

Manufacturing in Emerging Europe:

**Bulgaria, Czech Rep, Hungary, Poland,
Romania, Serbia, Slovakia, Slovenia, Turkey**



**A Multi-country DEMO Market Research
by FRD Center**



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Since 2000, FRD Center offers upon demand new suppliers identification and selection services, market research and intelligence, B2B matchmaking and M&A consulting services to foreign companies and organisations interested to enter Romania and the emerging markets in Europe as manufacturers, exporters, consultants, investors or joint-ventures, to relocate their operations, or to source in CE, SE and Eastern Europe.

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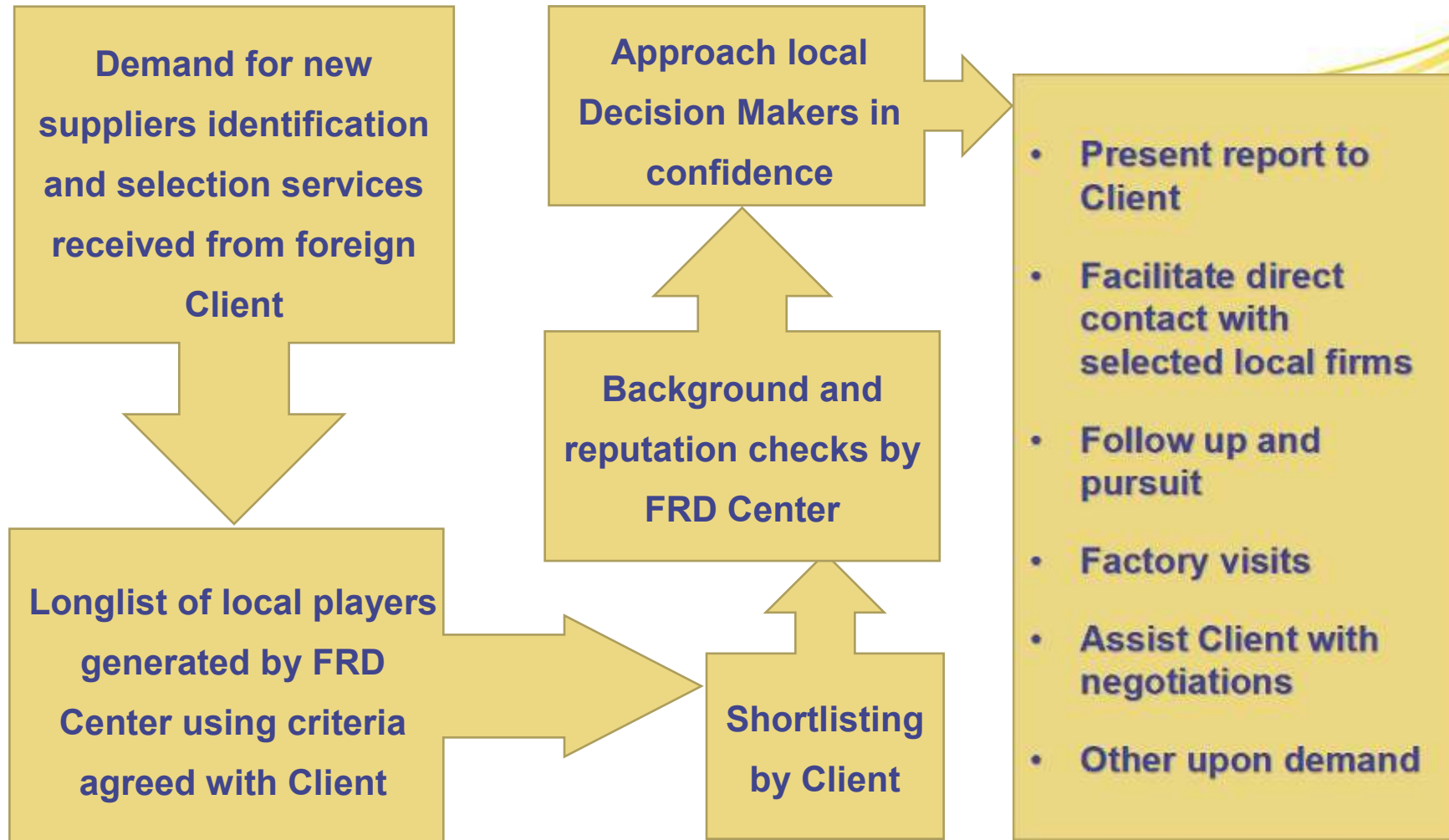
As part of the CSR activity, FRD Center endorses the

Sibiu International Theatre Festival FITS (SibFest) - www.sibfest.ro

The Sibiu International Theatre Festival is the most complex festival in Romania. Internationally, it is recognised as one of the most important performing arts festivals in Europe, alongside Edinburgh International Festival (Great Britain) and Avignon Festival (France).



New Supplier Identification and Selection in Emerging Europe





About FRD Center

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www.frdcenter.ro



For over 20 years, FRD Center generates upon demand from Clients:

Multi-country market research

New suppliers identification and selection

Players identification and detailed profiles

Comparative analysis

Data collection, interviews with KOLs

Reputation checks

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In this report

Industrial manufacturing current situation and recent dynamics in the following markets in Emerging Europe:

- Bulgaria
- Czechia
- Hungary
- Poland
- Romania
- Serbia
- Slovakia
- Slovenia
- Turkey





Bulgaria



As it results from the FRD Center previous researches, some of the leading manufacturing sectors in Bulgaria are:

- 1.machine building
- 2.electrical engineering and electronics
- 3.chemistry
- 4.food
- 5.ICT

In March 2020 compared to March 2019, the following manufacturing sectors in Bulgaria have recorded increases:

- | | |
|---|-------|
| -manufacture of food products: | +8.3% |
| -manufacture of pharmaceutical products and preparations: | +4.8% |
| -manufacture of other transport equipment: | +0.2% |

Bulgaria

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The labour cost for LCI (compensation of employees plus taxes minus subsidies) in manufacturing in Bulgaria has been of 5.2 EUR / hour in 2019 compared to 4.7 EUR / hour in 2018.

In the first quarter of 2020 the total hourly labour cost in industry in Bulgaria has increased by 9% compared to the first quarter of 2019.



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Bulgaria



According to the FRD Center analysis, some examples of **clusters in Bulgaria** are:

- Automotive Cluster Bulgaria (automotive sector)
- Bulgarian Fashion Association (textile and apparel sector)
- Bulgarian Furniture Cluster (wood and furniture sector)
- CASTRA Cluster (aerospace sector)
- Hoisting Devices Cluster (technology and heavy machinery sectors)
- Sofia Knowledge City Cluster (ITC sector)

Bulgaria has **industrial parks** located all over the country. Some examples are:

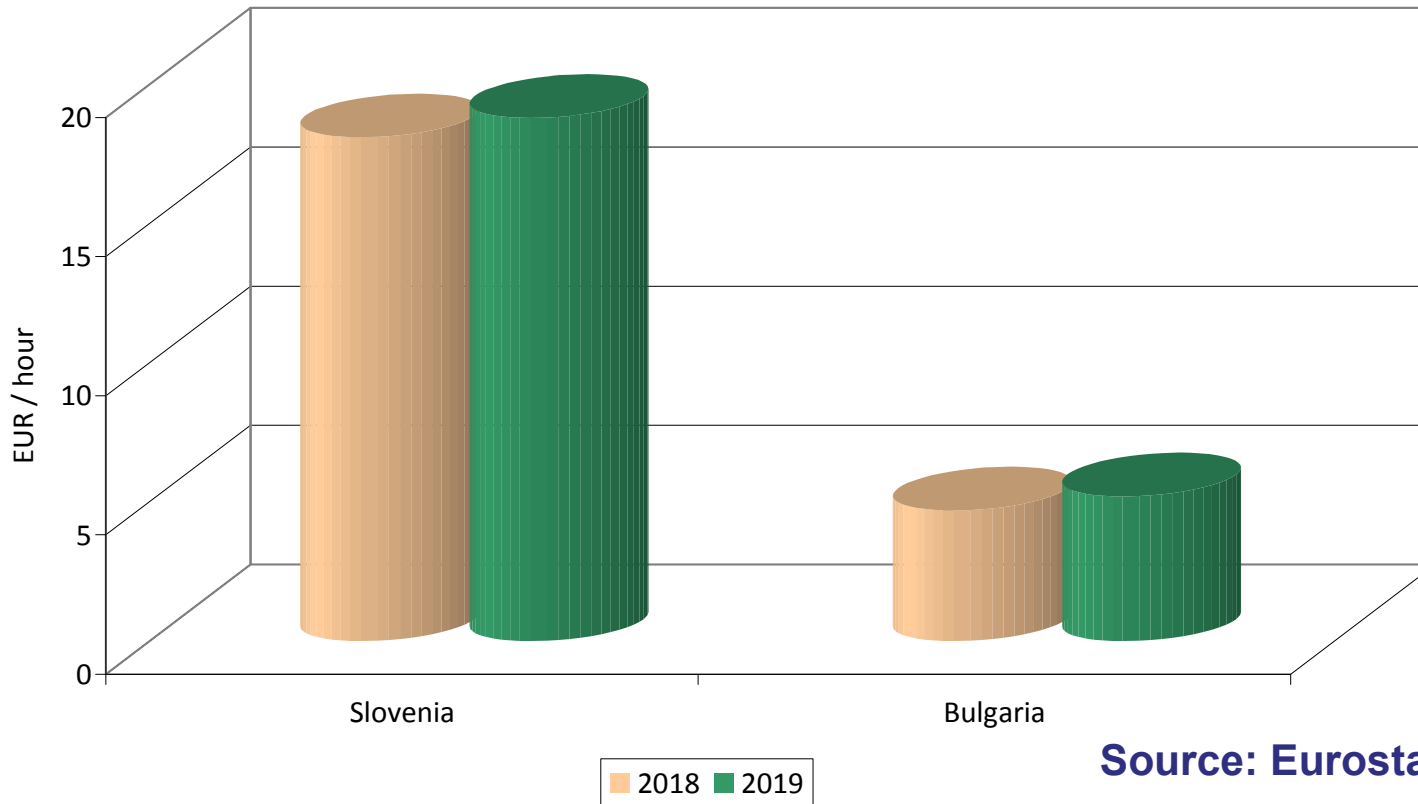
- Montana Technology Park (NW Bulgaria)
- Ruse Industrial Park (Northern Bulgaria)
- Elin Pelin Industrial Park (SW Bulgaria)
- Aytos Industrial and Business Park (SE Bulgaria)



Analysis of Labour Costs dynamics in SE Europe



Labour cost for LCI (compensation of employees plus taxes minus subsidies) in manufacturing



Source: Eurostat, FRD Center

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As it results from FRD Center previous regional researches, the **Czech Republic** is rated as one of the best manufacturing destinations in Europe. Over 40% of the Czech labour force is employed in the industrial sector.

Some of the key factors in this rating are:

- high degree of security;
- relative political stability;
- economic and corporate stability;
- its central position with strategic access to Europe's main markets;

Nevertheless, the Czech Republic is far from being the cheapest country for the manufacturing industry, considering not just the payroll costs for the local labour but also the costs of utilities, industrial development and administrative charges.

The Czech Republic ranked 30th, out of 190 countries, in the "Ease of Doing Business" category in the 2018 World Bank "Doing Business" report (27th in 2017).

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Czechia

The **Czech Republic** hosts one of the highest concentrations of automotive-related manufacturing and design activity in the world. The Czech automotive industry employs more than 150,000 people and accounts for more than 20% of both Czech manufacturing output and Czech exports.

As it results from FRD Center previous regional analyses of the manufacturing sector, the main Czech manufacturing sectors include:

- automotive;
- aviation and aero-spatial;
- engineering;
- environmental technologies;
- metalworking;
- medical devices and equipment;
- electronics and electrical engineering;
- chemical and pharmaceutical industry;
- furniture;
- glass and ceramic industry;

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Unfortunately, due to the COVID-19 pandemic lockdown, the GDP resulting from manufacturing in Czech Republic decreased to 276488 CZK Million in the first quarter of 2020 from 284692 CZK Million in the fourth quarter of 2019.

This temporary situation is expected to be overcome promptly as, in order to keep the economic and industrial factors interesting for potential partners, an extensive infrastructure with excellent scientific centres has been established in recent years.

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Czechia



As it results from the FRD Center previous researches, several **manufacturing and technology clusters** operate in the Czech Republic.

Some examples are:

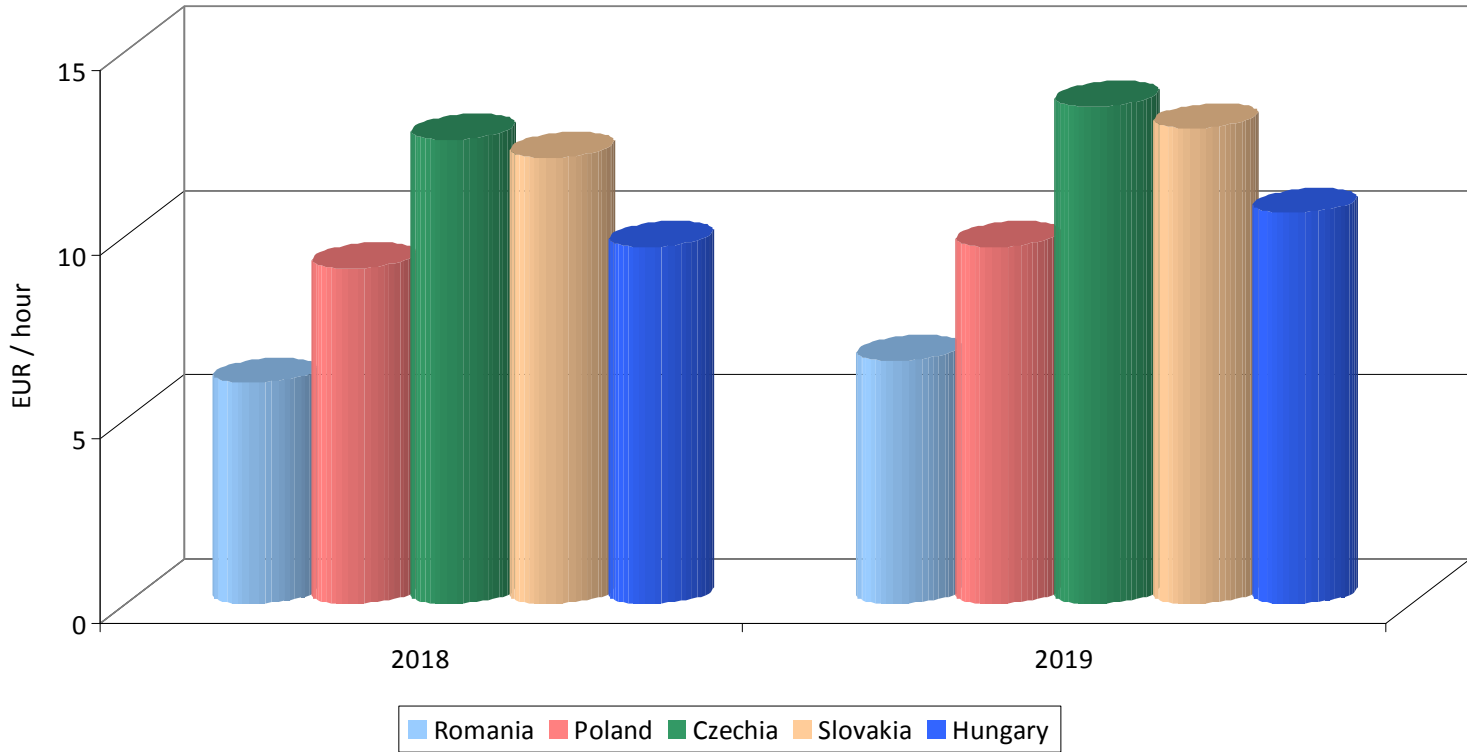
- Czech Machinery Cluster
- HK Metal Cluster
- Cluster of Czech Furniture Manufacturers
- Technology Centre of the Czech Academy of Science
- Moravian-Silesian Automotive Cluster,
- Science and Technology Park,
- Palacky University in Olomouc



Analysis of Labour Costs in CE Europe



Labour cost for LCI (compensation of employees plus taxes minus subsidies) in manufacturing



Source: Eurostat, FRD Center

Hungary

As it resulted from FRD Center previous researches, some of the leading **Hungarian manufacturing sectors** are:

- automotive manufacturing;
- electronics;
- chemicals, pharmaceuticals;
- machinery;
- medical technology;
- ICT;
- food industry;





Hungary

The **automotive manufacturing sector** is one of Hungary's core industries and generates almost 21% of total exports. More than 600 companies employing a total of 100,000 people are active in the sector.

The **electronics industry** is one of the largest industrial sectors in Hungary, accounting for 22% of total Hungarian manufacturing production. The country is the largest electronics producer in the CEE region, providing 26% of total regional production.

The output of the manufacturing sector rose by 5.2% in the first nine months of 2017 compared to the same period of the previous year. The labour productivity of manufacturing companies with 5 or more employees rose by 1.7%, while there was a 3.2% increase in the number of employees.



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As FRD Center found out through previous researches, the Hungarian Government recently launched the Industry 4.0 National Technology Platform with the participation of research institutions, education institutions and companies that carry out R&D in Hungary.

This program provides a framework for companies to support high-added-value research and development work. The government wants to utilise this program to motivate Hungarian SMEs and large enterprises, especially in the application and development of digital manufacturing and the internet of things.

In spite of the COVID-19 pandemic lockdown, the Hungarian GDP from Manufacturing increased to 1964888 HUF Million in the first quarter of 2020 from 1958160 HUF Million in the fourth quarter of 2019.



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With a nominal GDP is \$571.320 million in 2017, the **Polish economy** is the eighth largest in the EU.

Within EU27, **Poland** is the sixth largest manufacturing country, with manufacturing contributing 27% of the country's GDP.

As it resulted from FRD Center previous researches, some of the leading Polish manufacturing sectors are:

- automotive;
- metalworking;
- furniture;
- shipbuilding;
- rubber and plastic;
- coke and refined petroleum products;
- chemicals and chemical products;
- electrical equipment;

Poland

In 2018, the manufacturing sector grew by 5.8%, compared to the overall GDP growth rates of 5,1%. In February 2019, manufacturing grew by 6.9%.

Nevertheless, due to the COVID-19 pandemic, manufacturing production in Poland decreased 27.5% in April of 2020 over the same month in the previous year.



According to FRD Center previous researches in the topic of manufacturing in CEE, the **Polish automotive production** accounts for 11% of its total industrial output and about 4% of the country's GDP.



Poland



The Polish Government's economic development agenda heavily focuses on supporting innovation.

To help Polish industry move to the next level, the Polish Government launched its Industry 4.0 Platform in 2019, aiming to encourage the innovation level of Polish companies, popularizing knowledge about 4.0 processes and developing competences in areas such as robotics and automation.

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FRD Center is monitoring the players and market opportunities in the Industrial Manufacturing, Automotive, Machine-Tools, Technology, Furniture Manufacturing sector in CE Europe, Eastern Europe and SE Europe.

Upon demand, FRD Center identifies and selects the local players according to the Client's criteria, provides New Vendor Identification and Selection services.

For 20 years, FRD Center facilitates commercial relations between foreign manufacturers, investors, exporters with local key decision makers and provides B2B matchmaking, Trade Missions, Inward Buyer Missions, Roundtables etc.

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with your specific demand for local support

Romania

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As its results from FRD Center's numerous researches regarding the **Romanian manufacturing sectors**, Romania is one of the strongest players in CEE. Historically, manufacturing companies and the industrial sector represent the backbone of Romania's economy.

In 2018, the Romanian manufacturing industries accounted for approximately 35% of the GDP and 29% of the workforce.

The GDP from Manufacturing in Romania averaged 7231.52 RON Million from 1995 until 2019, reaching an all time high of 10302.30 RON Million in the fourth quarter of 2018.



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Romania

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According to the FRD Center previous analyses of the sector, the **Romanian industrial manufacturing sector** consists mainly of:



- automotive: OEM and auto components
- heavy machinery and machine-tools
- defence
- ICT
- chemicals, including plastic, paints & varnishes, glass, cement etc.
- mining and aggregates
- agricultural machinery
- oil and drilling equipment manufacturing
- naval, aviation and defense
- furniture
- home appliances, white goods
- metal casting and metalworking
- food production

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Romania



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One of the most dynamic sectors in Romania is **automotive manufacturing**.

At the same time, **technology** is considered a primary growth driver for Romania. The **IT&C services sector** is forecasted to reach EUR 6.3bn by the end of 2020.

Today, Romania is one of the leading countries in the region not only for IT&C development, but also for **SSC & BPO**. Over the last 2 years, names like London Stock Exchange Group, Viavi, Huawei, Capgemini, Samsung, Amazon, Accenture have opened Centers in Romania, either for R&D, Business Services, Logistic or others.

Romania's ITC sector reached 6.2% of GDP in 2017 and the ITC services exports exceeded EUR 4.5 billion in 2018. A full implementation of the strategic vision of the ICT sector in Romania will result in a total investment of around 2.4 billion euro. Direct and indirect impact on the economy can be translated into a GDP growth of 13%, increase in the number of jobs by 11% and cut in administration costs by 12% during 2014-2020.

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Romania

The Romanian GDP advanced 2.4% year-on-year in the first quarter of 2020. In regards to the GDP from Manufacturing in Romania, this increased to 10037.10 RON Million in the fourth quarter of 2019 from 9980.40 RON Million in the third quarter of 2019.

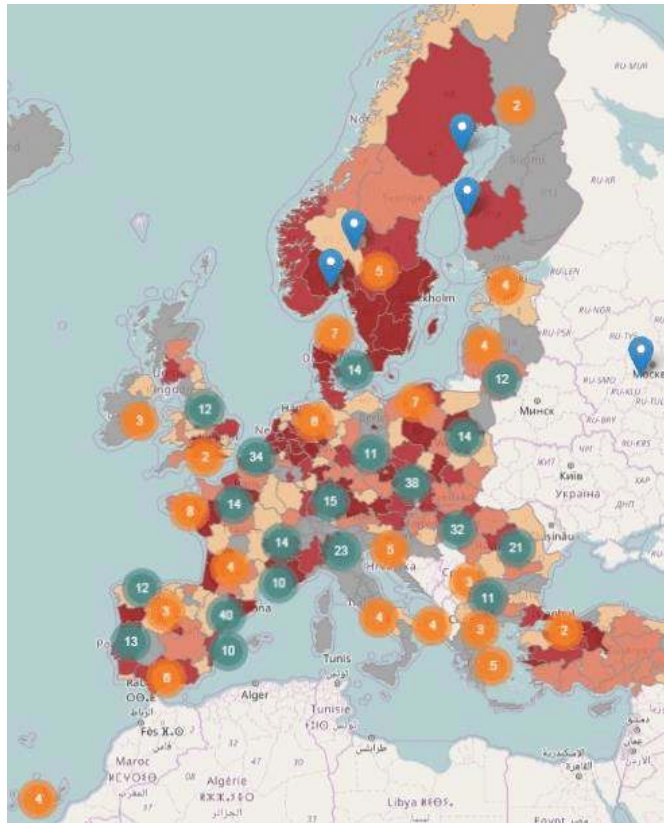
Unfortunately, because of the COVID-19 pandemic lockdown, the Manufacturing Production in Romania decreased 17.7% in March of 2020 over the same month in the previous year.

It is expected that the situation improves, while external orders start to pick up.



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Picture source: European Cluster Collaboration Platform

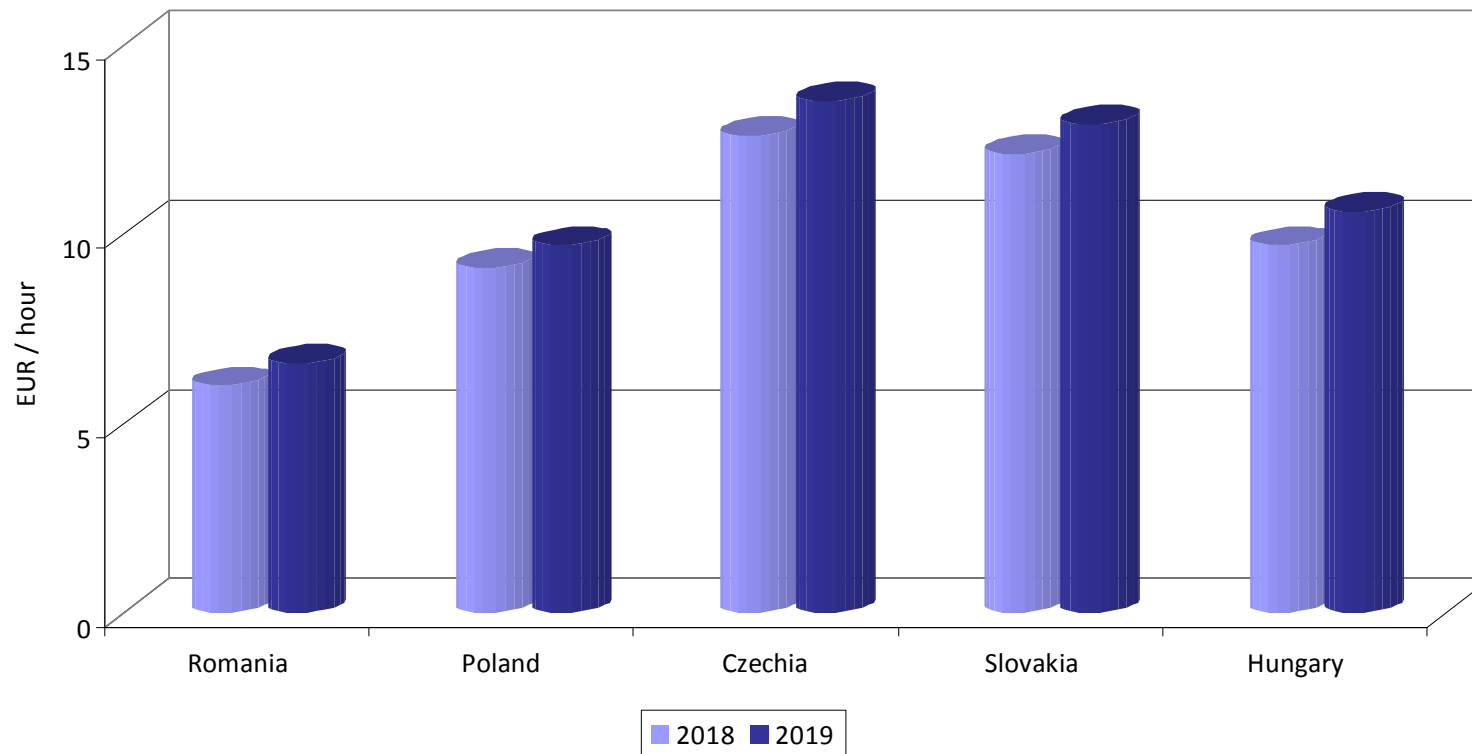
In regards to the **technology support** network operating in Romania, as FRD Center found out through previous researches, there are several clusters such as

- Danube Engineering Hub
- Romanian New Material Cluster
- ICT Oltenia Cluster
- Transylvanian Mechanical Engineering Cluster
- Green Solutions Lower Danube Cluster
- MECHATREC
- INDAGRO POL

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Analysis of labour costs in CE Europe

Labour cost for LCI (compensation of employees plus taxes minus subsidies) in manufacturing



Source: Eurostat, FRD Center

Serbia

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As it results from the FRD Center previous analyses in Emerging Europe, the main **manufacturing sectors in Serbia** are:

- automotive
- food and beverages
- textile
- wood and furniture
- metalwork and machine building
- aerospace and defense
- ITC



The **industrial manufacturing production** in Serbia in T1 2020 compared to T1 2019 has increased by 6.1%.

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Serbia



According to the FRD Center research based on official statistical data, in T1 2020 compared to the same period of 2019, some of the **manufacturing sectors in Serbia** that have recorded increases are:

-manufacture of coke and refined petroleum products:	+42.7%
-manufacture of computer, electronic and optical products:	+24.8%
-manufacture of electrical equipment:	+21.8%
-manufacture of tobacco products:	+20.6%
-manufacture of basic pharmaceutical products and pharmaceutical preparations:	+16.6%
-manufacture of furniture:	+11.6%
-manufacture of wood, except furniture:	+10.5%
-manufacture of food products:	+4.1%
-manufacture of chemicals and chemical products:	+4%
-manufacture of paper and paper products:	+3.1%



Serbia



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The labour cost for LCI (compensation of employees plus taxes minus subsidies) in manufacturing in Serbia has been of 5.1 EUR / hour in 2018 compared to 4.7 EUR / hour in 2017.

Seven clusters from different sectors are the founders of the **Serbian Cluster Association**:

- Autocluster Serbia (automotive sector)
- Vojvodina Metal Cluster (metalworking technology sector)
- Fashion and Apparel Cluster of Serbia (textile sector)
- Vojvodina ICT Cluster (ITC sector)
- Nis Cluster of Advanced Technologies (ITC and electronic engineering)
- ICT Cluster of Central Serbia (ITC sector)
- ICT Network (business services sector)

The members of these clusters have over 30,000 employees and record cumulated annual revenues of over 1 bn EUR mainly from exports.

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Slovakia

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Manufacturing is one of the key industries for the **Slovak Republic**. The industrial sector represents 34.4% of GDP and 35.5% of the active population.



As it results from FRD Center previous analyses of the manufacturing sector in Emerging Europe, the **main industrial sectors in Slovakia** are:

- automotive manufacturing;
- transport material;
- chemistry;
- food stuffs;
- wood and furniture;
- pulp and paper;
- textiles, garments;

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Slovakia



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The main industrial manufacturing industry in Slovakia is **automotive**, which over the last 10 years, saw a five-fold increase. According to the ZAP SR (Automotive Industry Association of the Slovak Republic), the share of automobile production reached 46.8% of the total industrial production.

With over one million cars produced annually, the Slovak Republic became the global leader in car production per capita.

Car production in Slovak factories is among the most effective and environmentally-friendly worldwide.

Unfortunately, due to the COVID19 lockdown, the manufacturing production in Slovakia decreased 21.4% in March of 2020 over the same month in the previous year. The GDP from Manufacturing in Slovakia decreased to 4414 EUR Million in the first quarter of 2020 from 4429 EUR Million in the fourth quarter of 2019.

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Slovenia



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The logo for FRD center, featuring the text 'FRD center' in a bold, sans-serif font, with 'FRD' on the top line and 'center' on the bottom line. The text is positioned to the left of a stylized yellow swoosh that curves from the top right towards the bottom right.

According to the FRD Center previous researches, some of the leading **manufacturing sectors in Slovenia** are:

- automotive
- electrical and electronics
- machining and metal
- chemicals and pharmaceuticals
- ICT
- wood

The turnover in manufacturing of other non-metallic mineral products has increased by 10.5% in Slovenia in 2019 compared to 2018.

The value of the sold industrial products and services in Slovenia has amounted to 26.6 bnEUR in 2019, up by 2.4% compared to 2018.

More than a third of the value of sold products and services in 2019 in Slovenia has been generated by the largest three manufacturing activities:

- manufacture of motor vehicles, trailers and semi-trailers (14.6%)
- manufacture of electrical equipment (11.3%)
- manufacture of fabricated metal products (10.1%)



Slovenia



The turnover in manufacturing of other non-metallic mineral products has increased by 10.5% in Slovenia in 2019 compared to 2018.

The **manufacturers of motor vehicles**, trailers and semi-trailers in Slovenia have generated 93.4% of their turnover in 2019 on foreign markets. Furthermore, the domestic manufacturers of other transport equipment have sold 90.8% of their products outside Slovenia.

The highest turnovers from the sale of industrial products and services in Slovenia in 2019 have been generated by the following regions:

- | | |
|-------------------------|-------|
| - Osrednjeslovenska | 19.0% |
| - Jugovzhodna Slovenija | 18.9% |
| - Savinjska | 13.5% |
| - Podravska | 12.8% |
| - Gorenjska | 11.8% |



Slovenia



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The labour cost for LCI (compensation of employees plus taxes minus subsidies) in manufacturing in Slovenia has been of 18.8 EUR / hour in 2019 compared to 18.1 EUR / hour in 2018.

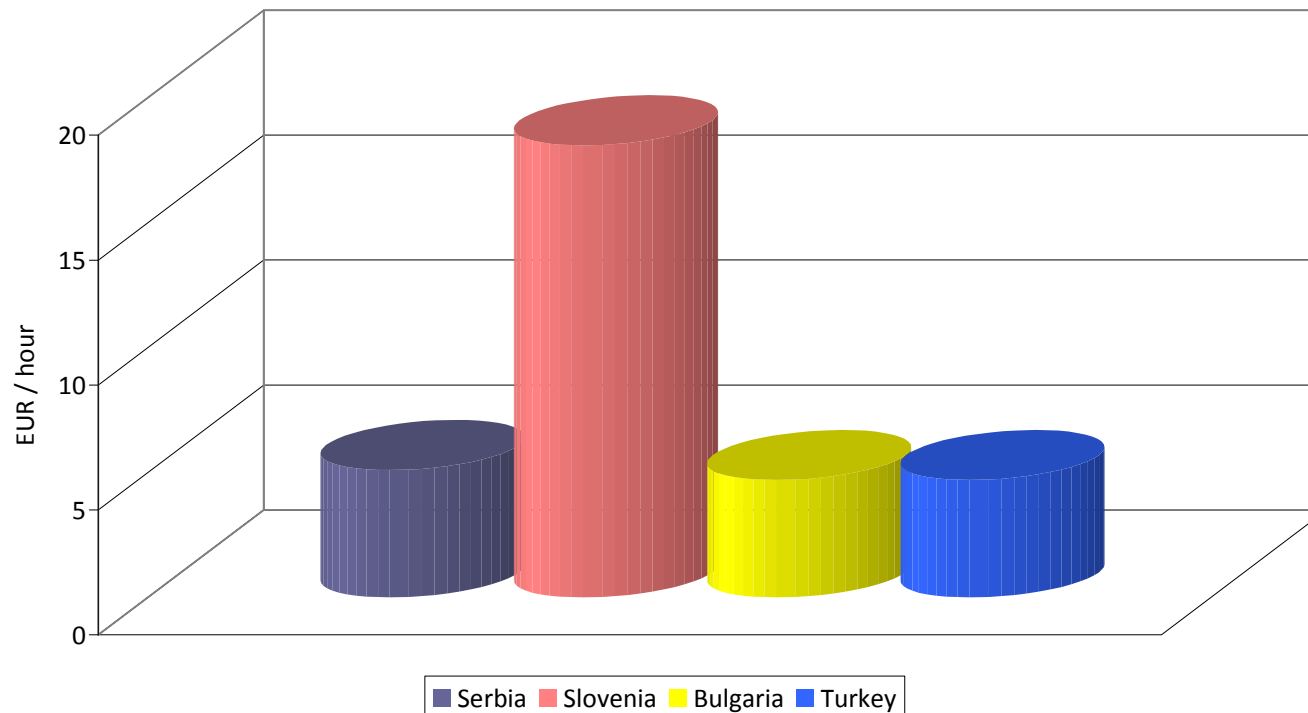
The estimated gross annual labour costs per employee in the automotive industry in Slovenia in 2019 are:

- 23,800 EUR for production associate
- 20,400 for technician
- 18,400 EUR for quality controller
- 14,700 EUR for unskilled worker

Some examples of **clusters in Slovenia** are: GIZ ACS Automotive Cluster (automotive sector), Slovenian Innovation Hub SIH EEIG (biopharmaceuticals and business services sectors), TCS Toolmakers Cluster (technologies sectors), Lesarski Grozd Wood Industry Cluster (furniture and wood sector).

Analysis of Labour costs in SE Europe

Labour cost for LCI (compensation of employees plus taxes minus subsidies) in manufacturing in 2018



Source: Eurostat, FRD Center

Turkey

Turkey's Manufacturing Purchasing Managers' Index (PMI) has reached 53.9 in June 2020 compared to 40.9 in May 2020 and 33.4 in April 2020. The lifting of the COVID-19 restrictions has enabled the domestic manufacturers to expand their production volumes.

According to the FRD Center previous analyses, the key manufacturing sectors in **Turkey** are:

- automotive
- food
- metal
- chemicals
- machinery
- aerospace and defense
- ICT



Turkey

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Turkey is the 5th largest **automotive producer** in Europe. Furthermore, Turkey ranks 2nd in Europe at plastic production.

The labour cost for LCI (compensation of employees plus taxes minus subsidies) in manufacturing in Turkey has been of 4.7 EUR / hour in 2018 compared to 5.4 EUR / hour in 2017.

The gross wages-salaries index in industry in Turkey has increased by 19.9% in the first quarter of 2020 compared to the same quarter of the previous year. Furthermore, the hourly labour cost index in the industrial sector has increased by 18.6% in Turkey in the first quarter of 2020 compared to the first quarter of 2019.



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Turkey



As it results from the FRD Center research, there are around 330 Organised Industrial Zones and over 80 Technology Development Zones, operational or in construction phase in Turkey.

Some examples of **clusters in Turkey** are:

- ISIM Construction Machinery Cluster (machinery sector)
- Turkish Cosmetics Cluster (chemicals sector)
- OSTIM Rubber Technologies Cluster (rubber sector)
- OSTIM Medical Industry Cluster (medical devices sector)
- Turkish Aerospace Cluster Association (aerospace and defence sector)

FRD Center

Market entry services to Romania, the CEE and SEE.
Market research, B2B matchmaking, sector studies,
trade missions, investment opportunity research, M&A support,
new supplier identification and selection.

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FRD Center assists international companies with overseas expansion, new suppliers identification and market entry to the Emerging Markets in Eastern Europe, CE and SE Europe.

Are you a foreign company looking to source, expand, build strategic partnerships or to find new Clients in Eastern Europe?

As one of the pioneer privately owned market entry advisory firms in Romania, operating for 20 years, FRD Center has high competencies in market entry advisory and is quite well placed to assist foreign companies with a multitude of aspects related to new vendor identification & selection, market opportunity assessment, B2B matchmaking with local Decision Makers and M&A in Romania and the region.

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For tailored Market Research, B2B Matchmaking with local players in the sector, New Suppliers Identification and M&A assistance feel free to contact

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