

SEPTEMBER 2020

FOREIGN  
DIRECT  
INVESTMENT  
IN ROMANIA

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## FOREWORD

This report was initially planned to be launched in early 2020, but the outbreak of the epidemiological crisis delayed its publication. Out of the desire to incorporate an updated perspective on foreign direct investment (FDI) in the post-crisis period and although it is too early to draw firm conclusions from the preliminary data released so far, some short and medium-term trends can still be highlighted:

Globally, FDI flows will be significantly impacted by the pandemic. For the period 2020-2021, the United Nations Conference on Trade and Development (UNCTAD) estimates a reduction in FDI flows of up to 40%<sup>1</sup>, and the forecasts of the Organisation for Economic Co-operation and Development (OECD) indicate a decrease in FDI of up to 30% in 2020 compared to 2019<sup>2</sup>. Two-thirds of investors surveyed by EY expect a reduction in the investments planned for 2020 in Europe, according to the EY Europe Attractiveness Survey 2020<sup>3</sup>.

In Romania, FDI flows had a negative net value of -338 million euros in the first five months of 2020, compared to a positive net value of +2.059 billion euros in the same period of 2019. Even though this trend is expected to reverse in the coming months, the initial signal provided by the direction of FDI flows in the first semester of 2020 is a reflection of the relatively high risk that foreign investors see in the Romanian economy and their lack of confidence in the short-term prospects of the business environment.

The relocation of production activities near the main consuming countries (especially those currently in China), mentioned also by the Commission and the European Parliament, is an opportunity for Romania to position itself as an attractive location for FDI. However, Romania is in competition with other states from the same region and, as the results of this study show, given the reduced competitiveness of its regions compared to those of the neighbouring states and the lack of coherent public policy measures to attract high value-added FDI, there is a high risk of a continuation of the existing trend of attracting, in particular, activities with low added value and low technological intensity.

Uncertainty about the structure of demand in the post-crisis period could affect both the component and the composition of FDI. Fiscal and legislative stability would reduce the overall cumulative effect of this uncertainty.

Exports from the whole region will be affected by the decrease in demand, as well as by the temporary segmentation of value chains. Romania and Serbia will probably incur a high cost, as their manufacturing sectors are much more integrated into global supply chains and they contribute the most to their economies in terms of added value and employment.

It would be beneficial for Romania to have a more significant presence on international markets, especially during this period, through government agencies dedicated to attracting investments and promoting exports, such as Invest Romania. With a proactive attitude, they could coordinate contacts with potential investors, facilitating the relationship with local governments in the implementation of investment projects.

1. [unctad.org/en/PublicationsLibrary/diaeiainf2020d3\\_en.pdf](https://unctad.org/en/PublicationsLibrary/diaeiainf2020d3_en.pdf) (accessed on 15 June 2020)

2. [read.oecd-ilibrary.org/view/?ref=132\\_132646-g8as4msdp9&title=Foreign-direct-investment-flows-in-the-time-of-COVID-19](https://read.oecd-ilibrary.org/view/?ref=132_132646-g8as4msdp9&title=Foreign-direct-investment-flows-in-the-time-of-COVID-19) (accessed on 15 June 2020)

3. [assets.ey.com/content/dam/ey-sites/ey-com/en\\_gl/topics/attractiveness/ey-europe-attractiveness-survey-2020-v2.pdf](https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/attractiveness/ey-europe-attractiveness-survey-2020-v2.pdf) (accessed on 15 June 2020)

## THE MAIN CONCLUSIONS OF THE STUDY

Romania benefited from 0.45% of total FDI flows globally, i.e. 81.12 billion euros in 2018. Data from the National Bank of Romania (BNR) show that foreign companies were responsible for 75% of total exports and 68% of total imports. The number of employees in foreign companies represents 26% of the total number of employees in Romania, a slight decrease compared to previous years.

Even though FDI stocks in Romania have increased every year since 2008, the differences remain significant compared to other countries in the region, if we look at FDI relative to GDP or the number of inhabitants. Although less exposed to the US-China trade war, Romania may be indirectly affected by increasing uncertainty, declining investor confidence and the delaying of investment decisions.

The services sector has the largest share of FDI stocks in Romania: approx. 47% of the total. In contrast, in the high-tech sector, stocks of FDI as a share of the total in the manufacturing industry are only 5%, the lowest level in the region.

During 2016, Romania attracted only 5% of the total volume of the FDI related to high-tech industries and knowledge-intensive services in the region. Instead, 52% of the stocks were directed to Hungary, 18% to Poland and 14% to the Czech Republic, the regional specialisation thus acting to the detriment of Romania.

Romania's deficiencies in competitiveness are also reflected in the regional competitiveness index. None of the 8 development regions of Romania matches the average level of performance of the European Union (EU), not even the Bucharest-Ilfov region.

In relation to the components of FDI, the negative values of net credit indicate that the amount of loans granted by Romanian FDI enterprises to non-resident partners in the group is higher than the credit received by Romanian companies, which emphasises that Romanian investments have reached a certain degree of maturity. A cash pooling behaviour (the ability to provide loans to companies in the group), while capping losses and dividends, signals that Romanian companies have low investment opportunities. These aspects suggest the end of an era for FDI in Romania.

In this context, it would be useful to outline Romania's direction and to identify new ways of taking action. Public policy measures could focus on encouraging FDI with the highest added value possible and on facilitating the reorientation of FDI to high-tech and knowledge-intensive industries in the service-related fields. Lack of solid measures to increase competitiveness, focused on attracting a certain type of FDI, puts Romania at risk of becoming specialized in industries with low added value and low technological intensity.

The case studies in the energy, automotive and telecommunications industries show that the impact of companies with foreign capital in the Romanian economy is significant. The total estimated impact of the activities of the FIC's members is 5.8% of GDP in the energy industry, 1% in the telecommunications industry and 1.2% in the automotive industry. The performance of foreign companies is also higher in terms of gross value added per employee, both compared to the average for the economy and the average for the sector - in the latter case with the exception of automotive companies, where the values are marginally equal.

# 1. FDI CONCEPTUAL FRAMEWORK

The positive impact of FDI on the host country's economy, both directly and indirectly (Figure 1) is one of the most common and debated issues related to FDI. The impact is determined by the size and degree of market development, infrastructure quality, economic / political stability, trade openness, as well as by the mix of fiscal incentives, business climate, cost, and quality of labour.

Figure 1. The impact of FDI on the economies of host countries

Source: The authors



## Which factors contribute to attracting FDI?

There are three major reasons for attracting FDI: expanding markets (FDI in search of markets), identifying cheaper factors of production (FDI in search of efficiency) or the intention for technological development (FDI in search of resources / strategic assets).

Success in attracting FDI is determined by two categories of factors: those related to the size and the characteristics of the destination markets (which incentivise horizontal FDI) and those related to the cost of the factors of production and their quality (which attract vertical FDI)<sup>4</sup>. Beyond the factors that cannot be influenced (the geographical location of a country or region, openness to the sea or, conversely, geographical isolation), most of the factors that determine the capacity to attract FDI can be influenced by solid public policy measures.

Studies show the tendency of multinational companies to locate in areas where other companies are already present, a concept called the "agglomeration effect".

Such areas provide newcomers with a large pool of skilled labour, as well as companies situated upstream and downstream of the value chain already benefiting from technological externalities and knowledge, which provide them with factors of production tailored to their needs or business services.

In relation to FDI in industry, studies show that the probability of a region to be the chosen location for foreign companies increases if the concentration of firms operating in the same industrial sector is greater<sup>5</sup>. For the services sector, the trend is to concentrate investment in the most prosperous areas of the countries, where they benefit from highly skilled labour and other knowledge-intensive services<sup>6</sup>.

4. Horizontal FDI involves the multiplication of the value chain in each country or region in which the MNCs are implanted, while vertical FDI is based on the sharing of the value added chain between different production units of the MNC.

5. Pusterla, 2007.

6. UNCTAD, 2001; Pelegrin, 2008.

FDI is recognized as a way to transfer technology and knowledge from the parent company to subsidiaries in the host country and then to local companies.

Positive technological externalities are intensified by competition, imitation and training, but they depend on the technological and social capabilities of the subsidiaries in the host country and the local firms with which they interact. For such effects to occur, it is necessary to have a minimum level of absorption capacity for local firms.

## 2. FOREIGN INVESTMENT AT A GLOBAL AND REGIONAL LEVEL

Romania benefited, in 2018, from 0.45% of total FDI flows globally, ranking 40th, after Peru and before Panama. Among the countries in the region, Poland was the main destination chosen by investors, receiving 0.88% of total flows (25th place), followed by the Czech Republic with 0.73% (31st place) and Hungary with 0.49% (38th place).

### A. THE TRADE WAR AND POSSIBLE CONSEQUENCES FOR THE ROMANIAN ECONOMY

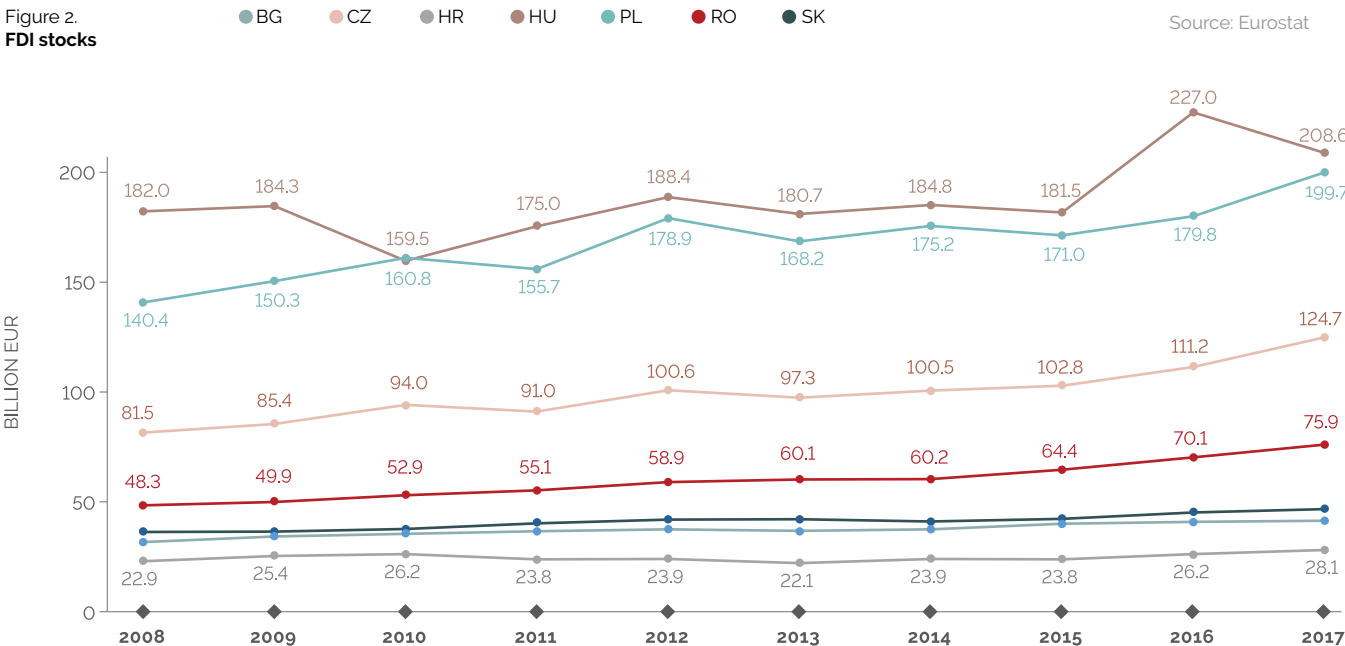
As a result of high trade activity with both the US and Asian countries, Europe is affected by trade shocks in these locations. However, there are fewer consequences for emerging European countries than for advanced ones, especially in relation to the US, due to lower exposure to value-added trade with the US or China, according to an IMF report<sup>7</sup>.

7. Huidrom, R., Jovanovic, N., Mulas-Granados, C., Papi, L., Raei, F., Stavrev, E., Wingender, P. (2019) Trade Tensions, Global Value Chains, and Spillovers. Insights for Europe, International Monetary Fund, European Department, no. 19/10

### B. REGIONAL ANALYSIS OF THE EVOLUTION AND EVALUATION OF FDI IN RELATION TO GROSS VALUE ADDED

In Romania, FDI stocks have increased every year since 2008, unlike for other countries in the region which recorded at least one year with a lower value, compared to the previous period (Figure 2). Moreover, Romania registers the highest level of CAGR (compound annual growth rate) for FDI stocks- 6.6% in the period 2008-2017.

Figure 2. FDI stocks

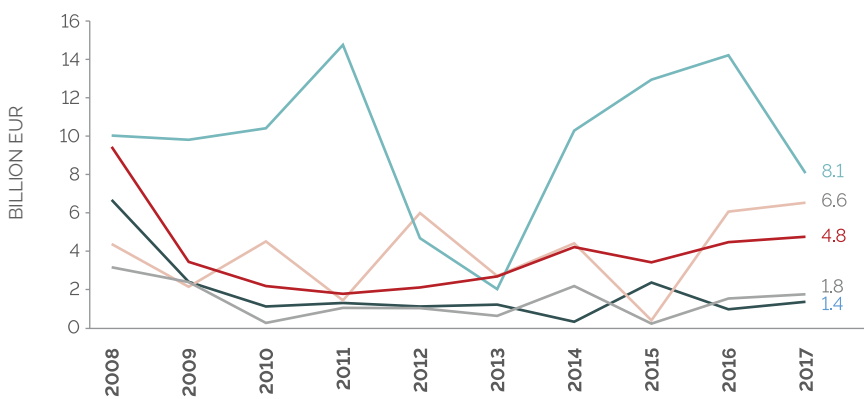
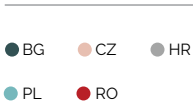


Source: Eurostat

In Romania's case, FDI stocks amount to 75.9 billion euros, the fourth highest value of the seven neighbouring countries, maintaining a level 2.7 times lower than in Hungary (ranked first), 2.6 times lower than in Poland and 1.6 times lower than in the Czech Republic.

The evolution of FDI flows indicates a very volatile trend for the main countries in the region (Figure 3), while in Romania, starting from 2009, flows resumed their growth in a constant manner, without significant increases or imbalances.

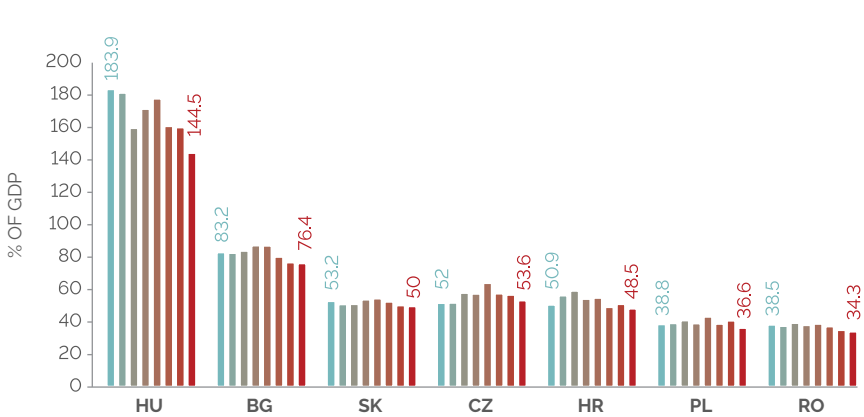
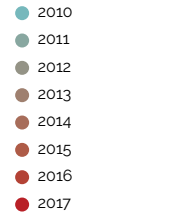
Figure 3.  
**FDI flows, 2008-2017**



Source: Eurostat

The differences remain significant between Romania and all the other countries if we adjust the level of FDI stocks by the size of the economy and if we relate the volume of stocks either to GDP or to the number of inhabitants.

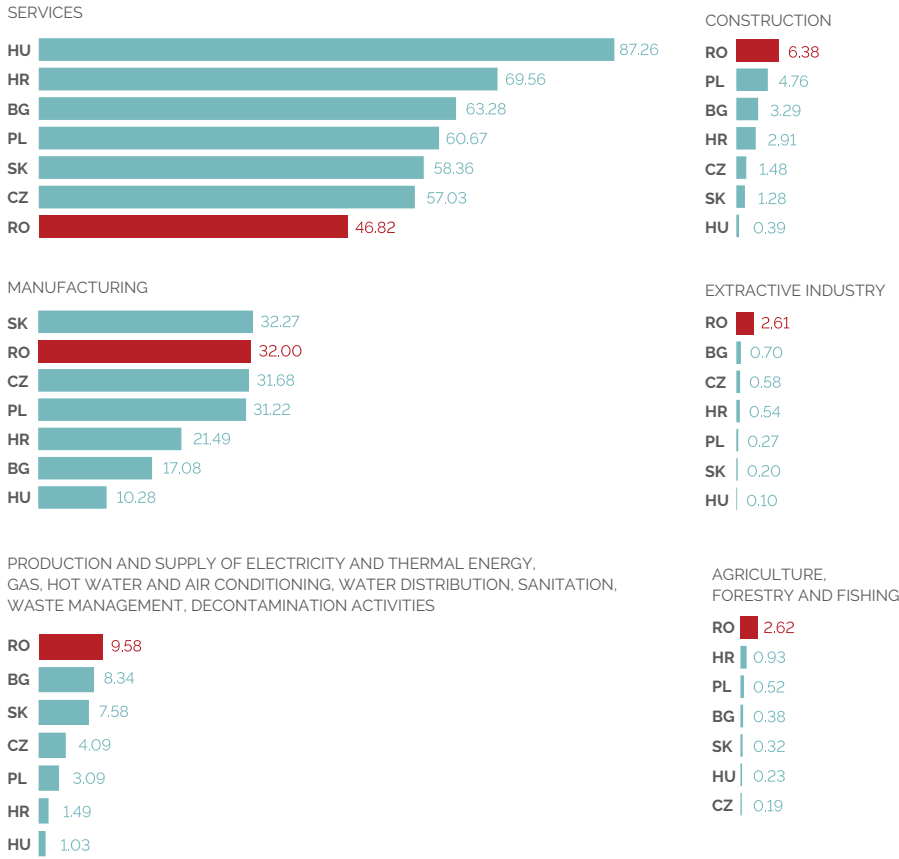
Figure 4.  
**FDI stocks as a % of GDP, 2010-2017**



Source: Eurostat

Figure 5 - The largest stocks of FDI are in the services sector, for all economies analysed. Romania has the lowest share of FDI in the services sector; 47% of the total. The next ranked, the Czech Republic, is over 10 percentage points ahead of Romania, and the other countries have much higher shares, reaching up to over 87%, in the case of Hungary.

Figure 5.  
**Distribution of FDI stocks by main sectors of the economy, as a % of total stock volume in 2016**

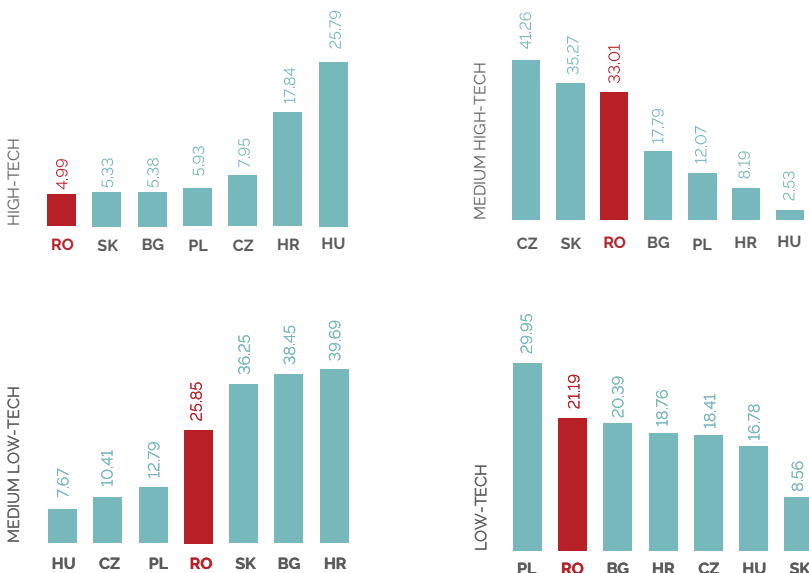


Source: Eurostat

Romania has an atypical composition of FDI stocks by sector, with over 2.6% of FDI stocks both in the Extractive Industry and in Agriculture, forestry, and fishing, while in the other countries, their share is below 1% in total stocks. (Figure 5)<sup>8</sup>. One third of the FDI stocks in the manufacturing industry are accumulated in medium high-tech (MHT) industries, such as Manufacturing of road transport vehicles and other means of transport. (For a detailed presentation of industries classified by degree of technological intensity, see the table in Appendix 1). The medium low-tech (MLT) sector attracts over a quarter of the share of FDI stocks, followed by the low-tech (LT) sector with over a fifth.

In the high-tech (HT) sector, stocks of FDI as a share of total manufacturing are only 5%, the lowest level in the region. There is a need to stimulate the attraction of FDI in sectors with a high level of technology, in order to avoid a situation in which FDI in Romania ends up being specialised only in sectors with low added value and low technological intensity.

Figure 6.  
**FDI in industry in 2016, as a % of total FDI stocks in Manufacturing<sup>9</sup>**



Source: authors' calculations based on Eurostat data

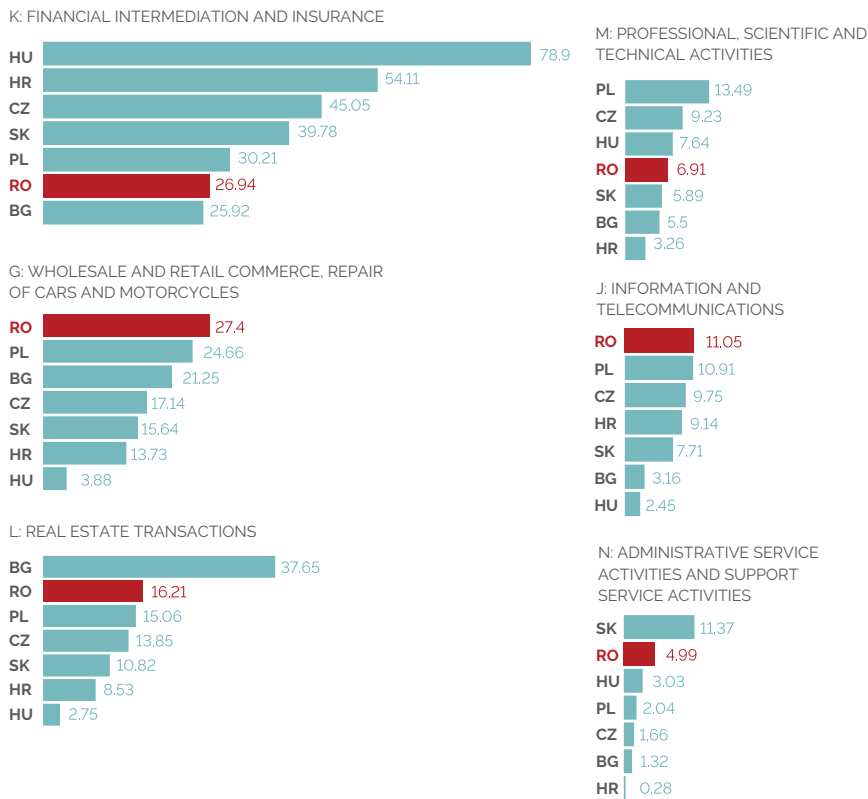
8. Eurostat uses a classification of industries in the manufacturing sector according to technological intensity and based on CANE Rev.2., As follows: high-tech (high-tech (HT)) industries, medium-to-high technology (medium high-tech (MHT)), with medium to low technological level (medium low-tech (MLT)) and with low technological level (low-tech (LT)). More details at [https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:High-tech\\_classification\\_of\\_manufacturing\\_industries](https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:High-tech_classification_of_manufacturing_industries)

9. The difference of up to 100% is due to the lack of data for certain sectors.



Romania has the largest share of FDI in the wholesale and retail sectors, compared to countries in the region. The second focus of FDI is financial intermediation and insurance. The third most important sector is real estate transactions. Romania has the largest share of FDI in the information and telecommunications sector, included in the category of knowledge-intensive high-tech services.

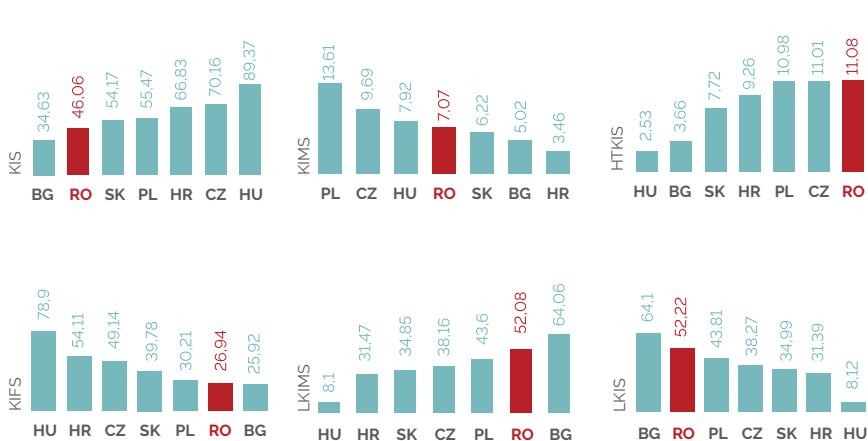
**Figure 7.**  
**FDI Distribution by main services sectors in 2016, as a % of total FDI stocks in Services**



Source: Eurostat

Romania has the second lowest level of FDI in the region in terms of Knowledge Intensive Services (KIS) and Knowledge Intensive Financial Services (KIFS) and has modest results compared to Poland and the Czech Republic in terms of Knowledge Intensive Market Services, excluding financial and high technology services (KIMS). The best performance in relation to shares of FDI stocks is recorded in the field of High-tech Knowledge Intensive Services (HTKIS), due to the volume of FDI attracted in the Information and Telecommunications sector, which comes very close to the level achieved by the Czech Republic. Romania has the second highest share of FDI for both Less Knowledge-intensive Services (LKIS) and Less Knowledge-intensive Market Services (LKIMS). This distribution of FDI suggests a trend of attracting FDI towards low value-added sectors (Figure 8).

**Figure 8.**  
**FDI in services in 2016, as a % of total FDI stocks in services**



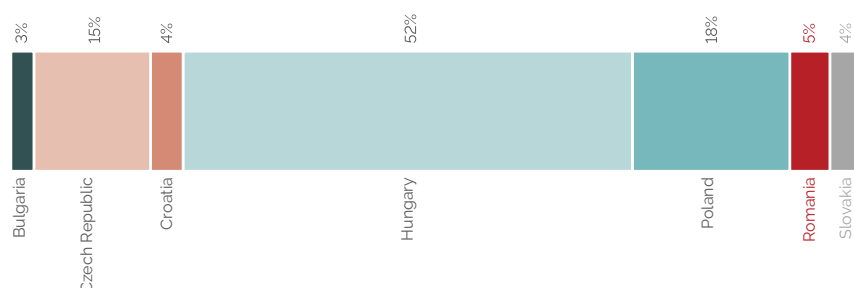
Source: authors' calculations, based on Eurostat data<sup>10</sup>

10. The calculations were made based on available data provided by Eurostat

We were interested in Romania's position in relation to the stock of FDI at the regional level from the perspective of industries with different degrees of technological intensity. From this point of view, Romania has an atypical structure of the distribution of FDI stock between these industries, but the situation in Central and Eastern Europe (CEE) confirms Romania's specialisation in industries with lower technological intensity. Romania has the largest share in FDI stocks at the regional level in high-tech industries with medium technology (21%), but also in low-tech with medium technology (20%). In the case of services there is already a well-defined specialisation of the countries analysed from the perspective of FDI stock distribution. We note that FDI in Knowledge-intensive Services (KIS) accounts for about 70% of total FDI in services in the region (70.15%), but the seven countries are not equally important from this perspective.

If we pool together the high-tech industries and knowledge-intensive services (see the figure below), regional specialisation is quite clear, and this is to the detriment of Romania. We previously noted that Romania could enter a vicious circle of targeting FDI in low-tech sectors and industries. Currently, Romania needs to quickly reconsider its competitive advantages, also at a regional level, in order to get out of this vicious circle and succeed in attracting higher levels of FDI in the high-tech area and in services intensive in knowledge.

Figure 9.  
**Regional distribution of FDI stocks in high-tech industries and knowledge-intensive services (% of FDI stocks attracted by the 7 countries, 2016)**



Source: authors' calculations

### C. ECONOMIC COMPETITIVENESS ANALYSIS OF ROMANIA AND NEIGHBOURING STATES AT THE NATIONAL AND REGIONAL LEVEL

The competitiveness index<sup>11</sup> is calculated based on three sub-indices, which assess 11 dimensions:

**Basic elements:** quality of institutions, macroeconomic stability, infrastructure, health, basic education;

**Efficiency:** higher education and lifelong learning, labour market efficiency, market size;

**Innovation:** technological training, business sophistication, innovation.

The average value of the country-level sub-indices shows the lowest values for Bulgaria in the case of Efficiency and Innovation, followed by Romania, while the sub-index assessing the Basics is the furthest from the European average for Romania (followed by Bulgaria).

In Romania, none of the 8 development regions matches the EU average performance level, not even the Bucharest-Ilfov region, although it is the closest to the average and it is the region that includes the country's capital. Out of the 51 regions analysed, we find the best performance in the capital regions of the Czech Republic and Slovakia.

The greatest lack of competitiveness is registered at the level of the first dimension evaluated (Basic Elements), where Romania has the lowest performance compared to the EU average. The main problems are poor access to basic education, followed by poor healthcare and poor infrastructure. A relatively similar level of competitiveness is recorded for the third dimension, Innovation, due to low levels of technological training and business sophistication.

In conclusion, Romania is not prepared even in terms of the most basic components to be competitive at the regional and European level. In this context, the other indicators that increase a nation's competitiveness are unlikely to see an upward trend.

11. The calculations were made based on available data provided by Eurostat

A Euromonitor report for 2018<sup>12</sup> predicts that Romania will face a labour shortage especially in high value-added industries. The same report notes Bulgaria's efforts to improve the quality of its education system; it took third place out of the countries in Central and Eastern Europe in increasing participation in the education system between 2012 and 2017.

The Czech Republic is the region's performer in terms of the attractiveness of the business environment, according to the 2018 Euromonitor report. With this kind of performance it still has the potential to attract new investors.

12. Euromonitor International. 2019. Passport. Business Dynamics: Romania.

## I. Regional analysis of competitiveness from the perspective of the determinants of FDI

For this analysis we used a set of 10 indicators reflecting the determinants of FDI, which are also present in the calculation of the European Regional Competitiveness Index 2019, their lack of availability being an important restriction. The indicators were collected from the Eurostat database or from databases of central banks and are presented in Table 1.

Tabel 1.  
Determinants of FDI

FDI Determinant	Abbreviation	Definitions
	FDI stock	FDI stock - EUR Millions, Eurostat Poland: Central Bank of Poland; Hungary: Central Bank of Hungary
Infrastructure	INFR	Kilometres of highway per 1 million inhabitants
	HTMAN	Employment in technology-intensive industries (% of total jobs)
	KISER	Employment in knowledge-intensive services (% of total jobs)
	LTMAN	Employment in technology-intensive industries (% of total jobs)
	RDEUR	Research and development expenses, Euros per capita
The degree of sophistication of the economy	GVA (only for the Romanian regions)	Business sophistication: Gross value added at basic prices; Million euro; KN sectors (Financial and insurance activities; real estate activities; professional, scientific activities and technical activities; administrative and support service activities)
Market dimension	GDPC	GDP per capita; PPPs; Index of real expenditure per capita (EU28 = 100)
	SEC	Population aged between 25 and 64 enrolled in non-tertiary upper secondary and post-secondary education (levels 3 and 4)
Labour market	TER	Population aged between 25 and 64 enrolled in tertiary education (levels 5-8)
	EMP	The population employed in all economic activities excluding agriculture - 15-64 years, thousands of people
Economy digitalisation	NET	Households with internet access at home (% of total households)

Figure 10 shows the relative positioning of CEE countries (Poland, Hungary, Czech Republic, Romania, Bulgaria, Slovakia, Croatia) compared to the best placed country in terms of these indicators at two points in time - 2008 and 2017 (based on available data).

The main conclusions of the regional analysis at the CEE level are the following:

1. Countries in the region have different positions depending on the indicator, but the Czech Republic holds the first place for 4 indicators (RDEUR, HTMAN, GDPC, SEC), followed by Bulgaria (LTMAN, TER), and Slovakia (HTMAN, NET). Romania has weak and very weak positions compared to the rest of the CEE countries for almost all indicators, except LTMAN and EMP (2nd place in 2008 and 2017).

- The highest relative progress is in Bulgaria (RDEUR and NET), Romania (INFR), Croatia (KIS) and Poland (GDPC). The largest declines in relative terms are recorded by Croatia (RDEUR) and Bulgaria (HTMAN). Romania has made the most progress in its relative position for INFR (an increase of 2.62 times), as well as having a lower level of growth for NET (1.77), GDPC (1.17), and KIS (1.11). However, there is also a decline in the relative position for RDEUR and EMP.
- Countries in the region are homogeneous in terms of these indicators, reflecting the similarities of their economies, at least in general. The highest heterogeneity is recorded for INFR, and RDEUR, EMP (both in 2008 and in 2017). The most homogeneous indicators at regional level are SEC and KIS (in 2008) and SEC, TER, KIS and GDPC (in 2017).

Figure 10.  
Relative positioning  
of CEE countries,  
2008 versus 2017,  
from the perspective  
of FDI determinants



Source: authors' calculations

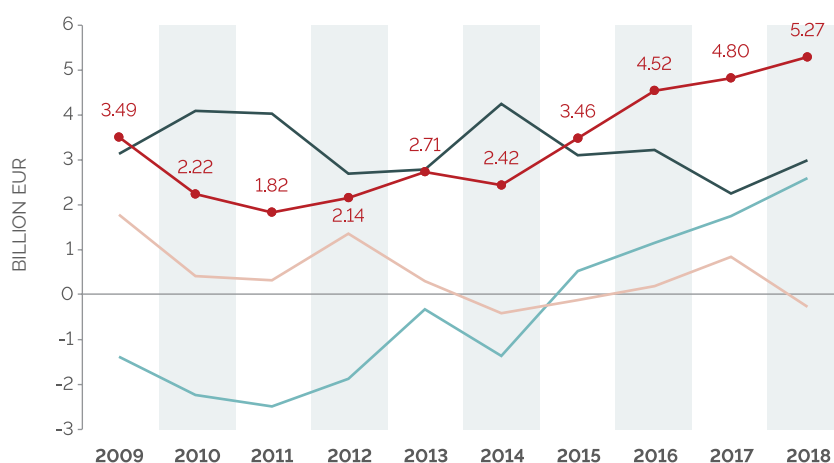
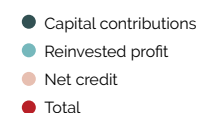
### 3. FOREIGN INVESTMENT IN ROMANIA

#### A. PRESENTATION OF THE MAIN EVOLUTIONS

##### I. The end of an era of FDI in Romania. Changes in the components of FDI flows

FDI flows have increased steadily in Romania since 2011 (Figure 11), except for 2014. However, there has been a change in the structure of FDI recently, marked, on the one hand by a decrease in net credit in the composition of the entry of FDI flows and, on the other hand, by an increase in reinvested earnings.

Figure 11.  
Evolution of FDI flows  
in Romania, total and  
by components

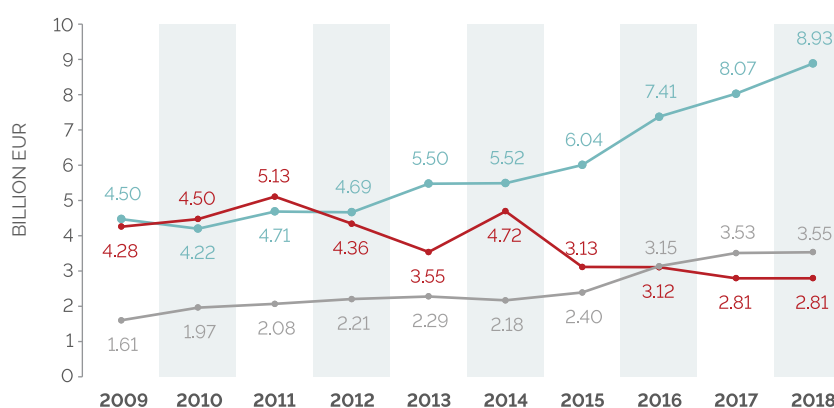
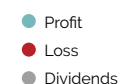


Source: NBR

The negative values of net credit indicate that the amount of loans granted by FDI enterprises in Romania to non-resident partners in the group is higher than the credit received by Romanian companies, which emphasises that investments in Romania have reached maturity. From now on, they can offer loans to external partners with whom they have links in their value chain.

At the same time, the evolution by components of reinvested profit (Figure 12) indicates a capping of losses at approx. 3 billion euros in recent years, simultaneously with a steady increase in net profit to 8.93 billion euros. The value of dividends distributed is, in turn, approximately 3.5 billion euros.

Figure 12  
Reinvested profit  
components: profit,  
loss, and dividend  
distribution



Source: NBR

The ability to offer loans to companies in the group may, at the same time, suggest an orientation towards cash pooling structures. Such cash pooling behaviour, while capping losses and dividends, suggests that Romanian companies do not have sufficient investment opportunities. Instead, they have liquidity that they keep at the parent company, which translates into a loss of investment opportunities.

It is fair, therefore, to conclude that a stage of FDI is ending in Romania, which has reached maturity in recent years. In this context, it is necessary to draw or decide the direction in which Romania wants to go and to identify the ways in which it can do so.

## II. New flows of FDI took advantage of the increase of incomes in Romania

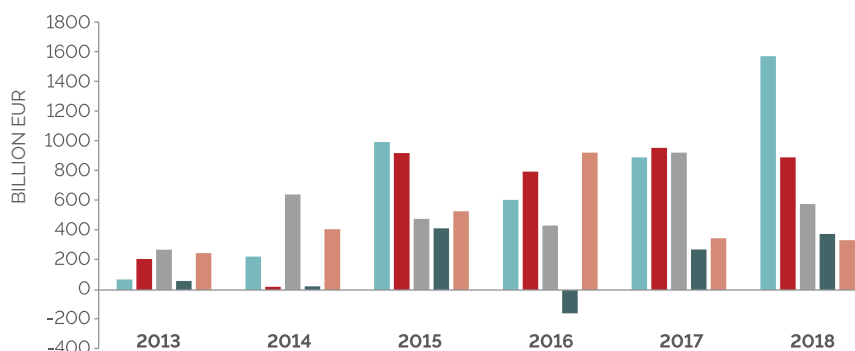
Significant FDI flows were directed to sectors such as trade, construction, and real-estate; hence to the development of business centers and shopping malls.

From a long term perspective, the growth in income and hence the growth in consumption, at the level recorded in the last few years, is not sustainable. Generally, productive investments should follow those investments oriented towards consumption by a lag of 1-3 years, which we

are not seeing in Romania. Without specific measures, Romania risks becoming a destination for investments oriented towards consumption, which will exploit only the large size of the market. When the purchasing power advantage disappears, such investments will also disappear.

Figure 13  
**FDI flows in the main 5 economic sectors**

- Trade
- Financial intermediation and Insurance
- Constructions and Real estate transactions
- Professional activities
- \*Means of transportation



Source: NBR

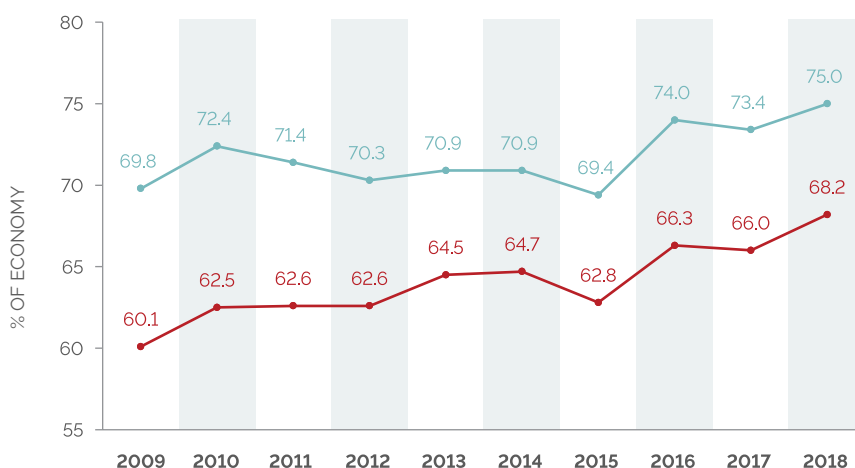
Note: the sectors marked with \* are part of the manufacturing industry

Foreign companies still maintain a balanced structure of exports over imports. NBR data shows that in 2018<sup>13</sup>, 75% of Romania's exports were made by foreign companies, and 68% of imports were made by them (Figure 14). The gap between the two decreased during 2016-2018.

13. The difference from the figures of the National Institute of Statistics (NIS) may be due to the partial integration of companies with mixed capital.

Figure 14  
**Imports and exports by foreign companies as a share of total Romanian imports and exports**

- Exports
- Imports

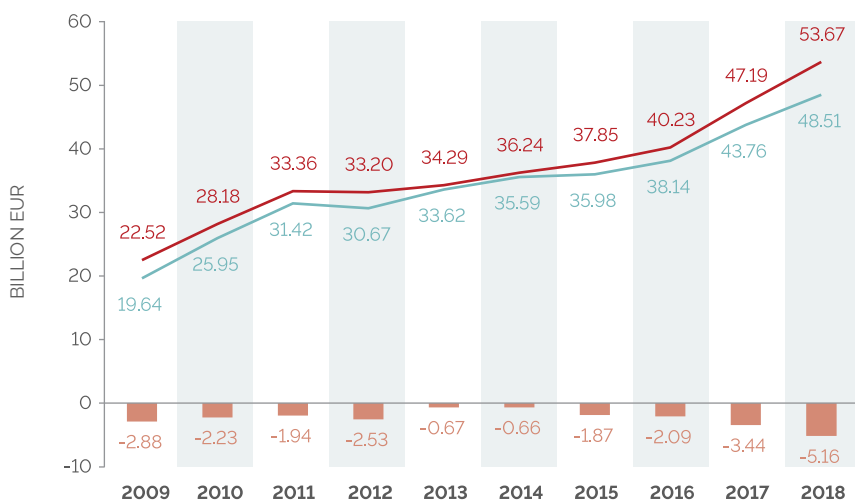


Source: NBR

The volume of imports made by foreign companies is higher than the volume of exports, like the trend registered so far (Figure 15). With an exports volume of 48.5 billion euros and imports of 53.7 billion euros, the trade deficit amounted to 5.16 billion euros in 2018. In 2018, the trade deficit created by foreign companies represented 34.8% of Romania's total trade deficit, the highest value in recent years.

Figure 15  
**Exports, imports, and the trade deficit of foreign companies**

- Exports
- Imports
- Trade deficit



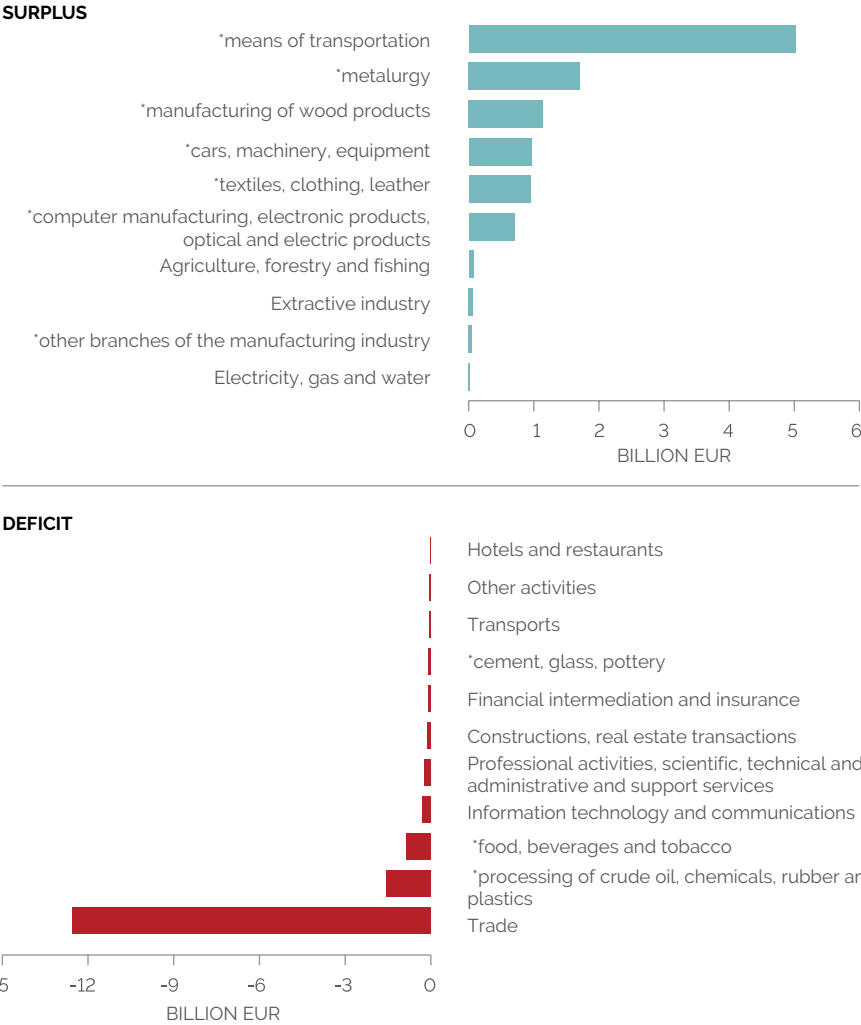
Source: NBR

The activity of foreign companies by economic sector is generally balanced between the level of exports and imports (Figure 16). The trade deficit created by foreign companies, comes mainly from three sectors of activity:

- Trade
- Processing crude oil, chemicals, rubber, and plastics
- Food, beverages and tobacco.

Therefore, the increase in the deficit has occurred mainly to cover the demand for consumer goods, stimulated by growing incomes in Romania.

Figure 16  
**Surplus and deficit of foreign companies by their respective sectors of activity**



Note: the sectors marked with \* are part of the manufacturing industry

Source: NBR

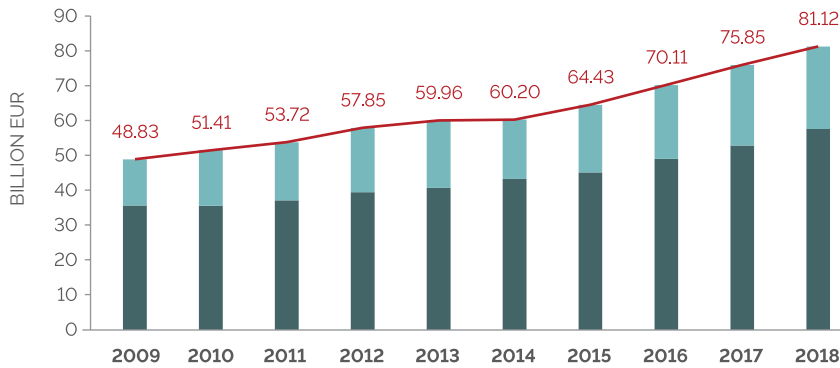
In 2017 (the most recent year for which data is available at OECD level) the main recipient countries of Romanian exports in the wholesale, retail and car repairs sector were Germany (10.1% of total exports), Bulgaria (9.5%), Hungary (5.75%), Italy (5.7%), and North Africa (5.4%). The main sources of imports in the same sectors were Germany (15.85% of total imports), Hungary (9.9%), Poland (7.65%), Italy (7.2%), the Netherlands (5.1%) and Turkey (4.6%)<sup>14</sup>.

14. Data for 2017 for China are not available. In 2015, China accounted for 6.5% of total imports in the Wholesale, Retail and Repair sectors.

**III. Other significant developments in the activity of foreign companies**

FDI stocks grew at a steady pace, reaching 81.12 billion euros in 2018. They consist mainly of equity investments (which include capital contributions and reinvested profits) and a relatively constant share of loans, at around 30% of the total value of FDI (Figure 17).

Figure 17  
FDI stocks in  
Romania, total and by  
components



Source: NBR

The distribution of FDI by regions continues to be very unbalanced (Table 2). The situation is partly due to the way the data is recorded; the value of FDI is determined by the location of the company's registered office.

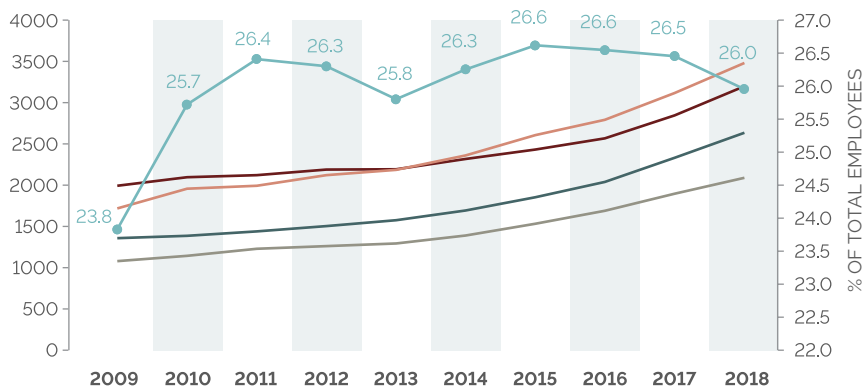
Table 2  
FDI distribution by  
region, as a % of total  
FDI

	2009	2015	2018
BUCHAREST-ILFOV	63.4	59.4	60.7
CENTER	7.4	9.0	9.0
WEST	6.2	8.1	8.6
SOUTH-MUTENIA	7.2	7.2	6.3
NORTH-WEST	3.9	5.9	5.7
SOUTH-EAST	5.9	4.5	4.2
SOUTH-WEST-OLTENIA	4.1	3.4	3.1
NORTH-EAST	2.0	2.6	2.4

Source: NBR

The average net earnings within companies with full foreign ownership exceeded both the national average and the average net salary in companies fully owned by the state, despite the increases in recent years. The number of employees in foreign companies represents 26% of the total number of employees in Romania, slightly lower compared to previous years (Figure 18).

Figure 18  
Average net earnings  
by ownership and the  
share of the number  
of employees in  
foreign companies



Source: NIS (National Institute of Statistics) and NBR

The largest foreign investors come from the same three countries which have been the main suppliers of FDI in recent years: the Netherlands (with 23.9% of total FDI stocks in Romania in 2018), Germany (12.7%) and Austria (12.2%). The share of these three countries represents 48.8% of the total FDI stocks in Romania, slightly lower compared to 2015 (when it was 51.6%) and compared to 2009 (53.3%). The main investor outside Europe is Turkey, followed by the USA in 2018. There was a significant decrease in the share of US investments from 2.5% of total FDI in 2015 and 2.1% in 2009 to only 0.7% in 2018.



**B. ROMANIA'S EXPOSURE TO A TRADE WAR OR TO PROTECTIONIST MEASURES**

The Central Bank of Spain carried out an assessment of the potential impact of the US-China trade war and the imposition of tariffs on the automotive sector in the EU. Tariffs on the automotive sector could have strong effects. For example, an increase in US tariffs on imports of vehicles and car components of 25%, would contribute in the long run to a 3.3% drop in value added in the EU car industry. The most affected countries would be Austria, followed by Germany and Hungary. The effects are limited in Romania, due to the low level of car exports to the USA.

Even if European states are not a direct target of a US protectionist policy, countries within the region may be indirectly affected by rising uncertainty, declining confidence and investment decisions being postponed, generating much more negative effects than might be expected at first glance<sup>15</sup>.

15. Viani, F. (2019). The latest protectionist trade trends and their impact on the European Union, Banco de Espana, Economic Bulletin 2/2019.

**C. WHAT KIND OF FDI SHOULD ROMANIA ATTRACT IN THE COMING YEARS**

Currently, the distribution of FDI stocks relative to gross value added indicates that Romania attracts FDI in low value-added sectors. Moreover, FDI in Romania is oriented towards industrial sectors with a medium to low level of technological intensity. In Romania only 5% of FDI stocks are directed to sectors with high technological intensity, the lowest level in the region. In this context, there is a strong need to stimulate the orientation of FDI towards high-tech industries.

A worrying sign is Romania's lack of capacity from the perspective of attracting FDI to the services sector. Romania has the lowest share of FDI in the services sector, compared to neighbouring states in the region. Given the global reorientation of FDI flows to services, largely supported by technological developments, this is an opportunity that Romania has failed to capitalise on and which requires further attention in order to reverse this trend.

Maintaining an unbalanced distribution of FDI flows and stocks at country level generates a risk of widening the gap between regions. Depending on the potential of each, high value-added FDI should be encouraged as much as possible; reorientation towards FDI should be facilitated in high-tech and knowledge-intensive industries in the service-related fields.

**D. TYPES OF PUBLIC POLICIES WHICH CAN GUIDE FDI TOWARDS INCREASING THE VALUE-ADDED OF THE ROMANIAN ECONOMY**

Romania began efforts to attract FDI late in comparison to other countries in the region after 1989, with the drive to attract investors really only beginning in the late 1990s. Political and legal instability was a permanent problem before the 2000s and in recent years we have seen legislative instability combined with a rather aggressive tone towards the business environment in general. In the last three years wage-led-growth policy has been decoupled from labour productivity, and this has significantly eroded one of the competitive advantages enjoyed by Romania, in the form of low-cost labour.

Without solid policies designed to increase competitiveness and focused on attracting a certain type of FDI, Romania risks becoming specialised in industries with low added value and low technological intensity.

Romania must enter a stage in which FDI is attracted within a strategic framework. Hungary has taken such steps in recent years, moving from FDI in the textile and low-value food processing sectors to wholesale, retail, and vehicle repair<sup>16</sup>.

A first step is to identify Romania's competitive advantages, then the opportunities which can be transformed into competitive advantages, and to decide on a long-term vision.

16. <https://santandertrade.com/en/portal/establish-overseas/hungary/foreign-investment>

If we wish to benefit from FDI, the design of public policy must be oriented towards a strategic and structural approach which aims to reevaluate all the opportunities offered by FDI. This should involve two complementary and mutually influential policies:

- Improving the capacity of local companies to "learn" and to "absorb" knowledge and technological developments from foreign investors,
- Targeting FDI in high value-added activities.

A too general and non-specific policy for attracting FDI will have a low impact, given the regional differences in Romania.

Focusing at a regional level on competitive advantages and areas for improvement with the participation of local government plays an important role in amplifying the positive effects of FDI on regional well-being and economic development. Thus, we can move towards a model of development which is based on cooperation between central government, local authorities, companies, universities and research institutes, NGOs, etc.

The authorities at a local and county level can act to support and foster interaction between economic actors, coordination, connections and synergies by promoting good practices and experience inside and outside the local context. Both Bulgaria and Poland offer tax incentives for investments in special (disadvantaged) economic areas.

The manufacture of general-purpose vehicles is the sector with the largest stocks of FDI out of the total attracted in the industry. Encouragement of this sector can be done through specific measures. For example, Hungary provides incentives for investment in a number of areas of activity: production, logistics, service centres, research and development, tourism, film production, sports, etc.

Ensuring political and legislative stability contributes to increasing investor confidence. One of the factors contributing to the attractiveness of the Czech Republic for investors is the guarantee of a strong and independent Central Bank, which ensures the stability of the currency.

The most important factors that determine future FDI flows are:

- The agglomeration effect (the most important),
- The level of GDP per capita,
- The quality of the workforce engaged in knowledge-intensive services,
- Infrastructure,
- Expenditure on research & development and internet access at household level.

From all of the measures needed to attract more FDI, the most urgent is to improve the availability of qualified labour, because Romania is facing both a labour shortage (caused by the massive migration of the population abroad) and a skills mismatch between labour supply and demand.

## 4. CASE STUDY: MULTIPLICATION EFFECTS OF FDI IN THREE INDUSTRIES - ENERGY, TELECOM AND AUTOMOTIVE

### A. DATA COLLECTED FROM THE MEMBERS OF THE FOREIGN INVESTORS COUNCIL (FIC)

The impact of FDI in Romania's economy, as in any other economy, has multiple ramifications. In addition to the directly measurable impact on the economy, highlighted by gross value added (GVA) or the number of employees, there are other effects that are more difficult to quantify, such as the impact of know-how transfer on current and future productivity. This section estimates the direct impact on the economy of a representative sample of FIC members in three economic sectors: energy, telecommunications, and automotive production.

The impact of operations in Romania, in each of the three sectors, is assessed through a standard analysis called assessment of the economic impact. This requires quantifying the impact of three types of effects on the economy, generated by the spending of the FIC members in the three sectors, cumulatively on each sector. Thus:

The direct impact involves the activity carried out in Romania, the profits generated by this activity, as well as the taxes or duties paid because of these activities, both by the FIC member companies and by their employees;

The indirect impact is the effect generated along the supply chain because of the activity of providing goods and services, which are elements of entry into the activity of FIC members;

The induced impact represents the large-scale effect generated in the economy by the spending of the employees of the FIC member companies, as well as their suppliers.

Methodology:

1. Three groups were created, corresponding to the three sectors analysed, in which the FIC members with the most significant activities in each sector were included. The companies which made up the three samples are: Enel, Engie, E.ON and OMV-Petrom in the energy sector; Ford and Renault in the automotive sector; Orange, Vodafone and Telekom in the telecommunications sector.
2. A questionnaire was created through which FIC members were directly asked for the information needed to conduct the study. The response rate was 66%<sup>17</sup>, and for the companies which did not provide data, the data available from public sources was used for the analysis.
3. The direct impact was calculated, cumulated for each sector, estimated by calculating the total gross profit - income before taxes, interest, depreciation, and amortisation - and adding this to the salaries of the employees. Thus, both the contribution of direct taxes paid to the budget and a part of the effect of the investments made by these companies over time were quantified.
4. Using the input/output table by the "Leontief" method<sup>18</sup>, the multipliers in the economy were estimated, corresponding to each of the three economic sectors.

For the energy sector, due to the nature of the activities of the FIC members included in this group, a weighted average of multipliers from two sectors was used:

1. Extractive industry
2. Production and supply of electricity and heat, gas, hot water and air conditioning.

The reference year for the data collected from FIC members is 2018, but the input/output table was generated considering the data available as at 2014. Thus, the interpretation of the data from the perspective of the current year must consider the fact that the structure of the economy may

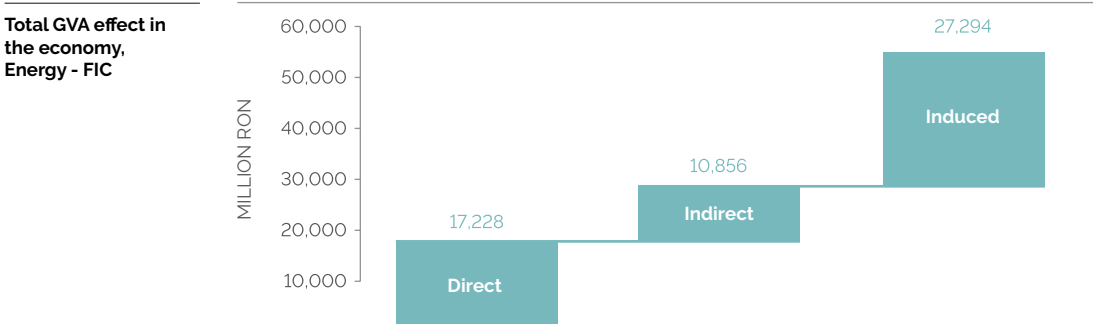
17. Some data was incomplete even among the companies that responded to the questionnaire, so in these cases, estimates obtained from publicly available data was used

18. Wassily Leontief won the Nobel Prize for Economics in 1973. The economic model he developed can be applied at the level of a country or region and is based on an input / output matrix whose elements represent the monetary value of inputs / outputs for each of the sectors considered.

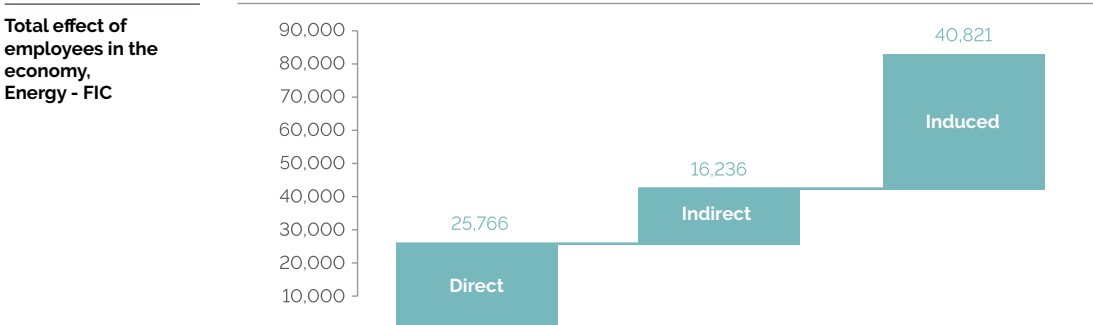
have changed during this period. At the same time, a one-off estimate, made in a given year, can sometimes provide a distorted picture of the impact on the economy, due to the influences of business cycles. Some of the data required approximations, so that the figures obtained rather reflect an underestimation of the impact of FIC members on the economy. The results are presented below, for each of the three sectors.

**B. ENERGY: OMV-PETROM, ENGIE, ENEL, E.ON**

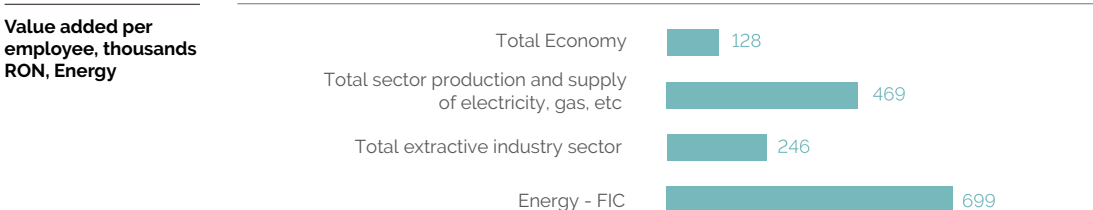
The direct impact in the Romanian economy, of the analysed companies in the energy sector was estimated at RON 17.2 billion. This represents almost half of the gross value added to the economy, generated by the two sectors: the extractive industry and the production and supply of electricity and heat, gas, hot water, and air conditioning. The indirect and induced effect generates over RON 10.8 and 27.3 billion respectively, so that the total impact on the economy of FIC member companies in the energy sector is estimated at over RON 55 billion (see chart below). This is the equivalent of 5,81% of GDP in 2018.



Similarly, the total impact on the economy in terms of the number of employees can also be estimated. The direct impact is 25,766 employees, which represents a quarter of the total number employed in both the extractive industry and in the production and supply of electricity and heat, gas, hot water and air conditioning. Quantifying the indirect and induced effects, the total number of jobs estimated to be generated in the economy by the activities of the representative FIC members operating in the energy sector is 82,824 (see chart below).



By estimating the direct gross value added to the economy and the number of employees, the value added per employee can also be calculated, a measure of approximation of productivity. As per the table below, the average productivity in the representative FIC companies in the energy sector, of RON 699,000 per employee, was above the level of sectoral productivity - both in the extractive industry sector (RON 246,000) and in the production and supply of electricity and heat, gas, hot water and air conditioning (RON 469,000). The difference is even greater than the average productivity per employee in the entire economy (128,000 RON)<sup>19</sup>, which is to be expected considering that a large part of the activities of other sectors of the economy have lower productivity.



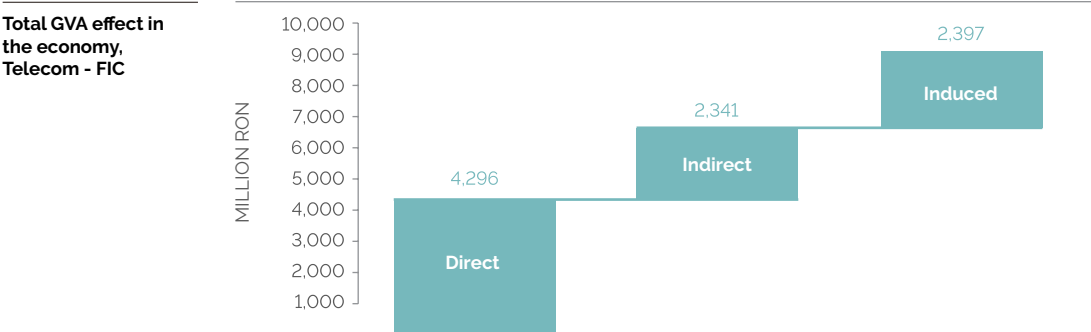
19. Average productivity in the economy was calculated for a total of 6,729 employees, which includes the total number of employment contracts, workers who are their own employees, as well as an estimated number of workers from the public administration, whose contracts are not registered in Revisal.

This fact highlights the significant impact that foreign companies from the energy sector have on the Romanian economy, both in terms of productivity, also with an impact on production chains.

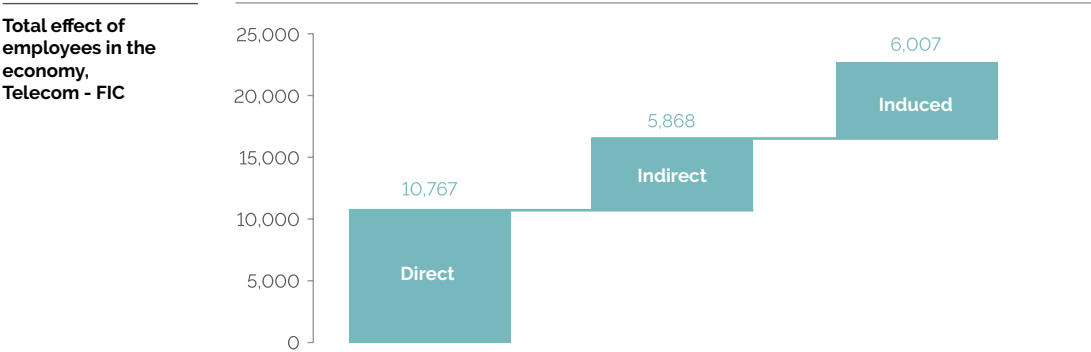
With the EU aiming to become climate neutral by 2050, the energy sector is bound to undergo a significant transformation – as the whole economic structure will be different. As a consequence, the energy sector’s need for investment will be higher in the near future than in the recent past. For instance, Romania’s integrated national plan for energy and climate change, submitted in April 2020 to the EC, estimates that around 23 billion euros of investments will be needed in domestic power production, transport and distribution alone. Private sector companies will shoulder a large part of this amount

**C. TELECOMMUNICATIONS: ORANGE, VODAFONE, TELEKOM**

Similarly, the direct impact on the economy of FIC companies from the telecom sector is estimated at almost RON 4.3 billion. The indirect and the induced impact generates, cumulatively, an effect of over RON 4.7 billion in the economy, so that the total value added in GDP is over RON 9 billion or the equivalent of 1% of national GDP in 2018.

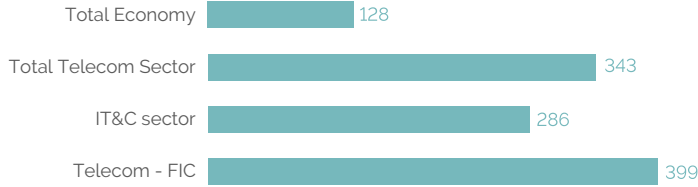


On the labour market, the direct impact of FIC representative companies in the telecommunications sector is 10,767 employees, almost a quarter of the total number of employees in this sector considering the entire economy (46,600 average number of employees in 2018). However, at the level of the entire economy, the total impact on the labour market is much higher; approximately 22,642 employees.



The estimated average productivity of FIC companies operating in the telecom sector is RON 399,000 per employee. This is higher compared to productivity measured at sector level (RON 343,000 per employee) and compared to the level of the relevant industry - i.e. ITC sector - information and telecommunications (RON 286,000 per employee).

**Value added per employee, thousands RON, Telecommunication (telecom)**

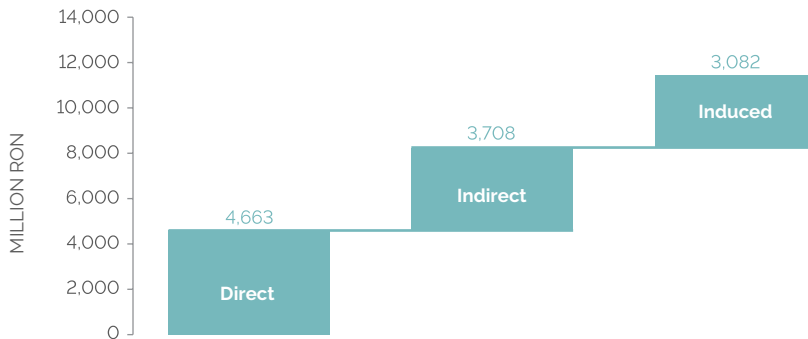


Compared to the average productivity of the sector, the difference is explained by the European or global size of the FIC member companies in the telecom sector, which allows efficiency gains due to economies of scale in a sector that is highly competitive.

**D. AUTOMOTIVE: RENAULT, FORD**

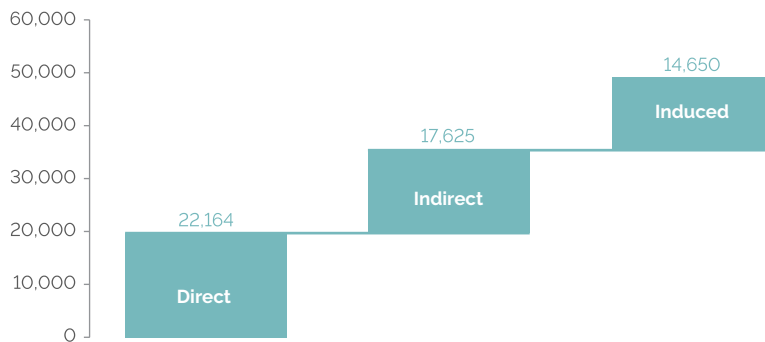
The gross value added to the economy by the representative FIC companies in the automotive sector was estimated at approximately RON 4.7 billion. The total impact on the economy is almost RON 11.5 billion, the equivalent of 1.2% of GDP in 2018.

**Total GVA effect in the economy, Automotive - FIC**



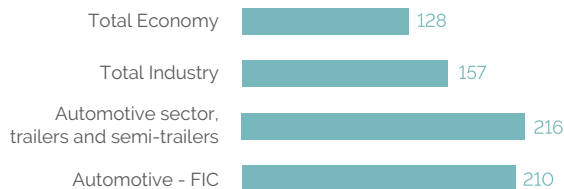
The workforce employed directly by FIC members in the sector is 22,164 employees, the equivalent of 11% of the average total number of employees at sector level in the economy (198,233). The impact on the labour market, cumulating the indirect and induced effects, is 54,439 jobs, 0.8% of the total number of employees in the economy.<sup>20</sup>

**Total effect of employees in the economy, Automotive - FIC**



The average gross value added per employee is estimated at RON 210,000 for FIC member companies operating in the sector. This value is slightly below the average of the automotive, trailers and semi-trailers sector (RON 216,000 per employee), which is explicable considering the relatively high degree of specialisation in the sector. The supply of intermediate products to the representative FIC companies in this sector, which have global reach, plays an important role in adding value to the Romanian economy. Compared to the total industry, the gross value added per employee (157,000 RON) is one third higher.

**Value added per employee, thousands RON, Automotive**



20. An internal evaluation of automotive sector FIC members, received after the completion of the report, stated that these companies' automotive employees produce more value added per employee than the average in the economy and than the industry average, which is consistent with our findings. The evaluation also gave an employment multiplication factor of 1.10 for the car industry, i.e. a job with a car manufacturer leads to the creation of 10 jobs in the local horizontal industry (according to the source: Acarom). This may arise in cases which require complex production processes with a high degree of specialisation

## E. CONCLUSIONS

The analysis of the total impact on the economy of a small but representative number of FIC members, in three sectors of interest, highlights the significant impact that foreign investors have, both in the production chains of the economy and in aggregate demand.

Gross value added per employee is, in all three cases, higher than the average value added per employee to the economy and to the sector - for example, at the level of total industry in the case of the automotive subsector, at the level of total industry and energy, cumulatively, in the case of the extraction and supply, electricity and gas distribution subsector or the information and communications technology sector in the case of the telecommunications subsector. This highlights the high productivity of the foreign companies compared to the average in these sectors.

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<http://www.insse.ro/cms/>

<https://www.imf.org/data>

## Appendix 1.

**Industries classified according to technological intensity**

Technological intensity	Sectors in the manufacturing industry, CANE('Classification of Activities in the National Economy') rev. 2
High-tech	21: Manufacture of basic pharmaceutical products and pharmaceutical preparations
	26: Manufacture of computers and electronic and optical products
Medium high-tech	20: Manufacture of substances and chemicals
	27-30: Manufacture of electrical equipment; Manufacture of machinery, machinery and equipment; Manufacture of road transport vehicles, trailers and semi-trailers; Manufacture of other means of transport
Medium low-tech	19: Manufacture of coke oven products and petroleum products
	22-25: Manufacture of rubber and plastic products; Manufacture of other non-metallic mineral products; Metallurgical industry; Metal construction and metal products industry, excluding machinery, machinery and installations
	33: Repair, maintenance and installation of machinery and equipment
Low-tech	10-18: Food industry; Manufacture of beverages; Manufacture of tobacco products; Manufacture of textiles; Manufacture of wearing apparel; Tanning and dressing of leather; Manufacture of travel and leather goods, harnesses and footwear; fur preparation and dyeing; Woodworking, manufacture of wood and cork products, except furniture; Manufacture of articles of straw and plaiting materials; Manufacture of paper and paper products; Printing and reproducing recordings on media.
	31-32: Manufacture of furniture; Other industrial activities

Source: Eurostat

## Appendix 2.

**Services classified by level of knowledge intensity**

Intensity in knowledge	Sectors in the services field, CANE rev. 2
Knowledge-intensive services - KIS	50-51: Water transport; Air transport
	58-63: Information and communications
	64-66: Financial intermediation and insurance
	69-75: Professional, scientific and technical activities
	78: Labour service activities
	80: Investigation and protection activities
Knowledge-intensive market services – KIMS (except financial services and high tech)	84-93: Public administration and defence; social insurance in the public system; Education; Health and social work; Entertainment, cultural and recreational activities
	50-51: Water transport; Air transport
	69-71: Legal and accounting activities; Activities of directorates (central), centralized administrative offices; management and management consultancy activities; Architectural and engineering activities; testing and technical analysis activities
	73-74: Advertising and market research; Other professional, scientific and technical activities
	78: Labour service activities
80: Investigation and protection activities	

High-tech knowledge-intensive services - HTKIS	59-63: Information and communications
	72: Research and development
Knowledge-intensive financial services - KIFS	64 to 66: Financial intermediation and insurance
	45-47: Wholesale and retail trade; repair of motor vehicles and motorcycles
	49: Land transport and transport via pipelines
	52-53: Storage and auxiliary transport activities; Postal and courier activities
	55-56: Hotels and restaurants 68: Real estate transactions
	77: Rental and leasing activities
	79: Travel agency and tour operator activities; other reservation services and tourist assistance
	81: Landscaping and building services
	82: Secretarial services, support services and other service activities provided mainly to enterprises
	94-96: Other service activities
Less knowledge-intensive services - LKIS	97-99: Activities of private households as employers of domestic personnel; activities of private households as producers of goods and services for own consumption
	45-47: Wholesale and retail trade; repair of motor vehicles and motorcycles
	49: Land transport and transport via pipelines
	52: Storage and ancillary transport activities
	55-56: Hotels and restaurants
	68: Real estate transactions
	77: Rental and leasing activities
	79: Travel agency and tour operator activities; other reservation services and tourist assistance
	81: Landscaping and building services
	82: Secretarial services, support services and other service activities provided mainly to enterprises
Less knowledge-intensive market services - LKIMS	95: Repair of computers, personal and household goods

Source: Eurostat