an increasing amount of Bulgaria's economic activity, but also attracts an increasing share of the country's population.** The natural growth in Sofia, although negative, is the most favorable in the country: -1.3 promiles for 2017. The aging of the population is also relatively slow, with age dependency ratios for the city being among the best in the country.

**In addition to attracting economically active people from other areas, Sofia is also characterised by a concentration of highly qualified population.** While in the country the share of the population with higher education is below 28%, in Sofia it is significantly higher - nearly 51%. The difference in the share of people with elementary and lower education is even higher - in Sofia the population aged 25-64 with elementary and lower education is three per cent compared to 17% in the country. This shows that Sofia has a concentration of mostly educated people, and the labour market is composed of relatively high-skilled labor force.

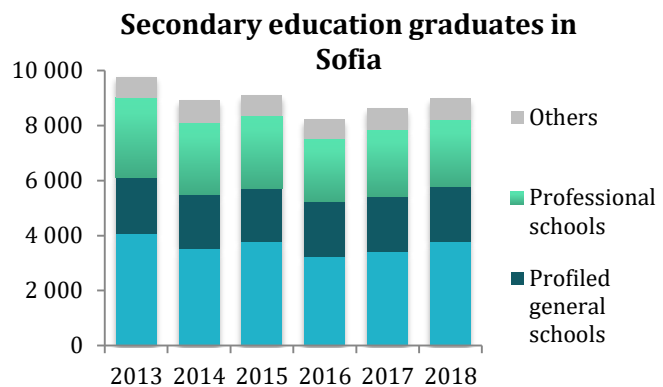
**Educational structure of the population aged 25-64 in Sofia, 2017, %**



Source: NSI

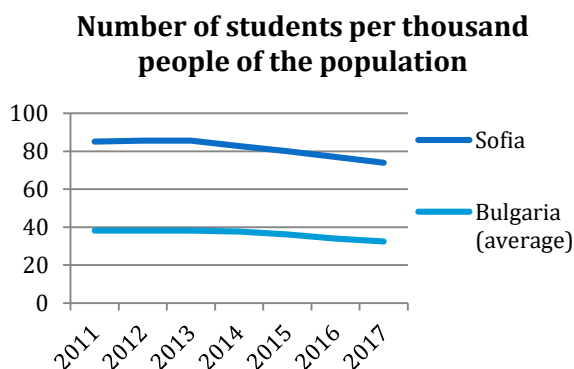
The education system of the Capital is well-developed. As Sofia is the region with the largest population and the highest number of children, most of the schools of all types and in all educational levels are concentrated here. **Students in Sofia demonstrate the best performance at matriculation exams**, traditionally showing the highest average scores and the lowest share of fail grades.

Over the last few years, about 9,000 students annually graduate from secondary education, with a gradual growth in the last two years. Another characteristic of Sofia is the comparatively low share of professional education graduates – a fact that can be explained by the smaller share of the *Manufacturing sector* in the city. While on average 1/2 of the students in secondary education in the country study in and graduate from professional schools, for Sofia this share is about 1/3.



Source: NSI

At the same time, **preferences for profiled secondary education remain high**. Nearly 70% of students in profiled schools study in language schools with focus on English, German, Spanish, French and other languages.



Source: NSI

As for higher education, 23 of the 51 accredited higher education institutions in the country are situated in Sofia. Moreover, **the top three universities with the highest accreditation rating (the Medical University, the University of National and World Economy and the Sofia University) are situated in Sofia** and attract the majority and the best quality of students. There are around 100 000 students in Sofia, accounting for over 40% share on a country level. In line with the trends in the country, the number of students in Sofia has been decreasing over the last few years (mainly due to demographic reasons), but the decrease is smaller than elsewhere.

A large part of the students from other areas remain in Sofia after completing their education – another factor for the city’s beneficial demography.

Given the concentration of highly-educated working-age population, it is not surprising that Sofia has the **highest employment rate – 75% in 2017, which is an absolute record both for the Capital and the country. Furthermore, Sofia has the lowest unemployment rates (less than three per cent) compared to all regions.**



**The highest share of employment remains in the sectors of Trade** – nearly 180 000 people or 1/4 of the labour force in the city. Since 2012, there has been a substantial rise in jobs in *the IT industry and professional activities* – a consequence of the boom in these sectors over the last few years. The number of employees in *Administrative and supporting activities* is also increasing, which can be partially attributed to the growth of the outsourcing industry.

Corresponding to the highest levels of employment in the country and the high share of industries that require highly qualified personnel, Sofia can boast salaries that are higher than the average in the country. In 2017, the **average annual salary in the Capital was BGN 15 700, which is more than 30% higher than the average salary in the country.** At

the same time, **unemployment in Sofia is mainly frictional** or voluntary, i.e. it results from the natural movement of people from one job to another or from relatively generous unemployment

benefits. The unemployment figures for Sofia show that out of the 15 000 registered unemployed in the Employment offices, 46% are with higher education and 31% with secondary professional education. In addition, nearly 60% of the registered unemployed are specialists (mainly in services, transport, economy and law). Given the level of specialisation and the relatively high educational level of the registered unemployed, it is not surprising that **only five per cent of the unemployed in Sofia remain registered for over 1 year** compared to 37% in the country.

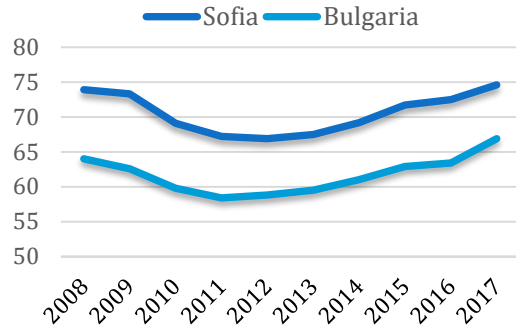
In addition to the educated workforce, **Sofia also offers relatively good infrastructural connectivity.** Sofia is among the main railway centers in the country. It is part of three European transport corridors and several highways start from the Capital, linking it with the Black Sea coast and the borders with Turkey, Greece and Serbia.

**The largest airport in Bulgaria** is also located in Sofia. Sofia Airport operates two passenger and two cargo terminals. Sofia Airport services more than 35 airlines, covering over 70 destinations and the number of passengers has increased by a record 30.3% in 2017.

Sofia is also the only city in the country with a metro, which currently serves about 380 000 people a day and continues to expand. Last but not least, Sofia also offers good internet infrastructure, with one of the highest internet speeds in Europe, and 3/4 of the population aged 16-74 has access to and regularly uses the Internet.

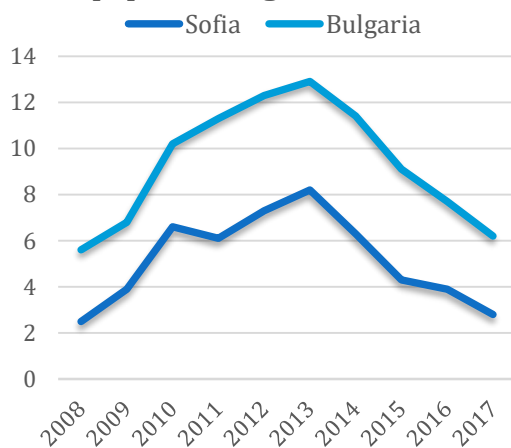
**The local tax environment in the Capital is stable and predictable.** Contrary to the general trend of increasing local taxes and fees in the country in the last few years, none of the main local taxes and fees has been changed for the last 7 years (2012-2018) in Sofia Municipality. Most local taxes and fees are similar to the average rates for the other regional cities. Exceptions are the relatively higher waste collection fee and patent tax for retailers.

Employment rate of the population aged 15-64, %



Source: NSI

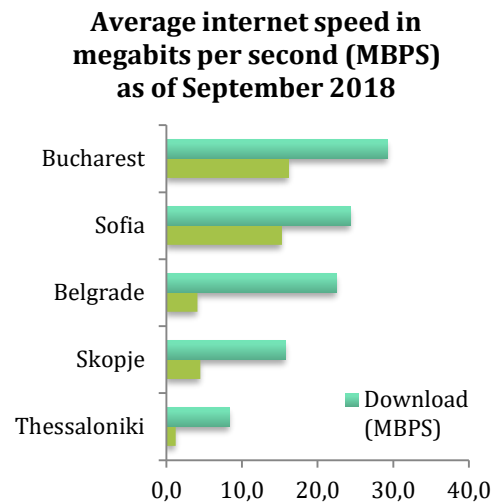
Unemployment rate of the population aged 15-64, %



Source: NSI

**Compared to its main competitors in the region, Sofia has a number of competitive advantages.** First of all, the low and proportional direct taxes – 10% flat tax on corporate profits and personal income. Only in Skopje these rates are at the same level; they are higher in the other countries in Southeast Europe. Other key advantages of Sofia are the low utilities and transport costs, while salaries and labour costs in general are comparable to those in other major cities in the region. Internet speed and accessibility are also among the advantages of Sofia.

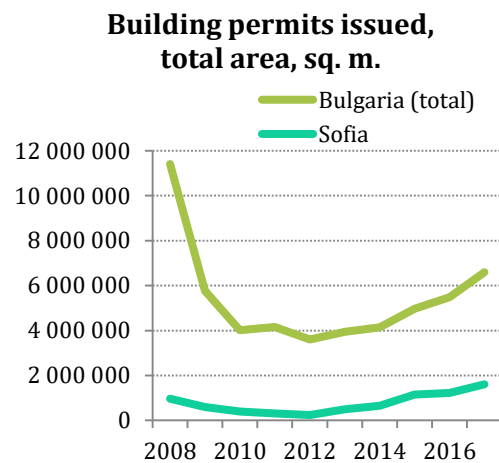
Overall, the prospects for the development of Sofia are positive. **The city will most likely continue to concentrate an increasing share of the economic activity in the country** due to its positive demographic processes and its leadership in the development of the fastest growing sectors.



Source: [testmy.net](http://testmy.net)

**The highly-skilled workforce will keep attracting investments in such rapidly growing sectors as the IT industry, Outsourcing of business services** and some **Manufacturing** activities with relatively high added value. The data from recent years also illustrates high investment levels in these sectors.

**Sofia is well-positioned to develop some new forms of economic relations such as the digital and shared economy services** due to both the appropriate IT infrastructure – highly educated people, high average internet speeds and numerous IT companies and specialists, and the large population.



Source: NSI

Most of the companies in the so-called **Creative industries** are concentrated in Sofia, and this sector has also been developing rapidly in recent years.

**The concentration of labour force and businesses in Sofia as well as the continuing increase of the local population are a good starting point for the development of Trade, Transport, Storage and Tourism.** Inbound tourism received a strong boost after two low-cost companies opened regular flights to and from Sofia.

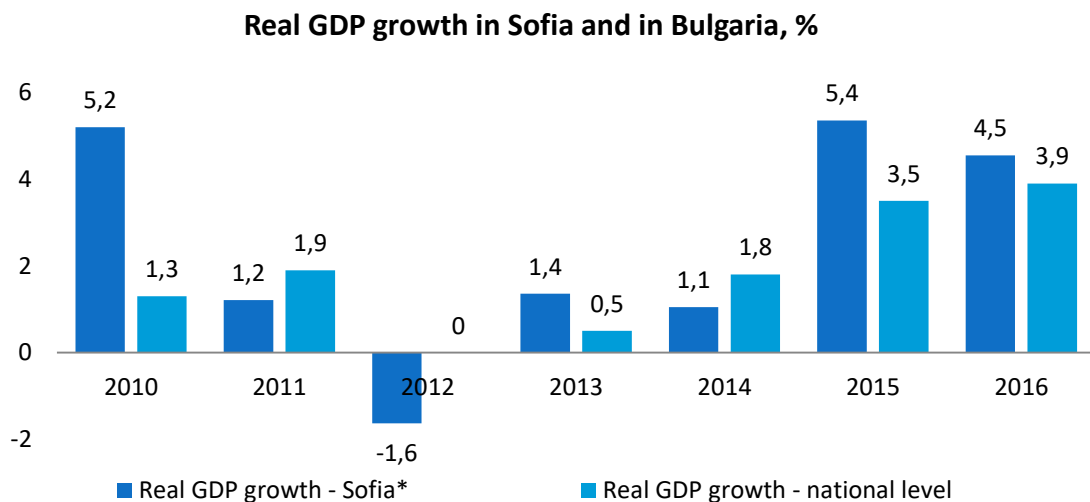
The **Construction industry** also has all the preconditions for growth in the coming years. Since 2015, there has been a rapid growth in the number of building permits, which in 2017 experienced record levels - higher than those in the years prior to the financial crisis.

## 1. Macroeconomic profile

### 1.1. Gross Domestic Product

**Sofia is the largest regional economy in the country.** The Gross Domestic Product (GDP) of the Sofia Region is BGN 37.6 billion for 2016, accounting for 40% of total Bulgaria's GDP. The contribution of Sofia to the national economy has been increasing moderately but steadily in recent years – for comparison, in 2008 the Capital produced 37.5% of the national GDP. This trend reflects the continued concentration of economic activity in Sofia.

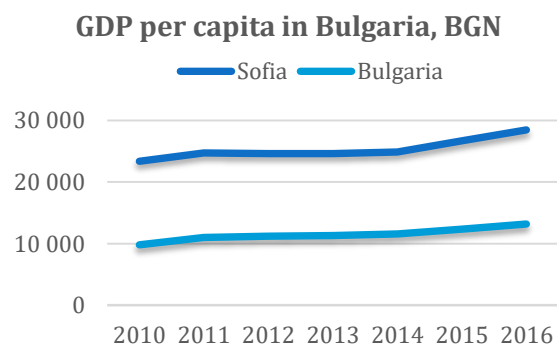
In addition to being the largest economy in Bulgaria, **Sofia provides the highest standard of living for its citizens compared to other regions of the country.** The GDP per capita is traditionally highest in Sofia (BGN 28 465 in 2016), and, since 2008, it is about 2.2 to 2.3 times higher than the average for the country. In comparison with the least developed regions in the country, it is over four times higher.



Source: NSI, Note: \*IME calculations

Although the Capital was not spared by the economic crisis of 2008-2009, **the recession in Sofia was less prominent compared to the decline in the overall national output.** In nominal terms, the gross domestic product of Sofia has not even stopped growing from 2008 onwards. In real terms<sup>1</sup>, the GDP of Sofia region shrank twice less than the national GDP drop.

Sofia experienced a **second contraction of its total output in 2012, that was not registered in the rest of the country.** This post-2008 economic development dynamic in Sofia was identical to the situation of the European economy, which many analysts compare to the letter *W*, where the initial decline in output in 2009 was followed by a further contraction in 2012. This parallel between Sofia's



Source: NSI

<sup>1</sup> I.e. after GDP deflated by the implicit deflator of national GDP because of the absence of regional deflators or price indices

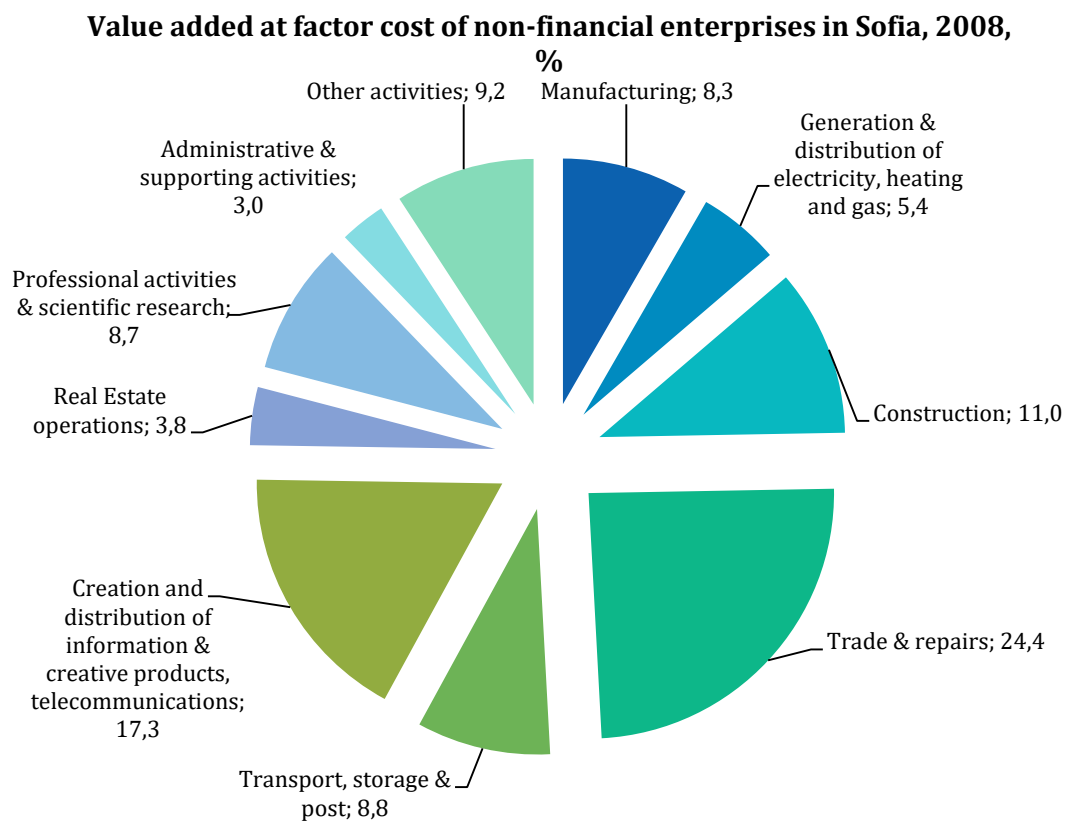
economy and the European economy suggests that Sofia's **economic cycle is much more closely tied to other EU member states** than to the other regions of Bulgaria. This fact is also reflected in the rapidly growing export earnings of the enterprises in Sofia, which determine the strong export orientation of the city's economy.

Latest data show a **sharp increase in Sofia's GDP in 2015 and 2016** (both in real terms and per capita), with growth rates significantly higher in the Capital than in Bulgaria as a whole. GDP in the country is also rising significantly – by 3.9% in 2017, but with a real growth of 4.5% Sofia is even further ahead of the economy in the rest of the country.

## 1.2. Structure of the Economy

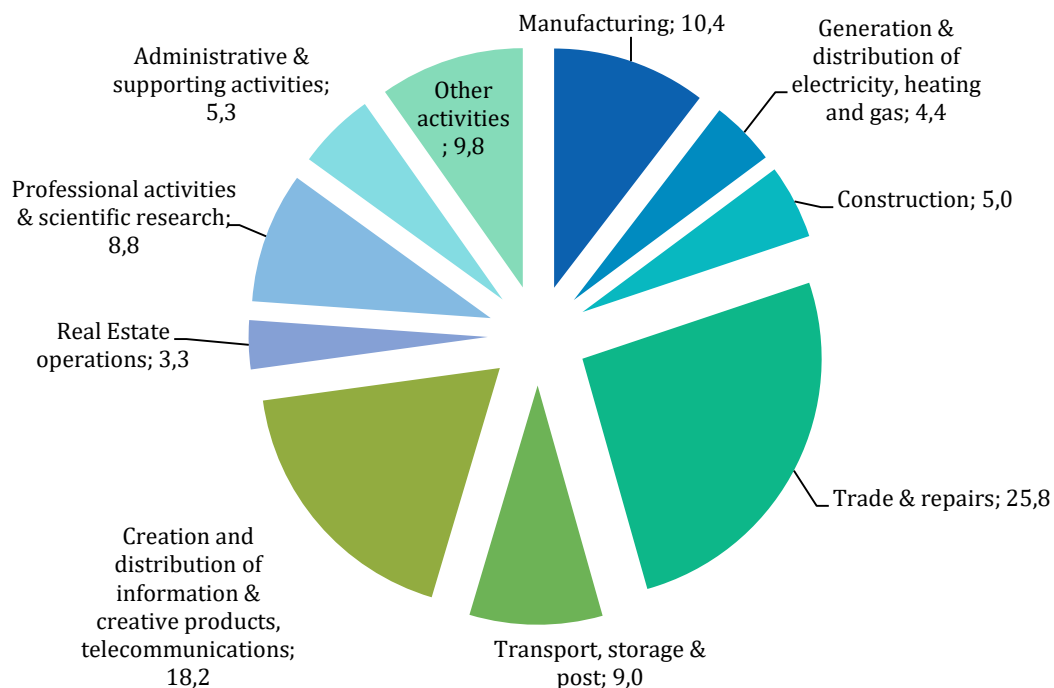
**Sofia's economy is dominated by the Service sector**, which produces over 80% of the regional GDP, while *Agriculture* continues to have a negligible share close to zero.

Statistics on the *value added at factor cost* indicator provide valuable insight into the structure of the real sector of the local economy.



Source: NSI, IME calculations, Note: \*Preliminary data

**Value added at factor cost of non-financial enterprises in Sofia, 2017, %**



Source: NSI, IME calculations, Note: \*Preliminary data

**The biggest change in the structure of Sofia's economy, following the recession in 2009, was the crisis in construction.** After the burst of the construction bubble and the tightening of the credit market, the sector shrank to half its size, with its share in the local economy declining from 11% in 2008 to below five per cent in 2017 (according to preliminary data).

At the same time, **the manufacturing industry has increased its weight** in the local economy, following a series of investments in new manufacturing facilities and already existing ones in pharmaceuticals, auto parts, cosmetics, optics and other. By 2017, the *Manufacturing industry* had a 10.4% share in Sofia's economy, or more than two per cent higher than its pre-crisis weight.

The same growth is observed in the sector of **Administrative and Supporting Activities**, which also includes part of the **outsourcing** industry (including call centres). A large part of the outsourcing industry also falls into the sector of **Professional Activities and Research**. There has been growth in recent years in both the professional services and the IT sectors (part of *Creation and Distribution of Information and Creative Products, Telecommunications* sector), which shows the ability of the local economy to attract and develop precisely such businesses. This is due to the combination of highly educated labour (including in technical fields), widespread foreign language skills and relatively low labour costs relative to other EU Member States and most of the Balkan region (for details see below).

The report *Sofia: The Outsourcing Industry*<sup>2</sup> from December 2017, prepared by IME for Sofia Investment Agency, shows the growing importance of the sector for Sofia's economy as well as the future development of outsourced services in the country in general. In 2016, the added value of the outsourcing sector in Sofia reached a record BGN 2.2 billion or about 50% above its 2011 level. Thus, the outsourcing industry is already creating 10% of the added value of Sofia's economy. The contribution of the sector in terms of output is similar too, with volume exceeding

<sup>2</sup> Sofia Investment Agency, [Sofia – Outsourcing Industry](#), 2017

BGN 5 billion as early as 2015. In the last five years alone, exports of services from this sector in Sofia have increased more than three times. The number of employees in the sector is also growing significantly. In 2016, the total number of employed reached 68 500 people, demonstrating an overall increase of 23% compared to 2011. As a comparison, the overall increase in the total labor force was eight per cent in Sofia and less than two per cent in Bulgaria.

The report *State and Development of the IT Industry in Sofia*<sup>3</sup>, prepared by IME for Sofia Investment Agency and published in November 2017, outlines the rapid development of the IT sector in Sofia in recent years. Between 2011 and 2015, the sector's share in Sofia's economy increased from 3.8% to 5.7% of the total output, reaching almost 50% in the broader ICT sector. Sofia's IT sector is also generating an increasing share of Bulgaria's exports, with export revenues from IT firms reaching BGN 1.2 billion in 2015 or nearly nine per cent of the total exports of services of the country. The cumulative foreign direct investments in the IT industry grew by 70% in 2015 compared to 2011, reaching € 261 million by the end of 2015. The annual expenditure of tangible fixed assets in the IT sector of Sofia is also growing rapidly – with 53% between 2011-2015, reaching BGN 123 million. Thanks to the significant investments, the IT industry is intensively creating new jobs. Between 2011 and 2015, the number of people employed in the sector in Sofia grew by about 50% reaching 40 400 people.

The latest available data (including preliminary data for 2017) shows that both the IT and the outsourcing sectors maintain their strong position in Sofia.

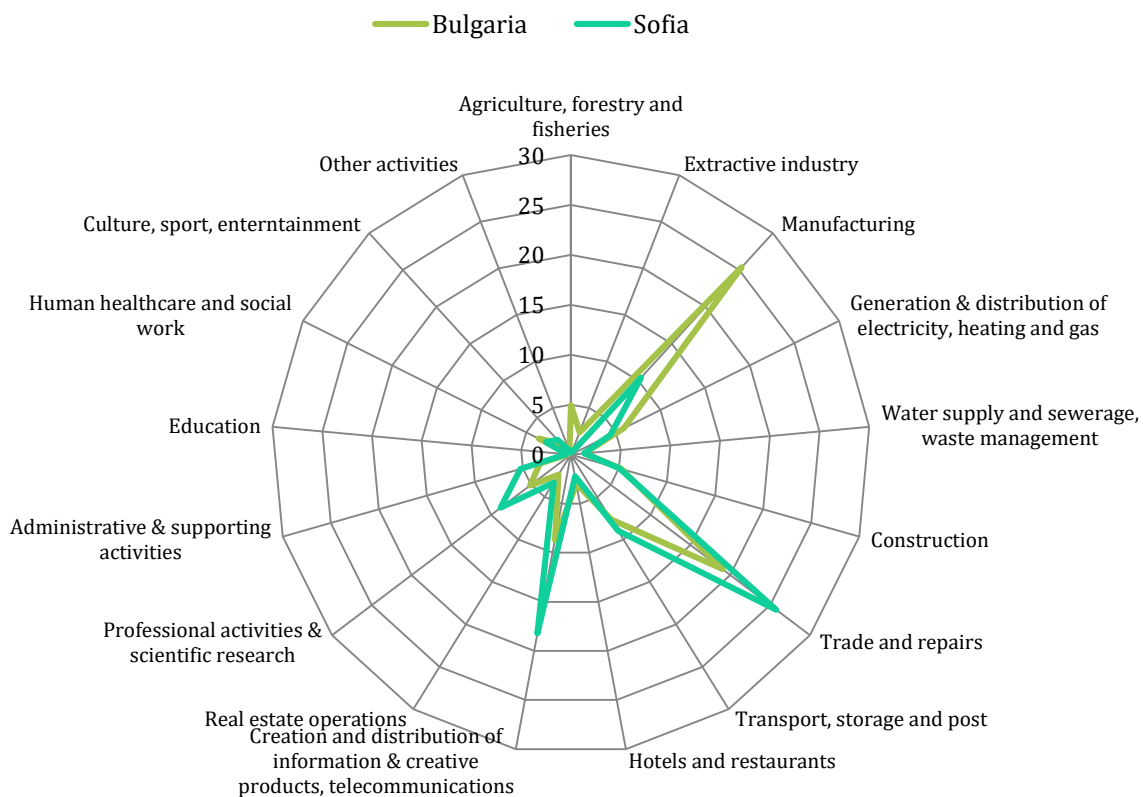
Compared to the national economy **the structure of the non-financial sector in Sofia differs considerably, which to a great extent also illustrates the comparative advantages of Sofia Municipality** over other parts of the country. For example, the economy of Sofia is dominated by the sector of *Trade and Repairs*, on one hand, and the *Creation and Distribution of Information and Creative Products and Telecommunications* on the other. The sector of *Trade and repairs* constitutes more than 1/4 of Sofia's economy compared to less than 1/5 of the national economy. The sector of *Creation and Distribution of Information and Creative Products*, together with *Telecommunications*, have a share of about 18% or twice as much as the average of nine per cent for the country.

The main reasons for the far greater weight of these sectors in the city's economy are the higher income levels and the significant population concentration in the Capital, which imply higher purchasing power and consumption than in the rest of the country. The concentration of the IT industry and the telecommunication services market in Sofia is the main factor behind the doubled share of the *Creation and Distribution of Information and Creative Products, Telecommunications* sector.

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<sup>3</sup> Sofia Investment Agency, [Sofia – State and Development of the IT industry](#), 2017

Structure of the non-financial sector in Sofia and the country, %, 2017\*



Source: NSI, Note: \*Preliminary data

The same applies to the sector of **Professional Activities and Research**, which in Sofia has almost twice the share it has on a national level– nine per cent and five per cent respectively. The reason behind this is the rapid development of the outsourcing industry in Sofia in recent years and the significant investments in the sector.

### 1.3. Investments

**The majority of the investments in Sofia are directed towards the service sectors.** The structure of the investments in Sofia differs significantly from that in the country, and to a large extent the differences are predetermined by the very structure of the city's economy. Considering that the local economy is dominated by services at the expense of the almost non-existent *Agriculture* and the significantly lower share of the *Extractive industry* and *Manufacturing*, compared to the average for the country, it is no surprise that **investments in Sofia are directed precisely towards the service sectors.**

#### 1.3.1. Expenditure for acquisition of tangible fixed assets (TFA)

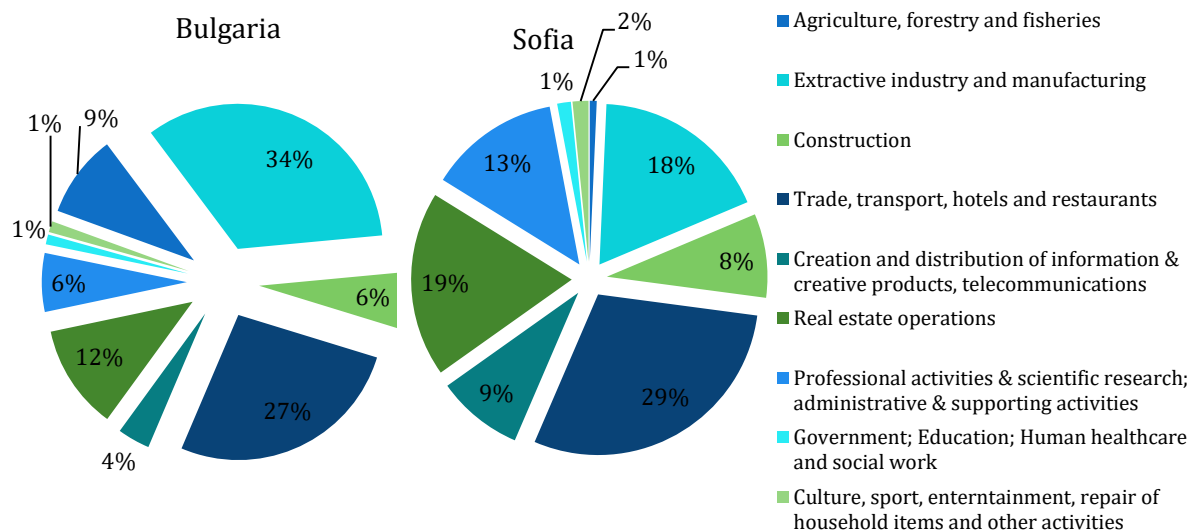
One of the main indicators of investment activity is the **expenditure on acquiring tangible fixed assets (TFA).** **The expenditure for TFA in Sofia is about BGN 6 billion in 2017 (according to preliminary data) or 37% of the TFA in the country.** This means that the share of expenditure for TFA as a whole is proportional to the weight of the Sofia's economy in the national economy in 2017.

**- By sector**

The distribution of expenditure for TFA by economic activities in the Capital largely reflects the structure of the local economy. **In Sofia about 3/4 of the expenditure for TFA are made in the services sector** (according to preliminary data for 2017). The sector with the greatest expenditure for TFA (29%) in Sofia is *Trade, Repairs, Transport, Storage, Post, Hotels and Restaurants*. This can be explained by both the high incomes in Sofia, which stimulate consumption, and the fact that the city is a developed transport and logistics center, continuing to attract investments in these businesses.

The *Extractive Industry and Manufacturing*, for their part, hold a share of about 18% in investments in TFA, *Construction* – about eight per cent and *Agriculture* – approx. one per cent. In comparison, on a country level the *Extractive Industry and Manufacturing* hold on average 34% of the expenditure for TFA, *Construction* – six per cent and *Agriculture* – nine per cent, respectively.

**Expenditure on TFA in Sofia and country by economic sector, 2017\*, %**



Source: NSI; Note: \*Preliminary data

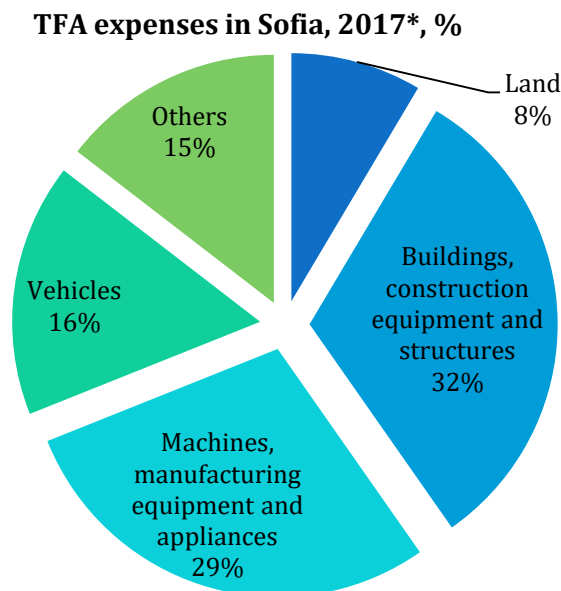
**Sofia is also characterised by a relatively high share of investments in *Creation and Distribution of Information and Creative Products; Telecommunications*.** The share of investments in this sector is about nine per cent, compared to four per cent in the country. This is mainly due to the energetic growth of the IT industry and the software development companies in Sofia, which, as the data show, also make substantial investments in fixed assets.

**Another sector, experiencing vigorous development in recent years, is the *Outsourcing of business services*.** This industry is growing rapidly and attracting significant investments both in Sofia and in several other large Bulgarian cities. Investments in TFA in the sector of ***Professional Activities and Research, Administrative and Supporting Activities*** are concentrated in the outsourcing industry. In Sofia, investments in this sector constitute about 13% of all investments in 2017, while in the country their share is lower – seven per cent, which again showcases the strong development of this sector in Sofia.



- **By type**

Both before and after the crisis, the bulk of non-financial corporations' TFA expenditure is directed towards buildings, construction equipment and structures – 32% of all TFA expenditure in 2017. Machines, manufacturing equipment and appliances rank second with 29% of all expenditure for TFA, followed by vehicles with 16%.



Source: NSI; Note: \*Preliminary data

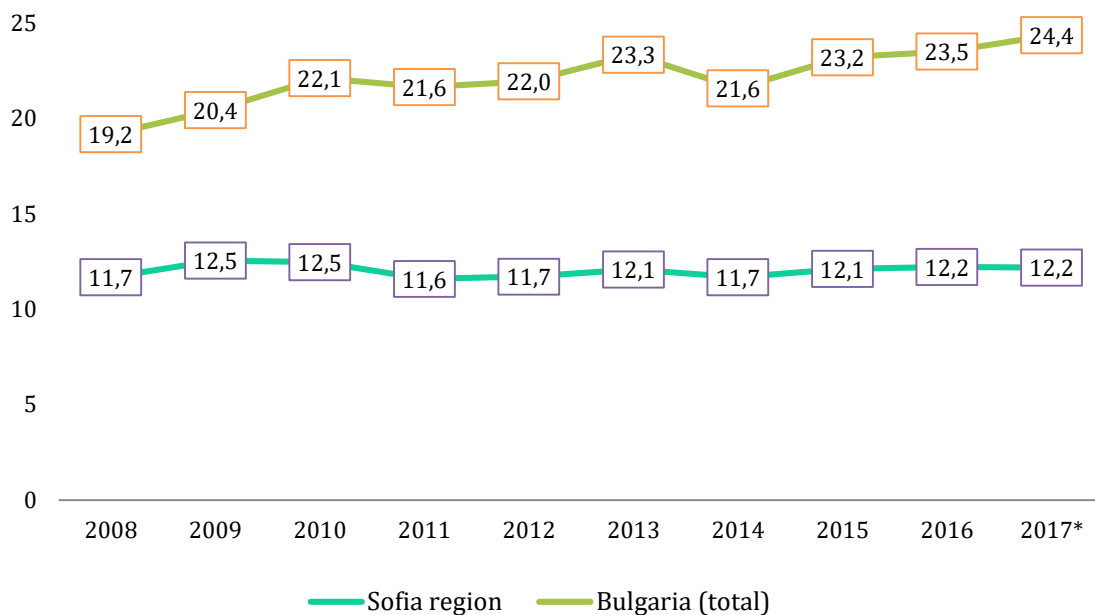
**While all types of TFA expenditure in the country declined after the crisis, the most serious decrease was in land expenditure.** The preliminary figures for 2017 show an increase, however land expenditure remains far from their pre-crisis levels. The reason behind this is the decrease in construction and the subsequent decline in demand for land for new construction. In the last five years, the largest decline is seen in the expenditure for buildings, construction equipment and structures, while the expenditure for transport is increasing.

As a whole, the expenditure for TFA trend in Sofia does not differ from the overall dynamics in the country. **Expenditure for machines, manufacturing equipment and appliances in Sofia traditionally has a lower weight** than it has in the rest of the country due to the lower share of the *Extractive industry* and *Manufacturing* in the city's economy, which implies relatively lower investments in machines and equipment than the national average.

### 1.3.2. Foreign Direct Investments

Sofia is the preferred destination for foreign direct investment (FDI) in Bulgaria and has attracted half of the cumulative foreign investments in the country. At the end of 2017 (preliminary data), the cumulative investments in Sofia amounted to € 12.2 billion or € 9 199 per capita. In comparison, the average level of attracted investments in the country is nearly three times lower - € 3 443 per capita.

Cumulative FDI by 31.12. of the respective year, bln BGN

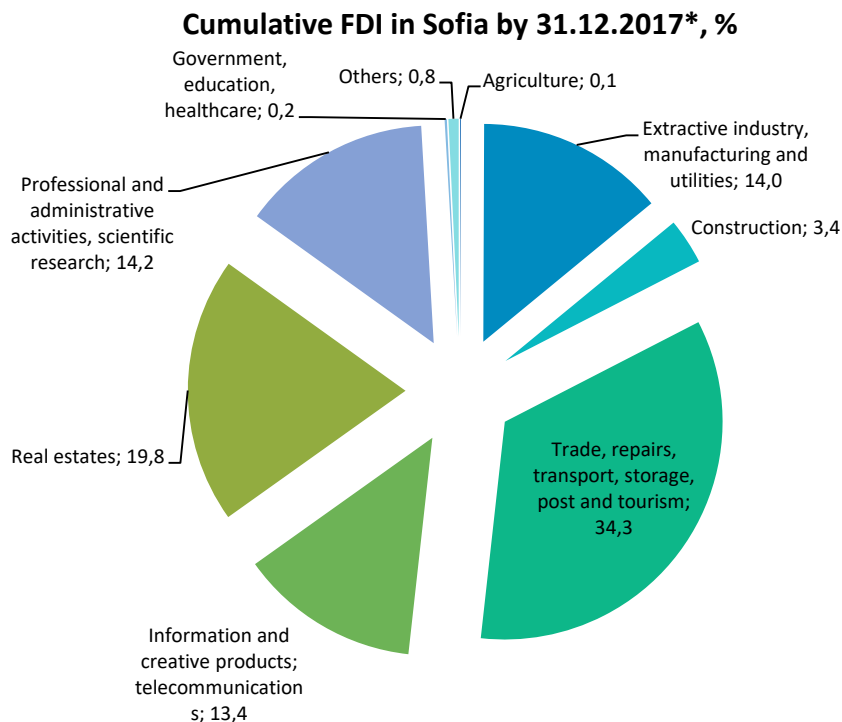


Source: NSI; Note: \*Preliminary data

**The largest recipient of FDI in the Capital is the large sector of *Trade, Ttransport and Tourism*** which attracted about 34% of foreign investments by 2017 (preliminary data). The second largest recipient of foreign investment are *Real Estate Operations*, attracting about 20% of all FDI in Sofia.

**The *Extractive industry, Manufacturing and Utilities* are another major recipient of FDI in Sofia**, with 14% of all foreign investment by 2017 targeting these sectors. ***Creation and Distribution of Information and Creative Products; Telecommunications* is also among the attractive sectors**, with around 13% of all FDI so far. All IT businesses, also fall into this sector. As we mentioned before, Sofia's economy has been offering good opportunities for the development of the IT industry in recent years –workforce, relatively low labour and other operating costs, low direct taxes, etc.

Another sector, which attracts significant foreign investments and develops rapidly in Sofia, is the **outsourcing** of business services, which in FDI statistics mainly falls into the sector *Professional Activities and Research; Administrative and Supporting Activities*. About 14% of all foreign investments in Sofia by the end of 2017 are concentrated in this sector.



Source: NSI, IME calculations<sup>4</sup>, Note: \*Preliminary data

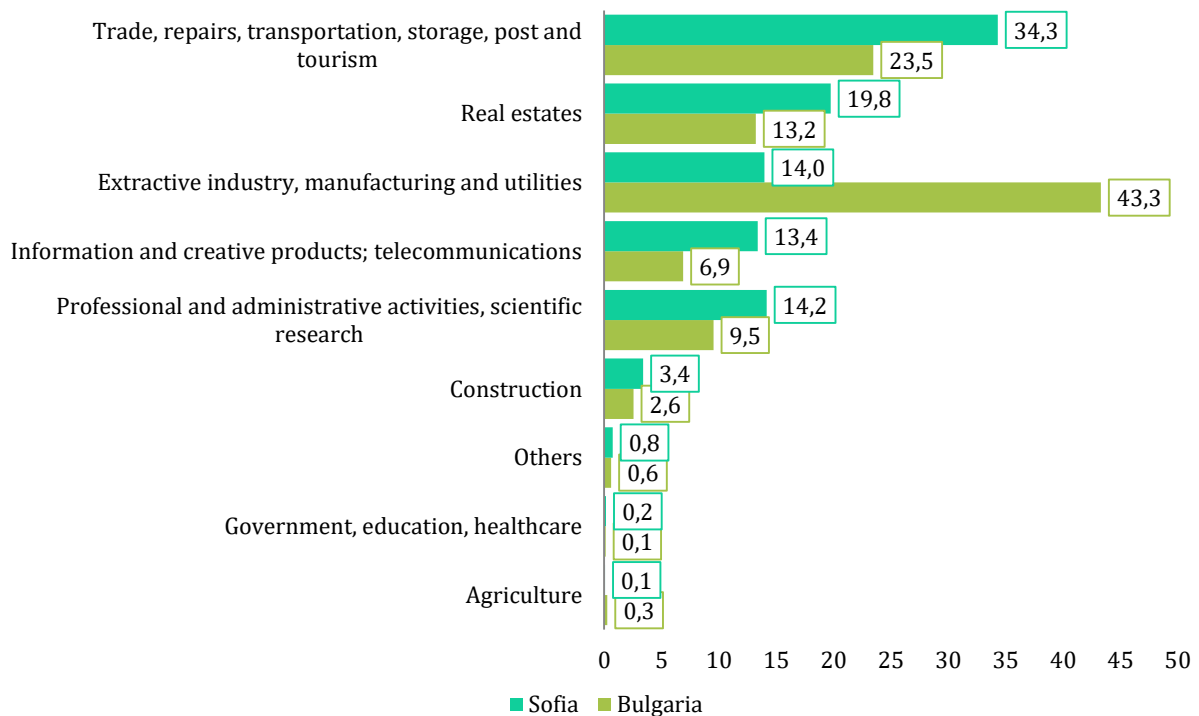
It should be noted that, compared to the average for the country, Sofia is characterised by a relatively higher share of foreign investments in the following sectors:

- Trade, Transport and Tourism; Information and Creative Products, Telecommunications;
- Real Estate;
- Professional and Administrative Activities, Scientific Research.

The higher level of investments is triggered by the strong positions of these sectors in the local economy. Given that the *Extractive industry* and *Manufacturing* have significantly lower share in the structure of the city's economy, compared to the average for the country, it is natural that the investments in these sectors are more than three times less than those in the country as a whole.

<sup>4</sup> The Names of the Sectors in the graph are simplified in order to offer a more comprehensible visual representation. *Agriculture* stands for "Agriculture, Forestry and Fisheries"; *Extractive Industry, Manufacturing and Utilities* encompasses "Extractive, Manufacturing and Other Industries; Water Supply; Sewerage Services, Waste Management and Recycling"; *Trade, Transport and Tourism* include "Trade; Automobile and Motorcycle Repairs; Transport, Storage and Post; Hotels and Restaurants", *Real Estate* is "Real Estate Operations"; *Information and Creative Products; Telecommunications* stand for "Creation And Distribution of Information and Creative Products; Telecommunications"; *Professional and Administrative Activities, Scientific Research* mean "Professional Activities and Scientific Research; Administrative and Supporting Activities", and *Government, Education And Healthcare* is "Government; Education; Human Healthcare and Social Work".

**Cumulative FDI by 31.12.2017\*, % of all**



Source: NSI, IME calculations; Note: \*Preliminary data

**1.3.3. EU funds**

In the last few years EU funds have become an increasingly important source of investment for the Bulgarian regions. **Sofia is characterised by a relatively good degree of absorption of EU funds.** Funds, paid out to projects, financed by the EU in both program periods on the territory of Sofia Municipality amounted to BGN 3.613 billion as of the end of June 2018. Sofia has absorbed nearly 1/3 of the total amount of funds allocated under the Operational Programs or about BGN 2 700 per person on average – a better absorption rate than the country average of about BGN 1 500 per person.

**Top 20 projects financed by European funds in Sofia in terms of paid funds as of September 2018, BGN**

Beneficiary	Project	Paid Funds
METROPOLITEN EAD	"Metro Expansion Project in Sofia: Stage II Lot 1" Obelya - Nadezhda "and Lot 2 "Mladost I - Tsarigradsko shose "	453 026 490
METROPOLITEN EAD	Project for Metro Extension in Sofia: line 3, Stage I - "Vladimir Vazov Blvd. - Central Railway Station - Zhitnitsa Street"	396 046 796
METROPOLITEN EAD	Project for Metro Extension in Sofia, I Stage - "Nadezhda" road junction - Central Railway Station - Sveta Nedelya Square - Cherni Vrah Blvd. "	362 206 777
Employment Agency	New choice - development and realisation	289 414 160

Sofia Municipality	Construction of an integrated system of municipal waste treatment facilities	250 150 810
METROPOLITEN EAD	"Project for expansion of the metro in Sofia Stage III, Lot 1 "Tsarigradsko shose - Sofia Airport" and Lot 2 "Mladost 1 - Business Park in Mladost 4 "	205 152 678
Road Infrastructure Agency	Lot 70 "North Speed Tangent from km 0 + 000 to km 16 + 540"	186 524 233
Road Infrastructure Agency	Construction of the Kalotina-Sofia highway, Lot 1 "Western Arc of the Sofia Ring Road /SRR/", Phase 2	87 593 711
Sofia Municipality	Delivery of 10 metro trains for the sections of stage 3 of a metro extension project in Sofia: Lot 1, Tsarigradsko shose Blvd. - Sofia Airport and Lot 2 Mladost 1 - Business Park Mladost 4	80 160 817
Sofia Municipality	Project for integrated metropolitan public transport	77 197 486
SOFIA TECH PARK	"Science and Technology Park"	67 413 621
Sofia Municipality	Implementation of activities for improvement of the quality of the ambient air by buying and supplying buses	64 835 097
Sofia Municipality	Implementation of activities for improving the quality of the ambient air by purchasing and supplying tramway cars	59 635 256
METROPOLITEN EAD	Sofia Metro Expansion Project, Line 3, Stage II - Section "Str. Jitnica - Ovcha Kupel - Ring Road "	55 824 647
Sofia Municipality	Integrated metropolitan public transport - Phase II	37 566 723
Ministry of Healthcare	Expanding the Radiotherapy Complex at the Radiotherapy Clinic of SBAL on Oncology - EAD, Sofia	31 397 078
Road Infrastructure Agency	"Lot 31 Rehabilitation and reconstruction of road II-18 Sofia ring road – Southern arc from km 41+137,87 to km 44+720 and road link № 2 of road junction Mladost in the section of SRR to the beginning of the existing overpass "	29 210 986
Ministry of Regional Development and Public Works	Supporting the regional investment planning of the water supply and sewerage sector	24 923 537
Ministry of Culture	National Museum Complex	24 378 901
METROPOLITEN EAD	Expansion of Metro Line 2 in Sofia, section from MS "James Baucher" to MS "Vitosha" - Phase 2	21 899 597

Source: [www.eufunds.bg](http://www.eufunds.bg)

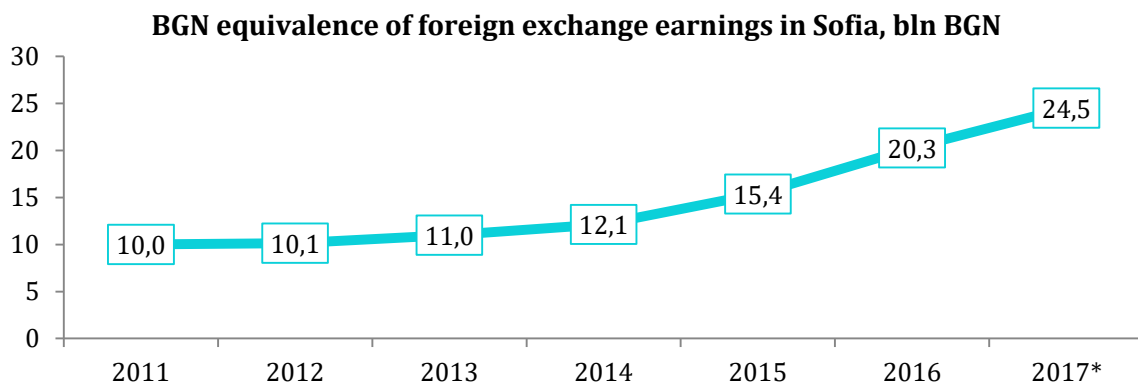
The beneficiary that received most funds is the Metropolitan Municipal Company, which manages the metro in Sofia. As of September 2018 it had absorbed BGN 1,518 million in projects financed by EU funds. The funds received are invested in the expansion of the metro network. Sofia Municipality is the second biggest beneficiary of EU funds on the territory of Sofia with BGN 675 million absorbed. The largest projects financed by EU funds are related to the construction of the Municipal waste treatment plant, the purchase of metro trains and ecological buses, the water supply and sewerage infrastructure of parts of the city, park areas, social services, enhancement of the administrative capacity, etc. The Employment Agency and the Road Infrastructure Agency are among the largest beneficiaries of European funds within the municipality.

## 1.4. Export

After 2010, foreign exchange earnings in Sofia have been steadily rising, increasing their absolute size by nearly 2.5 times by 2017. Over the last three years, the city has been experiencing an annual export growth of over 20%, with export earnings in 2017 increasing over two times compared to 2014. Thus, in 2017 (according to preliminary data) their BGN equivalent reached BGN 24.5 billion, which amounts to over 1/3 of the foreign exchange earnings of the country.

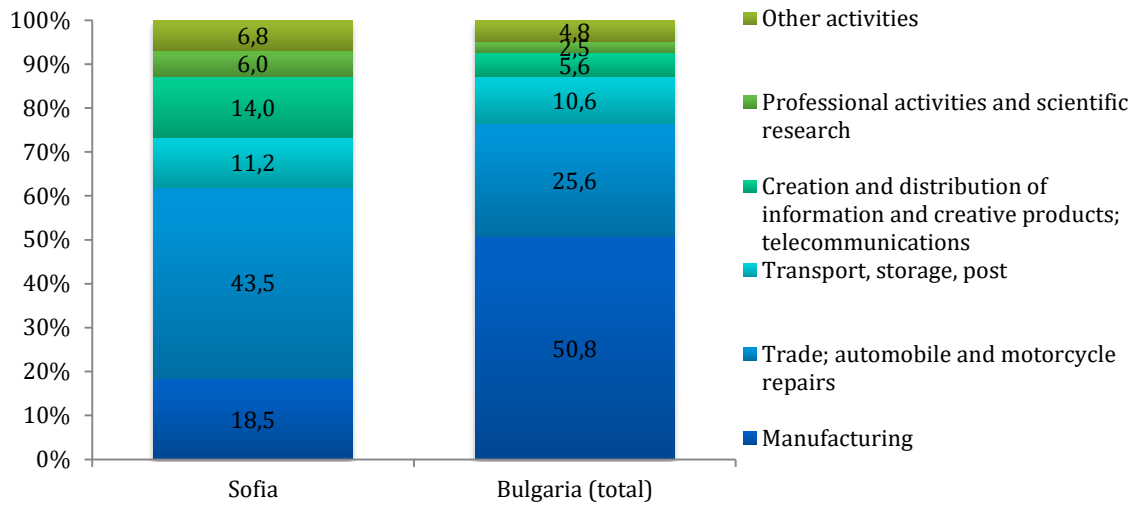
Sectoral data, once again, shows the specifics of Sofia economy. While nearly 50% of the country's export earnings are generated in *Manufacturing*, their share in Sofia is 18%. At the same time, the export of the *Trade and Repairs* sector in the Capital reaches 44% of the revenues, compared to 26% for the country.

Foreign exchange earnings from the *IT and Telecommunications* sector constitute 14% of the total export earnings in Sofia, compared to about six per cent in the national economy. Values for *Professional Activities and Research* sector also differ– the share of export earnings in the Capital is about six per cent, compared to three per cent in the country. This is due to the fact that the two sectors form the broad IT and outsourcing industry in the Capital, which is mainly export - oriented. What is more, exactly these sectors experienced significant growth between 2012-2017, with export earnings increasing by almost 200% (with a total growth of nearly 150% for the Capital).



Source: NSI; Note: \*Preliminary data

**BGN equivalence of foreign exchange earnings, 2017\*, %**



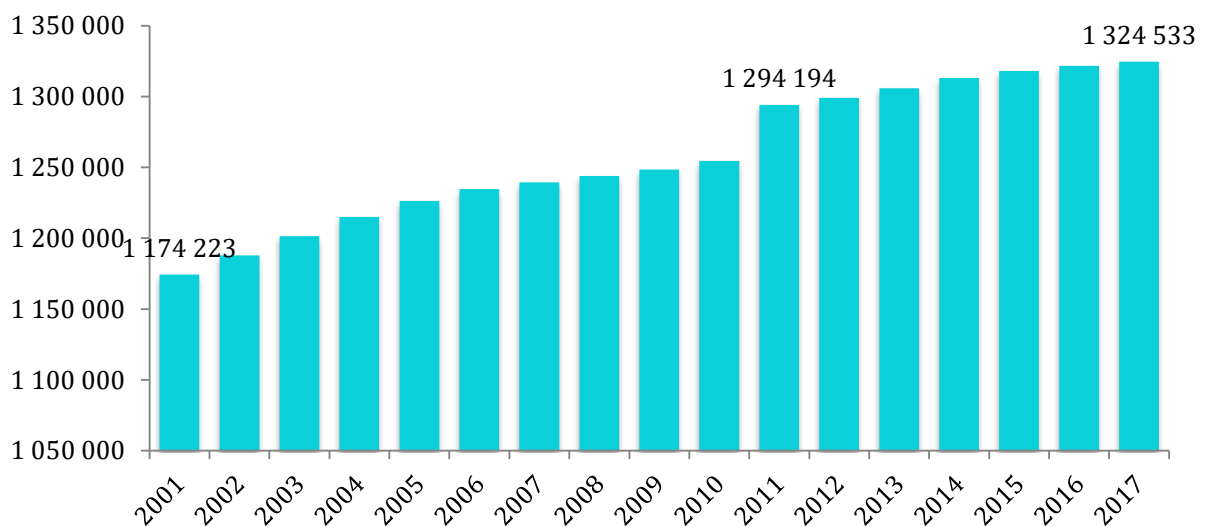
Source: NSI; Note: \*Preliminary data

## 2. Workforce

### 2.1. Demography

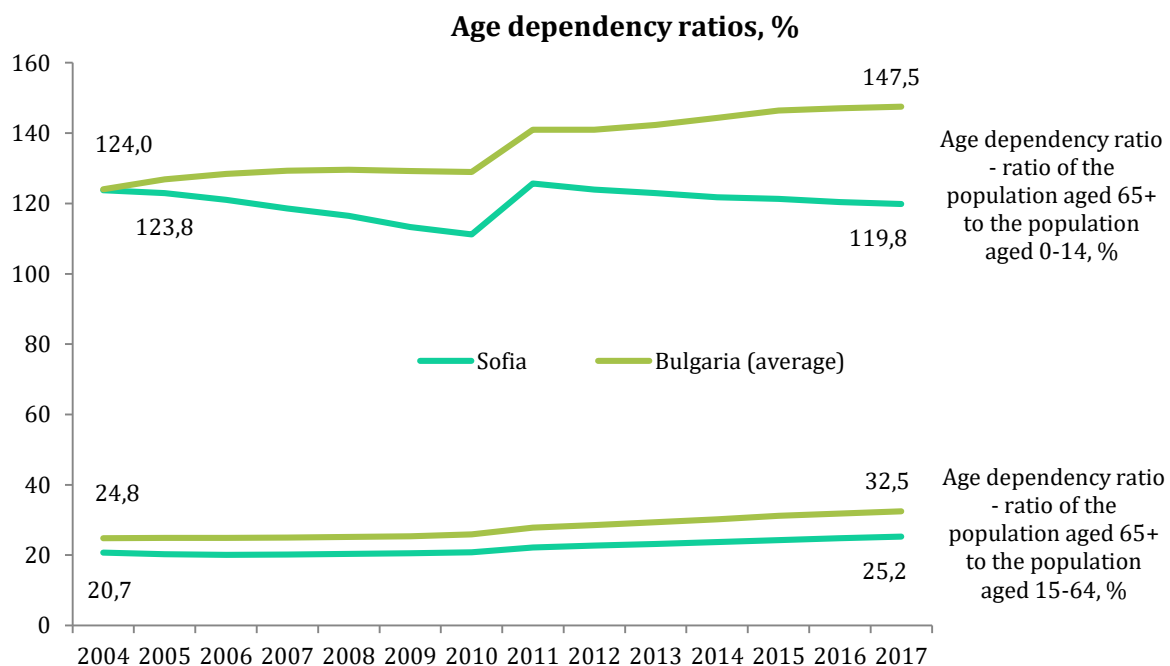
Sofia Municipality is the largest region in Bulgaria in terms of population and has relatively favorable demographic trends. In 2017, over 1.3 million people lived in Sofia Municipality, accounting for nearly 19% of the country's population. In comparison, in 2000 the population of Sofia amounted to only 15% of the total annual average population of Bulgaria, which means that the city attracts more and more citizens from other regions in the country.

**Annual average population of Sofia**



Source: NSI

In 2017, Sofia Municipality was again one of the six regions in the country (along with Plovdiv, Varna, Bourgas, Pernik and Kardzhali) with positive mechanical growth. The influx of young people also contributes to the relatively more favorable natural growth in the Capital. Although in 2017 the natural growth rate in Sofia was negative (-1,3 ‰), it was the most favorable in the country, with an average rate of -6,5 ‰. Over 21% of the children in Bulgaria in 2017 were born in Sofia compared to 15% in 2000. The relatively favourable natural and mechanical growth in Sofia determines the city's good demographic trends. The population is younger and decreases more slowly than in other regions and cities in the country. Over the years, the differences in age-dependency ratios between Sofia and the country as a whole have increased. While in 2000 the ratio of the population, aged 65 and over, to children under the age of 14 in Sofia was comparable to that in the country, in 2017 the difference increased to 28% in favour of Sofia. Similar is the trend in the ratio of number of people over 65 to the working age population.



Source: NSI

Another distinctive feature of Sofia Municipality is the almost entirely urban population. The concentration of the largest share of population in both one city and in the most densely populated urbanized territory in the country (three times higher than the average) provides diversity and easy access to workforce.

## 2.2. Education

The structure of the population in Sofia by education level differs significantly from that of the country. **The Capital is characterised by a concentration of highly qualified population** and especially of population with tertiary education.

The greatest difference in the share of population between Sofia and Bulgaria was noted for the population with elementary (or lower) and with tertiary education.

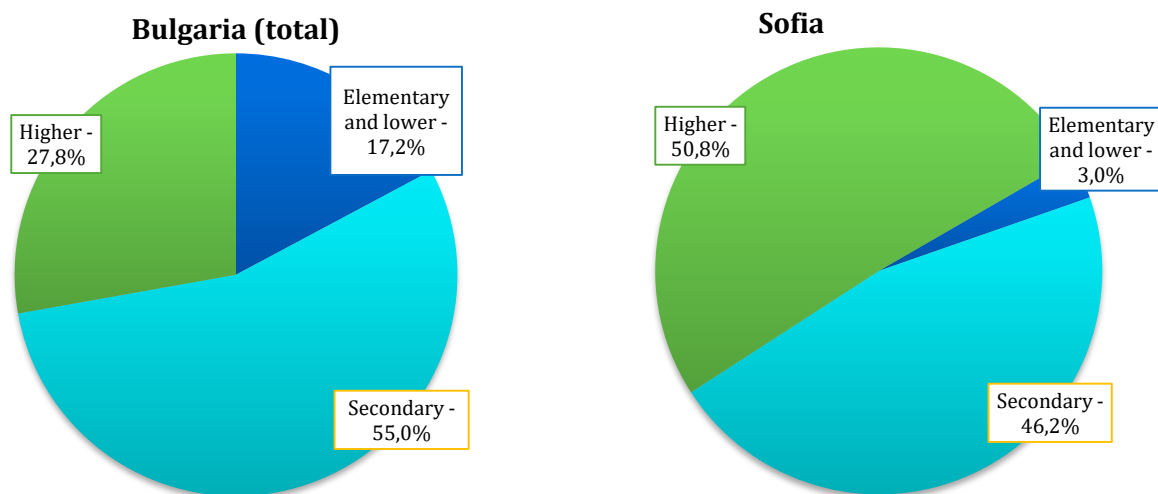
While the share of the population with higher education was below 28% in the country in 2017, in Sofia it was significantly higher – nearly 51%.



The variation in the share of people with elementary and lower education was even greater – in Sofia the population, aged 25-64 with elementary and lower education was three per cent, compared to over 17% in the country. This indicates that the Capital’s population is mostly educated and the labour market is made up of more skilled workers than in any other region and in the country as a whole.

In 2017 the share of residents with secondary education among the population aged 25-64 in Sofia remained less than the rest of the country – 46% and 55%, respectively.

**Structure of the population aged 25-64 by level of education, 2017,%**



Source: NSI

As Sofia is the region with the largest number of population and with the largest number of children, it is no surprise that most schools and educational institutions of all types and of all educational levels are concentrated in the city. **Students in Sofia are also performing best in matriculation exams**, traditionally showing the highest average scores and the lowest share of poor and failing grades in the compulsory matriculation exam –in Bulgarian Language and Literature. The latest results from 2018 are no exception.

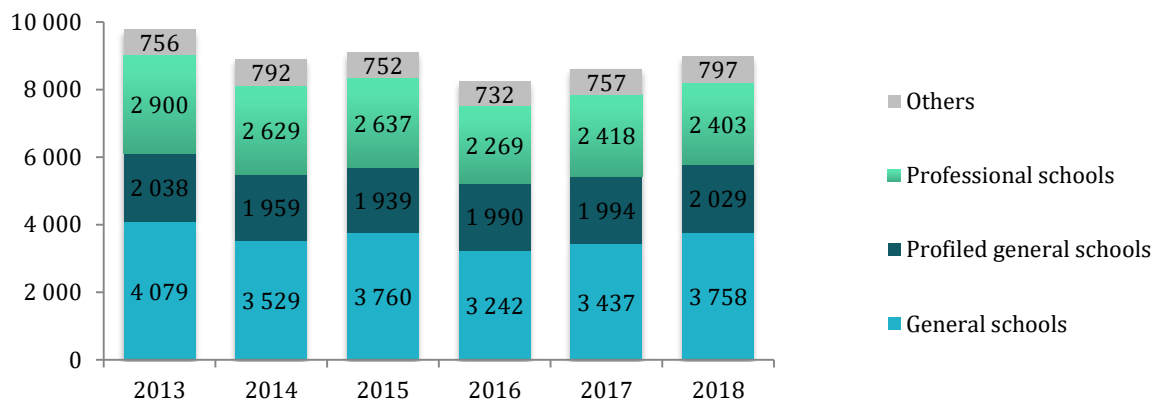
In 2017/2018 school year, there are 229 general schools in Sofia with 112 000 students or over 19% of the students in the country. In addition, 17% of all Bulgarian school teachers work in the Capital. The city’s education system is performing better than those in any other region of the country. The share of school drop-outs and repeaters in elementary and secondary education is three times lower than the average in the country.

Nearly 9 000 students graduate annually from secondary education in Sofia. Of these, about 2 500 graduate from a school which awards professional qualification.

Sofia is characterised by a comparatively low share of graduates with professional education degree. In the country, on average, half of the students graduate from a professional school. In Sofia the share is about 1/3. **The admission statistics for 2016/17 school year show that most students were enrolled in a professional qualification as a "Technician in Transport Equipment", "Technician in Computer Systems", "Technician in Communication Systems", "Economist" and "Electrical Engineer"**, which account for over 1/3 of the total intake and largely correspond to the economic profile of the Capital.

A coefficient of educational correspondence developed by IME, concerning the correlation<sup>5</sup> between professional education and the economic profile, shows that Sofia has one of the highest results in the country. This is mainly due to the high number of people studying in IT related fields and the high number of people employed in IT. It is worth noting that **the preference for specialised (or profiled) secondary education has increased in recent years**. Compared to 2008, the share of students in 8-12 grade in profiled classes in 2017 increased by five per cent. Nearly 70% of all students enrolled in a profiled school are enrolled in a profiled language school with English, German, Spanish, French being the most preferred languages. The great interest in profiled secondary language schools is not surprising. It corresponds to the Sofia's labour market demand for more university graduates and less graduates from professional secondary education. This is due to the specifics of the economy in the city because of the relatively low share of the *Extractive industry* and *Manufacturing* in Sofia.

### Secondary education graduates in Sofia



Source: RIO Sofia-city

Twenty-three of the 51 accredited higher education institutions in the country are located in Sofia. Moreover, **all three universities (the Medical University, the University of National and World Economy and Sofia University 'St. Kliment Ohridski') with the highest accreditation ratings<sup>6</sup> are located in the Capital** and attract the best students. The number of students in Sofia is about 100 000, which is over 40% of the total number of students in Bulgaria.

In 2016, the number of students per 1000 people in Sofia decreased to below 80 students per thousand people for the first time.

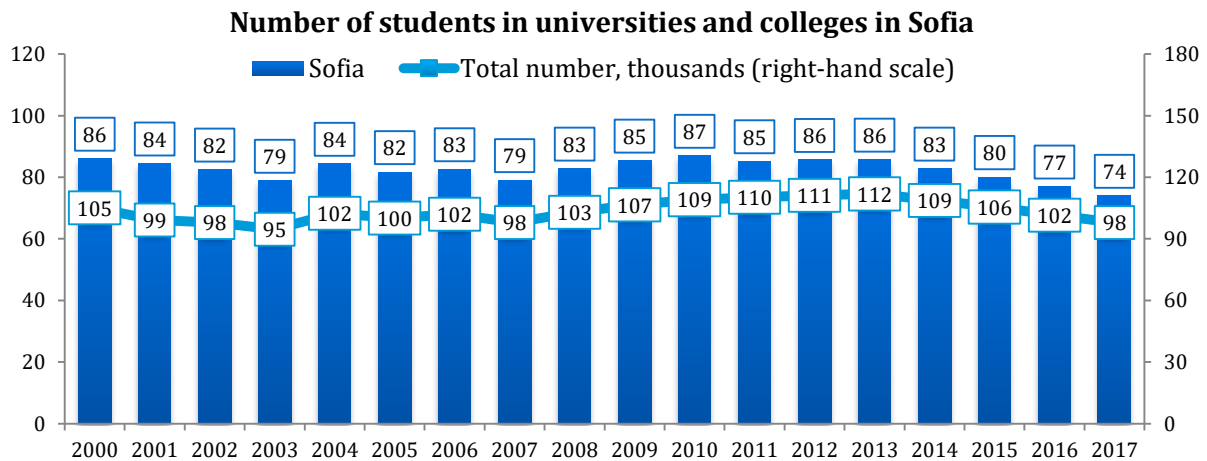
In 2017 the ratio was 74 students per thousand people. The decrease in Sofia is in line with the general trend for a decrease of the number of students in the country, mainly caused by demographic reasons. However, while the drop in the total number of students in Bulgaria reached six per cent both in 2016 and in 2017, in Sofia it was only to four per cent per year.

The only region with a higher student to population ratio remains Veliko Tarnovo, where there were 77 students per thousand people in 2017.

<sup>5</sup> IME, Zornitsa Slavova, [How professional education responds to the realities of local economies](#), 2018

<sup>6</sup> The data is from the Ministry of Education and Science, Registry of the accredited higher education institutions

Still, the share of the population between 25 and 64 with higher education in Sofia was almost double compared to the share in the country. This signifies that the city not only has the highest absolute number of students in the country, but also manages to retain them as well as to attract graduates from universities located in other cities.



Source: NSI

The rating system of the higher education institutions in Bulgaria, maintained by the Ministry of Education and Science, puts Sofia's universities at the forefront for students' performance in almost all majors. Data on acquired knowledge and skills, as well as the link between education and the labour market are also the highest in Sofia.

Sofia University "St. Kliment Ohridski" has the biggest share of students who apply their education to the labour market (about 70%) in the majors with the greatest number of students in the country – Economics (52 000), Administration and Management (23 000), Pedagogy (13 000) and Law (11 000), they were the group with the lowest unemployment rate (below 2%) in 2016.

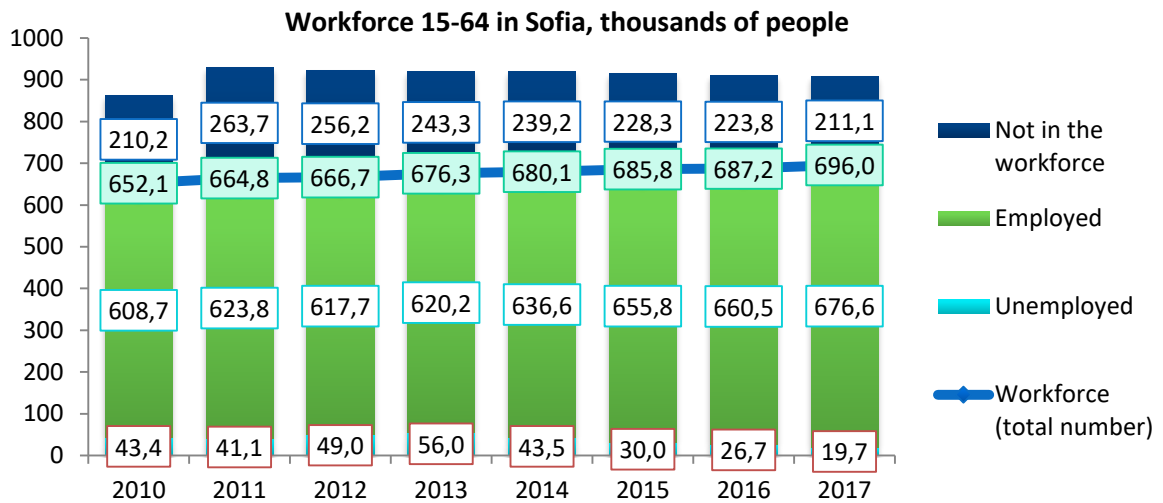
## 2.3. Labour market

### 2.3.1. Workforce

Sofia attracts an increasing share of the available workforce in the country. In 2017, the workforce aged 15-64 in Sofia was 696 000, representing 21% of the country total, compared to 650 000 or 19% in 2010.

In recent years, and especially after the recovery of the post-crisis labour market in 2013, the economic activity of the working-age population had risen significantly and in 2017 for the first time it even surpassed the pre-crisis levels. In 2017, the economic activity rate of the population aged 15-64 in Sofia was over 77%, compared to under 71% for the country.

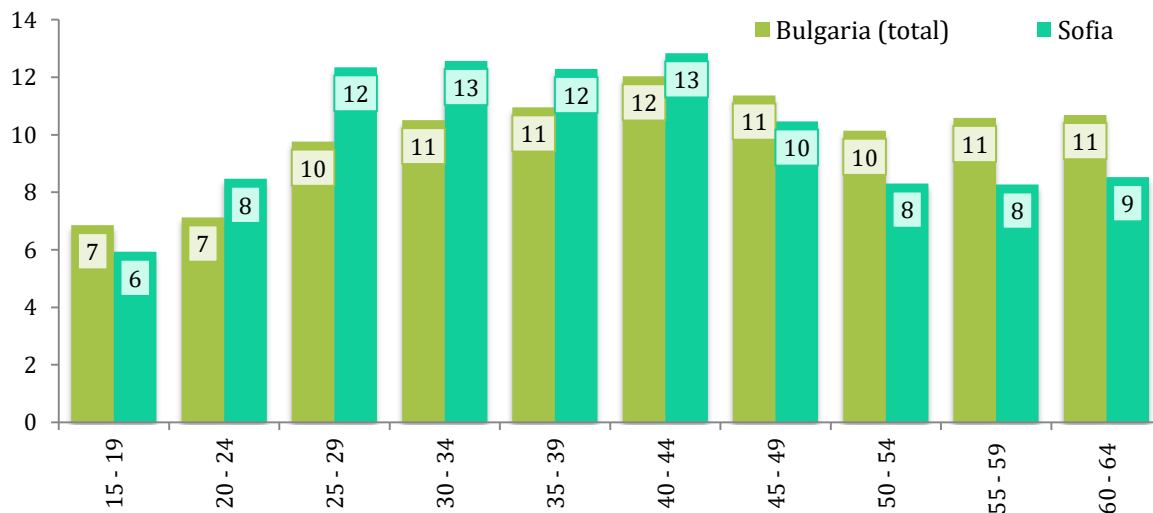
The number of people not in the workforce shrank by six per cent in 2017 and constituted 23% of the working-age population of Sofia (compared to 29% in the country).



Source: NSI

Another feature of Sofia is the much larger proportion of young people within the working age population. While more than half of the people in Sofia are under 40 (52%), their share is less than half (45%) of the overall population of Bulgaria. The main reason behind this is the decision of many young people from other regions of the country to stay in Sofia after graduating from a university in Sofia, as well as the better job opportunities in the Capital.

**Distribution of age groups in the population aged 15-64, 2017,%**

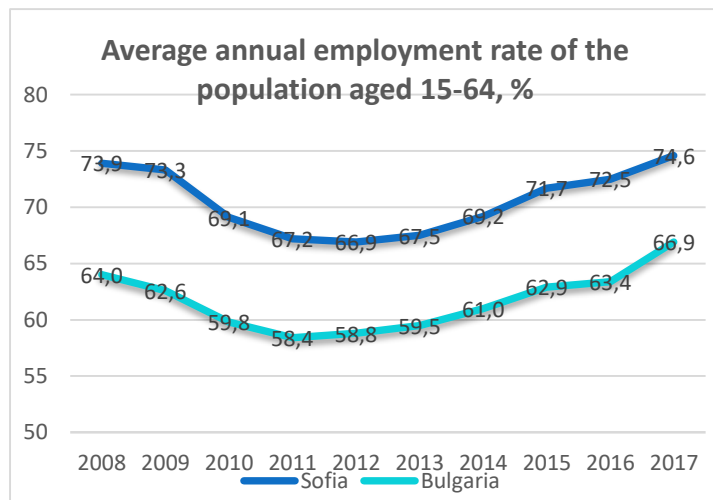


Source: NSI

These findings confirm the fact that Sofia attracts mainly people of working age, predominantly at the start of their careers looking for professional development and drawn by Sofia's labour market. Furthermore, according to the data on education, jobseekers in Sofia are relatively well-educated.

### 2.3.2. Employment

According to latest data, Sofia has the highest **employment levels, compared to any other region in the country**. In 2017, the working-age population was 677 000 people, and the employment rate among the 15-64-year-old population reached an average of 75%, compared to 67% in the country. 2017 was also the first year, when the employment rate levels exceeded the pre-crisis peak of 2008. Employment data by economic activity shows the restructuring of Sofia's economy due to the rapid growth of IT and outsourcing industries over the past few years.



Source: NSI

After the burst of the construction bubble in 2009, job creation in Sofia shifted to the accelerating sectors of IT services and outsourcing, with the number of employed in these sectors<sup>7</sup> increasing by over 50 000 between 2008-2017 and accounting for over 19% of the total employment in the city.

**The share of those employed in the sectors of Trade and Automobile and motorcycle repairs in Sofia remains the largest** – nearly 180 000 or nearly 1/4 of the total employment in the city. Between 2009-2017, the number of people employed in this sector increased by 21 000 people, as opposed to the other key sector in the Capital – *Manufacturing*, where the number of employees decreased by 15 000 between 2008 and 2017. The fact that the value added at factor cost of the sector and its share in the local economy increased during the same period, while the number of employees decreased, implies an increase in output efficiency and decrease in the need for human capital due to modernisation and capital investments, for example in new technologies.

After 2011 there has been a sharp rise in the number of jobs in the IT industry and professional activities as a consequence of the boom in these sectors. The sector of **Administrative and Supporting Activities** also grew in number of employees. Some of the growth can be attributed to the outsourcing industry, as call centres also fall under this economic activity.

<sup>7</sup> These activities are mainly in the "Creation and distribution of information and creative products; Telecommunications" and "Professional activities and research".

Number of people, employed in non-financial enterprises in Sofia by economic activities, number	2008	2017*	Change 2017 compared to 2008	Change 2017 compared to 2008
	Number	Number	Number	%
TOTAL FOR SOFIA	657 987	755 144	97 157	14,8
AGRICULTURE, FORESTRY AND FISHING	3 662	3 998	336	9,2
EXTRACTIVE INDUSTRY	1 535	678	-857	-55,8
MANUFACTURING	85 268	70 038	-15 230	-17,9
GENERATION AND DISTRIBUTION OF ELECTRICITY AND HEATING AND GAS	14 281	18 440	4 159	29,1
WATER SUPPLY, SEWERAGE, WASTE MANAGEMENT AND RECYCLING	7 847	9 536	1 689	21,5
CONSTRUCTION	77 734	49 530	-28 204	-36,3
TRADE; AUTOMOBILE AND MOTORCYCLE REPAIRS	158 124	179 042	20 918	13,2
TRANSPORT, STORAGE AND POST	81 114	94 987	13 873	17,1
HOTELS AND RESTAURANTS	29 821	36 817	6 996	23,5
CREATION AND DISTRIBUTION OF INFORMATION AND CREATIVE PRODUCTS; TELECOMMUNICATIONS	47 849	84 324	36 475	76,2
REAL ESTATE OPERATIONS	14 412	16 409	1 997	13,9
PROFESSIONAL ACTIVITIES AND SCIENTIFIC RESEARCH	46 498	62 158	15 660	33,7
ADMINISTRATIVE AND SUPPORTING ACTIVITIES	47 142	67 891	20 749	44,0
EDUCATION	3 238	6 463	3 225	99,6
HUMAN HEALTHCARE AND SOCIAL WORK	23 452	30 562	7 110	30,3
CULTURE, SPORT AND ENTERTAINMENT	9 442	11 750	2 308	24,4
OTHER ACTIVITIES	6 568	12 521	5 953	90,6

Source: NSI, Note: \* Preliminary data

### 2.3.3. Salaries

Salaries in Sofia are significantly higher than the average for the country. This is due to the high level of employment, as well as the large share of industries requiring high qualification. In 2016, the average annual salary for Sofia was BGN 15 700, or 1/3 more than the average salary in Bulgaria (BGN 11 400).

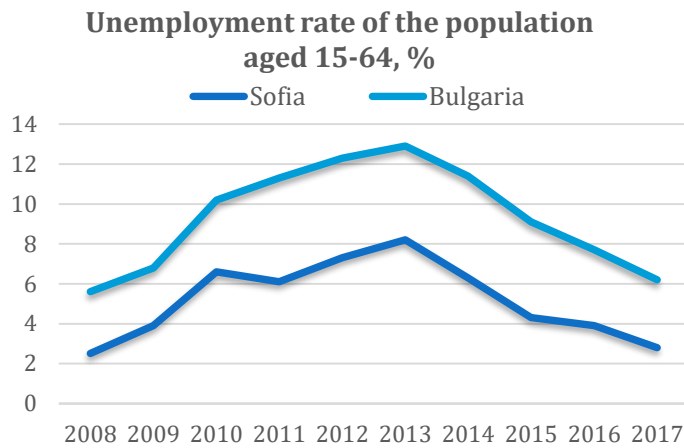
Compared to 2008, salaries in Sofia rose by nearly 73% on average, a percentage similar to that of the country. Thus, the difference between the remuneration levels in Sofia and the country as a whole remains stable.



Source: NSI

In Sofia, some of the highest pay increases were in the rapidly developing IT services and professional services sectors (outsourcing of business services). The sectors of *Creation and Distribution of Information and Creative Products; Telecommunications* and Professional Activities and Scientific Research, (including IT and outsourcing) offered the highest salaries in Sofia. The salary increase in such sectors as construction, real estate operations and hotels and restaurants was relatively low.

### 2.3.4. Unemployment



Source: NSI

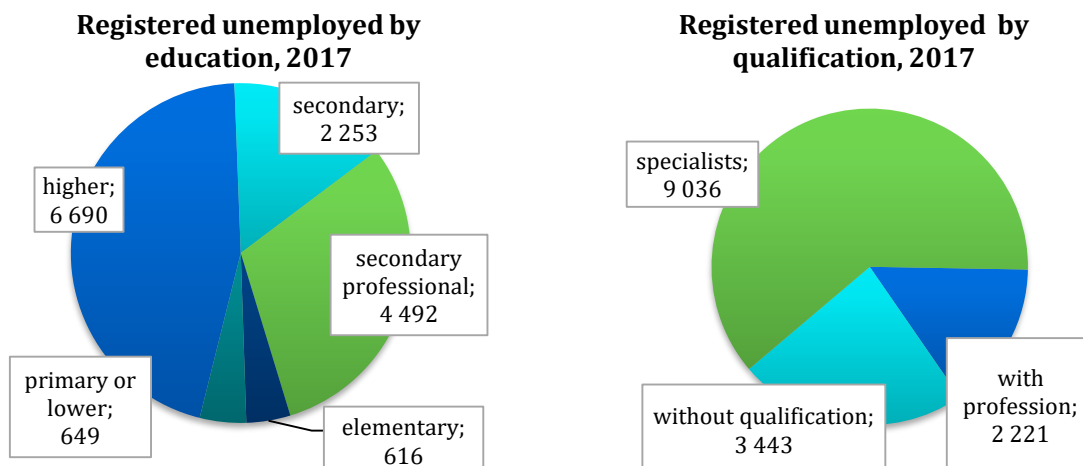
In 2017, the number of working-age unemployed people in Sofia decreased to 19 000 after the steady increase in employment rate in recent years.

The unemployment rate in 2017 approached pre-crisis levels, remaining significantly lower than the national average in the last 10 years – 2.8% in Sofia, compared to 6.2% in the country.

By the end of 2017, nearly 15 000 unemployed have registered in the labour offices in Sofia, over 46% of which (or nearly 7,000 people) had higher education and 31%, or more than 4 000, had a professional

secondary education. More than 60%, or 9 000 of the registered unemployed, were specialists (mainly in services, transport, economy and law).

Given the specialisation and the relatively high education of the registered unemployed, it is not surprising that only five per cent of the unemployed in Sofia remained registered for over a year, compared to 37% for the country. These data suggest that a large part of the unemployment in Sofia is frictional, i.e. it is due to the natural dynamics of the labour market and the transfer of the working population from one job to another. The unemployment insurance system in the country is another important factor, as it encourages unemployment to continue as long as the unemployed is eligible to receive unemployment benefits (the length of eligibility for unemployment benefits depends on the years of service and can reach a maximum of one year).



Source: NEA

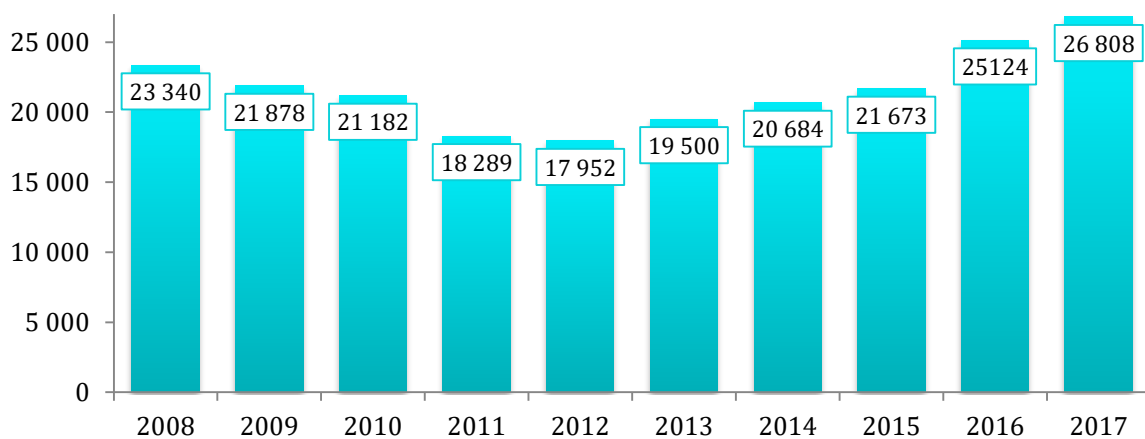
### 2.3.5. Job Vacancies

In 2017, a total of 27 000 job vacancies were listed in the labour offices in Sofia.

Employers were mostly seeking employees for the service sector (over 82%), in particular in the sectors of *Trade* and *Vehicles repairs* (combined 24%), followed by the *Administrative and supporting activities* including call centers (17%), *Manufacturing* (9%) and *Real estate operations* (8%).

The number of job vacancies listed in the last two years exceeded the number during the previous economic boom, and in the conditions of higher employment. This is indicative of the increasingly acute shortage of people in the rapidly growing sectors of the city's economy.

**Job vacancies listed in employment offices in Sofia**



Source: National Employment Agency

## 3. Local taxes and fees

**None of the major local taxes and fees<sup>8</sup> in Sofia Municipality has been changed during the last 7 years (2012-2018), indicating a relatively stable and predictable tax environment.** Most major local taxes in Sofia Municipality are slightly higher than the average for Bulgaria and the other regional centres in the country. This can be explained by the concentration of business activity and population in the largest city in the country. The fact that the local taxes and fees in Sofia are slightly higher is not a significant incentive to relocate people and companies away from the city. Local taxes and fees have a relatively small share in the overall tax weight. The bulk of the tax weight on individuals and legal entities is owed to the national budget and is the same for all parts of the country.

**Real estate tax** (for non-residential properties owned by legal entities) is one of the main taxes for companies owning and operating property. It was at 1.88‰ in 2018 and has not been changed over the last seven years. Its value is very close to the average for the country.

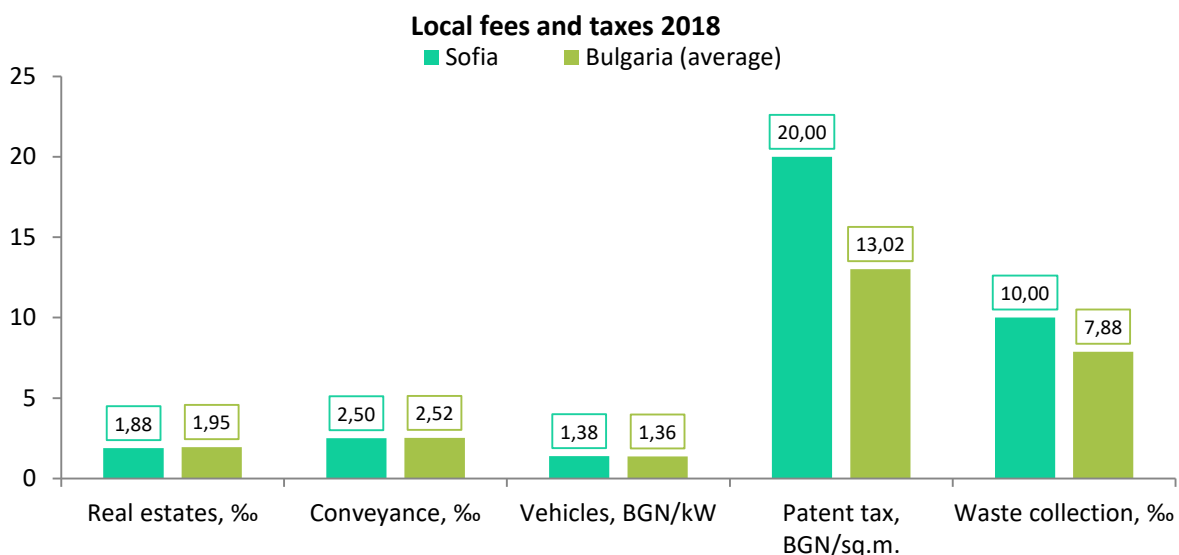
<sup>8</sup> „Local Taxes and Taxation“ Database of the Institute for Market Economics on the basis of APIA applications to all municipalities in Bulgaria for the purposes of the "Regional Profiles: Development Indicators" survey.



**Real estate transfer tax (%)** in Sofia Municipality was 2.50% in 2018, and is also close to the average in the country. Since 2007, this tax has legally defined limits of 0.1 to 3%. In most municipalities in the country it is 2%, but in the regional centres, including Sofia it's slightly higher - 2.50%. Its value has not been changed since 2012. **Tax on vehicles and automobiles** (with power of 74 kW to 110 kW) in Sofia Municipality during the seven years under review remains at the level of BGN 1.38/kW, with limits set in the law from BGN 1.10 to BGN 3.30 per 1 kW. In fact, the lower limit coincides with the baseline level in 2007 and perhaps that is why BGN 1.10/kW is the most common value among all municipalities in the country.

**The main differences in taxation between Sofia and the other regional cities in the country is in the levels of the patent tax for retail and the waste collection tax.** Both are significantly higher in Sofia. **In the last 7 years, the annual patent tax for retail** (of up to 100 sq.m. commercial area and at prime location) in Sofia Municipality was BGN 20 /sq.m. For comparison, in recent years, in most regional centres of the country, the rate was BGN 10 /sq.m, which is also the most common value in the country for 2018.

In Sofia Municipality, **waste collection tax** is at a constant level of 10‰ and this value remains the same in 2018. This is significantly higher than the average for the country - 7.9‰.



Source: IME (Applications for Access to Public Information)

## 4. Infrastructure

### 4.1. Transport Infrastructure

#### Road Infrastructure

Sofia has a strategic location as an international crossroad and a European transport centre. Three important trans-European transport corridors of key economic importance - Corridor 4, Corridor 8 and Corridor 10<sup>9</sup> intersect in Sofia.

<sup>9</sup> Corridor 4 connects Dresden, Prague, Bratislava, Budapest and Istanbul.

The fastest route from Sofia to Greece runs through the Kulata Border Crossing Point, 190 km south of Sofia. The Kalotina Border Crossing Point (BCP) and Serbia is 58.9 km from Sofia, StankeLisichkovo BCP and the road to Skopje is 122 km from Sofia and the Kapitan Andreevo BCP on the road to Turkey is 292 km from Sofia. The border with Romania – either via the Oryahovo ferry or the Vidin-Calafat bridge across the Danube river is 184 and 194 km from Sofia respectively.

The highways which connect (or will connect in the future) Sofia with the two Black Sea ports of Bulgaria and with the border crossing points with Turkey (Kapitan Andreevo), Greece (Kulata) and Serbia (Kalotina) are of particular importance for the city's development. **At this point, the construction of two of the highways is completed.** These are the "Trakia" highway (360 km) connecting Sofia with Plovdiv and Burgas, and the "Lyulin" highway (19 km) connecting the Sofia ring road with the Daskalovo junction and the "Struma" highway. The construction of "Struma" highway (150 km) that will connect Sofia (the Daskalovo junction) with the Greek border (Kulata) continues in 2018. By mid-2019, another two sections (with a total length of 36 km) should be completed, and the entire highway should be built by 2022.

**The Maritza highway was 100% completed in October 2015, connecting Sofia to the Bulgarian-Turkish border (Kapitan Andreevo)** – first via the Trakia highway to the Orizovo road junction (182 km) and then – from road junction "Orizovo" via the „Maritsa" highway to the border (117 km).

Hemus highway, which will connect Sofia with Varna in 2022, is still under construction. In two of the lots of Hemus highway (totaling 26 km) the construction began in 2018 and is to be completed in March 2020.

### **Railway Infrastructure**

**Sofia is the biggest railway network centre in Bulgaria.** The railway density is 12.8 km per 100 sq.km. of the territory in 2016, which is almost four times the country's average of 3.6 km/100 km.

In Sofia as in the rest of the country both the length of the railway network as a whole and the number of passengers have been decreasing in recent years. The main reasons lie in the lower demand due to the lowered quality, the absence of modernisation in this type of transport as well as the development of competitive transport modes (road and air transport).

The length of railways in Sofia Region dropped from 203 km in 2005 to 172 km in 2016; their density fell from 15.0 to 12.8 km/100 sq.km. At the same time, the annual number of passengers shrank from over 3 mln. to 2.2 mln.

### **Density of the railway network, length of railway lines in km/100 sq.km territory**

	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Sofia</b>	15,0	15,0	15,0	13,8	13,8	13,6	12,8	12,8	12,8
<b>Bulgaria</b>	3,7	3,7	3,7	3,7	3,7	3,6	3,6	3,6	3,6

Source: NSI

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Corridor 8 connects Drach, Skopje, Plovdiv and Burgas.

Corridor 10 connects Salzburg, Ljubljana, Belgrade, Plovdiv and Istanbul. Corridor 10 is also integrated into Corridor 9 for Helsinki, St. Petersburg and Moscow.

**The first and only metro in Bulgaria also operates in Sofia.** At present it operates 2 lines with a total length of 40 km and 35 stations; the construction of the third line started in 2015. By mid-2017 the number of daily passengers reached about 380 000 and underground transport was established as a quick, cheap and convenient means of transportation in the city. According to the general scheme<sup>10</sup> for the metro development, it is expected to have three diameters with branches in the periphery, with a total length of 75 km and 69 metro stations and with an opportunity of further enlargement reaching up to 80 km. After the final stage of construction, the Sofia underground railway is planned to carry about one million passengers a day.

### **Air Transport**

**The largest airport in Bulgaria, with two passenger and two cargo terminals, is located in Sofia.**

Over 35 airlines operate regular passenger or freight flights, as well as seasonal charter flights to and from Sofia. The summer schedule of Sofia Airport for 2018 offered a choice of over 30 airlines, which operate direct flights to 75 destinations in Europe and the Middle East.

A report by Sofia Investment Agency<sup>11</sup> shows that for the period 2015-2018 Sofia Airport has opened lines to 42 new destinations and the number of passengers has increased by a record 30.3% in 2017. This is also the highest growth among the 100 busiest airports in Europe. Of nearly 6.5 million passengers at Sofia Airport over the year, over 58% flew with low-cost airlines.

Several new routes and more than five new charter flights are planned by the end of 2018, and each month since the beginning of the year, the airport accounts for an increased monthly number of passengers and cargo compared to the same period of last year. In May 2018, the number of passengers already reached 620 000 (about 11% more than in May 2017), and the air cargo – over 2 200 tonnes or 14% more.

### **4.2. Digital Infrastructure**

Internet infrastructure has been improving in recent years, not only in Sofia, but in Bulgaria as a whole. **In Sofia municipality, the internet speed of 17 Mbps (testmy.net) at the end of September 2018 exceeds the average for the country**, which is an important factor for the business development in the Capital.

**Sofia also has the largest share of households with internet access: 76% in 2017** while in the country the average was 67%. Sofia also ranks first in the number of people aged 16-74 who use the Internet - 78% in 2017, compared to 66% for the country.

All this comes to show that Sofia municipality provides good conditions for internet access and the relatively young and educated population uses it.

**Share of households with Internet access, %**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Sofia</b>	47,3	53,0	57,1	67,0	66,2	70,9	69,3	75,3	69,4	75,6
<b>Bulgaria</b>	25,3	29,6	33,1	45,0	50,9	53,7	56,7	59,1	63,5	67,3

**Share of people aged 16 to 74 who used the Internet in the last 12 months, %**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Sofia</b>	66,0	72,3	68,0	78,7	74,2	77,5	77,7	78,1	75,8	78,1
<b>Bulgaria</b>	33,0	39,7	41,6	51,1	55,1	56,2	59,2	60,3	62,6	65,9

Source: NSI

<sup>10</sup> According to the “Technical and Economic Report of the Metro” and Sofia’s General Plan approved by the Council of Ministers of the Republic of Bulgaria.

<sup>11</sup> Sofia Investment Agency, [Sofia Tourism and Air Transport Market](#), 2018

## 5. Sofia as a Business Destination: Comparative Regional Analysis

Sofia has a number of advantages over its main competitors in the region: Belgrade, Bucharest, Skopje and Thessaloniki. **The main advantages of Bulgaria's capital come from its relatively low rate of direct taxes** (profit and income taxes) as well as the low utility and transport costs. The information infrastructure in Sofia is also very well-developed as the city has one of the highest internet speeds in Europe.

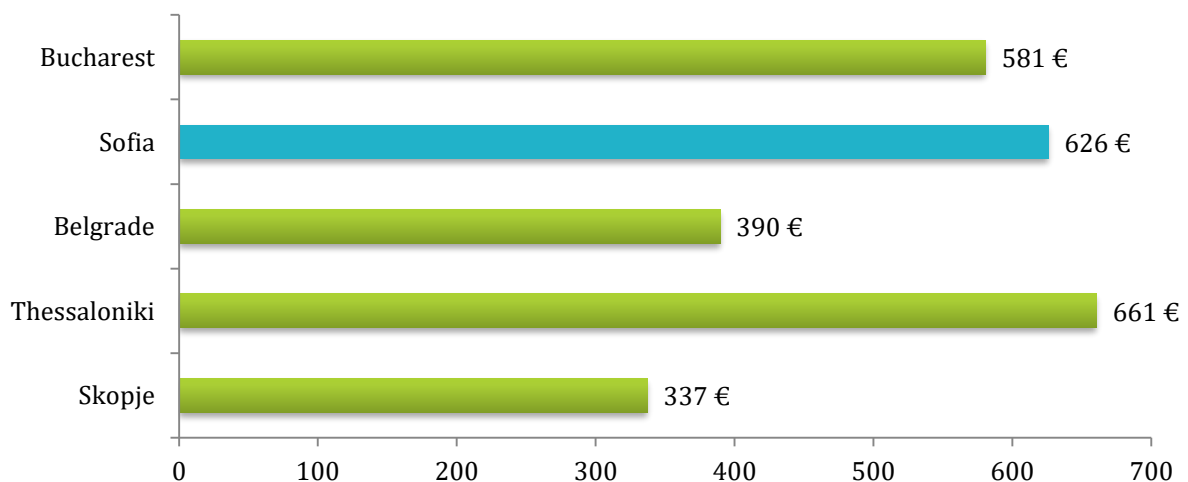
**Direct taxes in Bulgaria are the lowest in the region:** only Macedonia has an identical personal and corporate income tax rate of 10%. All other countries (respectively cities) under consideration have higher corporate and personal income tax rates.

### Direct Taxes (September 2018), %

Country	Corporate tax	Income tax
Romania	16	16
Bulgaria	10	10
Serbia	15	15
Greece	29	45
Macedonia	10	10

Source: Trading Economics, IME

### Monthly net average salary, regional comparison (September 2018)



Source: Numbeo

According to the latest data for September 2018, the average net salary in Sofia (after taxes and social security contributions) was € 626 per month. Compared to Belgrade and Skopje, average salaries in Sofia are significantly higher. Salaries in Sofia are lower than those in Thessaloniki and are comparable with those in Bucharest.

**Prices of utilities and local transport (September 2018)**

City	Monthly expenses for basic utilities (electricity, heating, water, waste collection) for an 85 sq.m.apartment	One-way ticket (public transport)	Average rate of taxi services for 1 km.
<b>Bucharest</b>	€ 91	€ 0,33	€ 0,36
<b>Sofia</b>	€ 91	€ 0,82	R€ 0,41
<b>Belgrade</b>	€ 129	€ 0,76	€ 0,59
<b>Thelassoniki</b>	€ 144	€ 1,00	€ 0,74
<b>Skopje</b>	€ 103	€ 0,57	€ 0,41

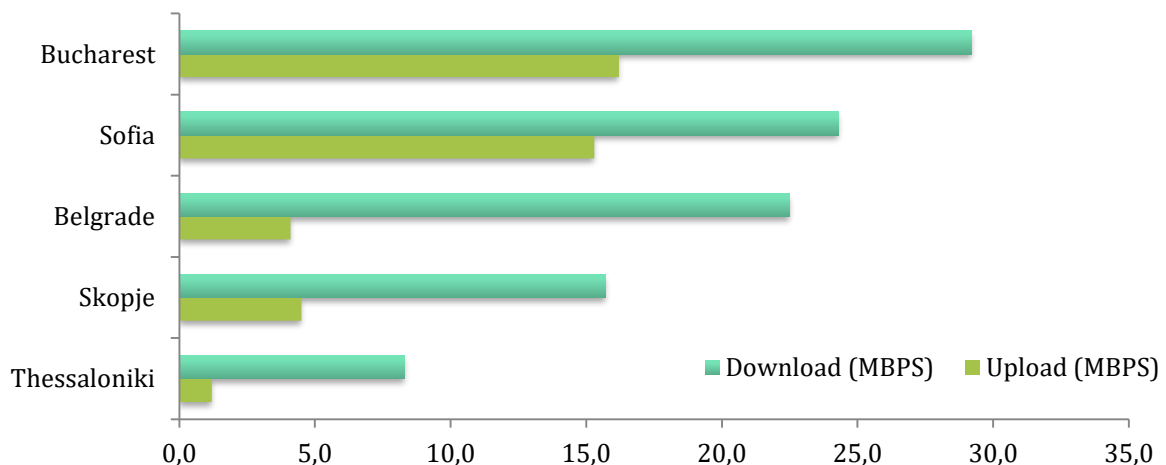
Source: Numbeo

**Prices of basic utilities (electricity, heating, water and waste collection) in Sofia are among the lowest in the reviewed cities in the region** – an average of about €91 per month for a medium-sized apartment of 85 sq.m.

Expenses in Bucharest are at about the same level and in all other cities in the region they are significantly higher. The price of public transit in Sofia, however, are the second highest in the region after Thessaloniki. Taxi rates in the Bulgarian capital, however, are relatively low – an average of €0.41 per kilometer.

Sofia has one of the highest Internet speeds in Europe. The city has the second highest average internet connection rate in the region, both downloading and uploading – 24 and 15 megabits per second respectively. Of all major cities in the region, the average speed of Internet services is higher only in Bucharest.

**Average internet speed in megabits per second (MBPS) as of September 2018**



Source: [testmy.net](http://testmy.net)

## 6. Perspectives for the Development of Sofia Region

**Sofia Region will continue to concentrate a growing share of the economic activities in the country.** Both the positive demographic processes and Sofia's leadership in the development of the fastest growing sectors provide the prerequisites for that. By 2017, Sofia was one of the six regions in the country with a positive net migration growth and the only one with more people settling in than leaving the city since 2000. Even though since 2010 the natural growth in Sofia has been negative, as in the rest of the country, it is relatively favourable compared with any of the other regions.

**Apart from attracting highly educated people of working age from other regions of the country, Sofia also educates the greatest number of university students in Bulgaria.** The city has the greatest number of elite high schools (with emphasis on languages, sciences etc.), which rank highest in achievement at state matriculation exams. Sofia is characterised by the highest number of university students: close to 100 000 or 40% of all university students in the country. Sofia is characterised by the highest share of people with higher education in the local population aged 25 to 64 years – 51% compared to 28% in the country for 2017.

**The highly qualified workforce will keep attracting investment in fast growing sectors such as the IT industry, the outsourcing of business services** and some high value-added manufacturing activities. Data about high investment in these sectors in recent years also come to support their development: manufacturing has been the second largest investor in TFA after the crisis as well as the most stable foreign investment recipient in recent years.

**Sofia is also very well-positioned to develop some new forms of economic relations such as the services of the digital and shared economy.** This is possible because of the suitable IT infrastructure: highly educated people, high average internet speed, a number of IT companies and specialists, but also because of the large size of the local population. The fast growth of some of the companies in the shared economy in recent years has confirmed the availability of good conditions for the development of such services. Judging by the ongoing processes in other European capitals, the potential for development of such services is huge and they are just making their first steps in Sofia.

The shortage of people with suitable engineering and technical education is a major limitation for the further growth of the IT sector and the digital economy. It forces companies to allocate considerable investment to education and training or to attract personnel from competitors. The faster universities and professional schools respond to the demand for such specialists, the more the potential for the development of these sectors in Sofia will increase.

The main part (over 60%) of companies, involved in the so-called **creative industries**<sup>12</sup>, is also concentrated in Sofia, and the share of their output in the local economy was more than double that of the country in 2016. For the period 2012-2016, the companies, the number of employees and the output of the creative industries in the Capital are growing significantly and a further growth can be expected in the future.

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<sup>12</sup> These include the publishing of books, music and computer games, the production and distribution of films and television programs, radio and television activities, computer programming, architectural, photographic, artistic, creative and advertising activities and those in the field of design.

Net change in foreign direct investment in Sofia, € million						
	2011	2012	2013	2014	2015	2016
<b>Total</b>	-880,3	117	370,5	-398,8	436,6	99,8
<b>Agriculture, forestry and fisheries</b>	5,3	2,1	14,2	28,1	-50,5	-1,9
<b>Extractive, manufacturing and other industries; water supply; sewerage, waste management and recycling</b>	119,9	205,3	65,5	85,3	-67,2	2,4
<b>Construction</b>	-478,1	206,1	-8,2	-75,6	-146,8	-76,8
<b>Trade; automobile and motorcycle repairs; transport, storage and post; hotels and restaurants</b>	-121,6	438,3	89,3	37,5	502,5	210,7
<b>Creation and distribution of information and creative products; telecommunications</b>	-373,6	-609,7	111	-389,1	-0,8	68,4
<b>Real estate operations</b>	-178,3	-313,5	82,7	-82,2	159,3	-113,3
<b>Professional activities and research; administrative and supporting activities</b>	146,9	189,6	9,5	-3,8	6,3	-0,6
<b>Government; education; human healthcare and social work</b>	1,3	-6,2	1,6	-0,7	13,1	3,4
<b>Other services</b>	-2,1	5	4,9	1,8	20,7	7,4

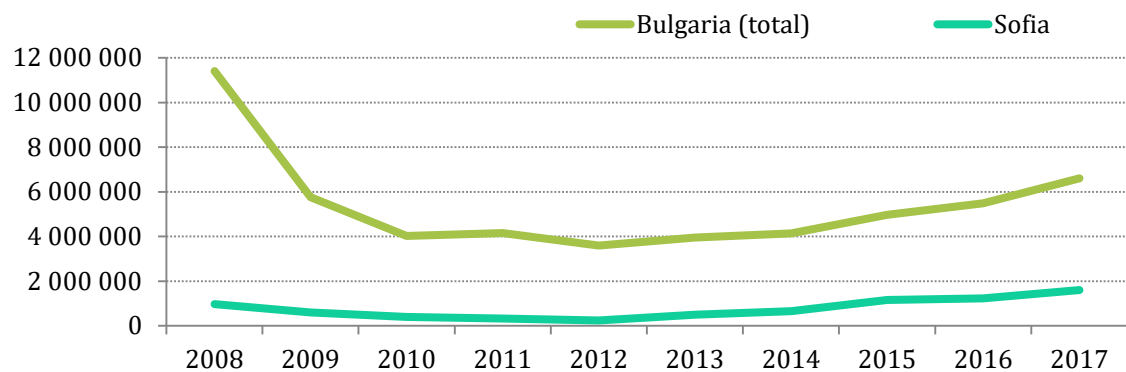
Source: NSI, IME calculations

**The population and business concentration in Sofia, as well as the continuing growth of the local population, offer good conditions for the development of the sector of Trade and Repairs; Transport, Storage and Post; Hotels and Restaurants.** Apart from the fact that the purchasing power of the population is high because of the higher incomes, which stimulates consumption and trade, Sofia is also a key transport and logistics centre, both nationally and internationally. Therefore, it is not surprising that this wider services sector in the Capital has also attracted the highest TFA investments in recent years.

**There is a noticeable growth of tourists in Sofia** in 2017. This is mainly due to the availability of convenient flights from a number of European cities to Sofia by two low-cost airlines. The growth in the number of passengers serviced at the Sofia Airport in 2017 was substantial 30% increase from a year earlier, and there has been a consistent growth each month since the beginning of the year, reaching 620 000 passengers in May 2018. In 2017, Sofia also registered a 13% growth in the number of tourists and a 15% increase in overnight stays. All this shows that Sofia is becoming a more attractive tourist destination.

**The construction industry in Sofia also has all the preconditions for growth in the coming years.** The record number of building permits issued in 2016 exceeded their pre-crisis peak levels. Factors that support the further growth of the sector in the city are the natural expansion of the city due to the influx of people from other parts of the country and the concentration of business activity. Housing prices in Sofia continue to rise, although their growth has been slowing down in the first half of 2018. However, the rapid increase in prices in recent years has created a risk of unsustainable market development. Apart from new housing, these processes also require constant infrastructure development.

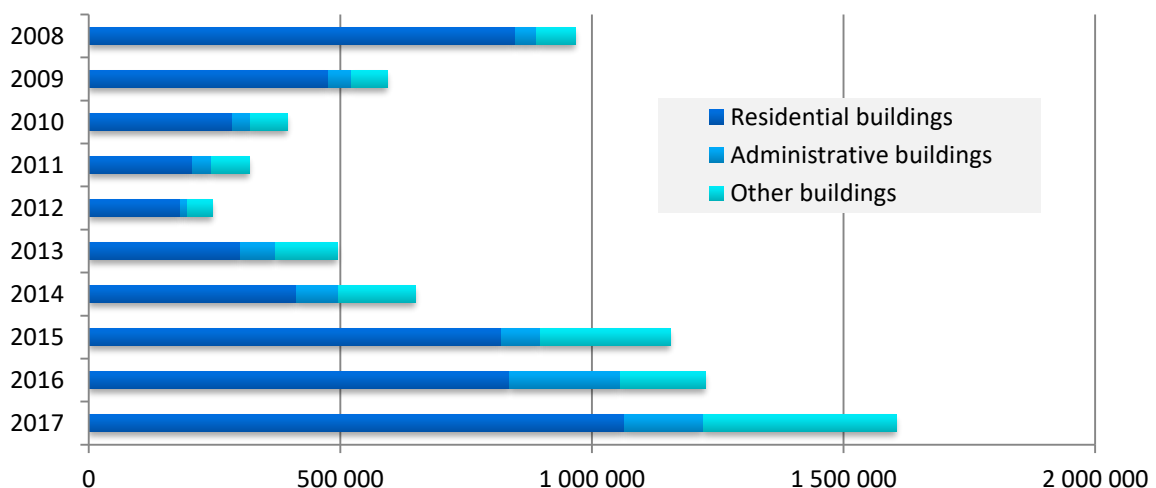
### Building permits issued, total area, sq. m., NSI



Source: NSI

Building permit figures point to a certain **restructuring of the construction sector in Sofia**. While prior to 2008 the share of residential buildings under construction in the total area of building permits was 88%, by 2017 this share shrank considerably to about 66%. Permits for non-residential buildings (manufacturing facilities, sports facilities, recreation and hotel buildings, culture and education buildings, healthcare facilities and so on, and “administrative buildings” – those used for office and administrative activities) grew almost three times, from eight per cent in 2008 to 24% in 2017. The share of administrative buildings alone grew from four per cent in 2008 to 10% in 2017.

### Building permits issued in Sofia region, total area, sq.m.



Source: NSI

That restructuring reflects both the rapid construction of business, manufacturing and other non-residential buildings in recent years and the considerable public investment in urban infrastructure, including EU funds.



In conclusion, Sofia has all the prerequisites for an on-going development at rates that are fast compared with Bulgaria as a whole, and to remain the centre of economic activity in the country, expanding even further its share in the national economy. The education system and its capacity to prepare the specialists in high demand remains the main challenge to the city's development. This is especially true to such fast growing sectors as some manufacturing branches, software design and development, the digital economy and business services.

Another important challenge to Sofia's development is the city's road and other infrastructure, as well as its surrounding territories, the development of which is lagging behind the demographic and economic processes.

Last but not least, the ongoing emigration of highly qualified specialists to other countries (the so called "brain drain") will continue to put pressure on the labour market inflating the pay in some of the fastest growing sectors and limiting their growth potential.



# SOFIA: ECONOMIC AND INVESTMENT PROFILE

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