



UNIVERSITATEA BABEŞ-BOLYAI  
BABEŞ-BOLYAI TUDOMÁNYEGYETEM  
BABEŞ-BOLYAI UNIVERSITÁT  
BABEŞ-BOLYAI UNIVERSITY  
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**Faculty of Economics and Business Administration**

# **Economic relations between the U.S. and Romania**

## **- Current status and perspectives -**

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**Authors:** Dénes Csala, Ottó Csíki, Bálint Zsolt Nagy, Kende-Ferenc Pastor, Béla-Gergely Rácz, Levente Szász

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***Babeş-Bolyai University Faculty  
of Economics and Business  
Administration***

<https://econ.ubbcluj.ro/>

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## **Executive summary**

This study focuses on the U.S.-Romanian economic relations and is structured in two main parts.

The first part investigates the current status of these relations in terms of foreign direct investment (FDI), job creation and trade.

The second part identifies several relevant parameters for the further development of these relations in terms of market opportunities and challenges, trade barriers, and policy recommendations.

The second part concludes with assessing the potential economic impact of recent major global developments, such as the pandemic, the U.S.-China trade conflict, and the Russia-Ukraine war.

### **Part I: Current status**

#### ***American FDI in Romania***

Romania, as a NATO and EU member state with a continuously improving, reliable business context has witnessed a dynamic growth trend in U.S. FDI since 1997, the year the Strategic Partnership between the United States and Romania was launched.

The last ten years, however, have brought a slight and oscillatory decrease in the U.S. FDI stock in Romania, mainly due to the market exit or non-U.S. company takeovers of some important U.S.-origin companies active on the Romanian market.

The U.S. is still the fifth largest investor in Romania with a significant 7.8% share of the total inbound FDI. This, coupled with the strong rebound of U.S.-FDI growth in the last three years gives us a cautiously optimistic perspective.

U.S. FDI is geographically concentrated in Romania with a few counties producing a large share of yearly revenues achieved by U.S. companies,

mainly due to the presence of a single major manufacturer per county: Dolj (Ford Motor), Braşov (Autoliv) and Buzău (Bunge). Bucharest and the surrounding Ilfov county are also in the top, many subsidiaries of U.S. companies being headquartered in the capital or in its close vicinity.

The geographical concentration is also a characteristic of the list of U.S. states where these investor companies originate from, Michigan (Ford Motor Company), Minnesota (Cargill, CHS Agritrade), New York (IBM, Colgate-Palmolive, Pfizer, Citibank, etc.) and Virginia (Philip Morris, Mars, etc.) being in the top in terms of the most recent revenue figures earned by these companies on the Romanian market.

In terms of the number of employees and the number of U.S. companies in Romania, the capital Bucharest and Cluj county stand out, mostly due to the large number of IT&C companies that are characterized by high aggregated workforce, but a lower aggregate revenue than manufacturers. In parallel, the largest number of U.S. companies investing in Romania are headquartered in California.

Comparing the presence of U.S. FDI in Romania to benchmark countries from the Central-Eastern European (CEE) region, Poland, Hungary and Czechia are clearly above Romania, while Slovakia and Bulgaria are far behind. However, in terms of the growth rate in the last decade, Romania is in the top, indicating that there is clearly room and potential for improvement in the near future, to attract more FDI from the U.S.

Less than 40% of the top 200 companies with U.S. origin are directly held by U.S. entities, while the remainder of more than 60% of the companies are indirectly controlled by U.S. companies through

joint ventures or through regional subsidiaries of U.S. companies located in other countries (mostly in Western-Europe).

U.S. FDI companies are mostly present in Romania in traditional industries such as manufacturing (Ford, Autoliv, Philip Morris, etc.), FMCG (Coca-Cola, Pepsico, P&G, etc.), but also in innovative sectors such as IT&C (IBM, Amazon, Microsoft, etc.).

Currently, an approximate number of 900 U.S.-controlled companies are present on the Romanian market. Manufacturing companies have historically made an important contribution to the long-term growth of American FDI in Romania, while the entrance of non-manufacturing companies, such as IT&C and financial service companies happened generally later, in the last 10-20 years, reaching a significant presence on the Romanian market as of today.

With the 900 U.S.-origin companies present in the country, Romania is in the regional top, being overtaken only by Hungary (1280) and Czechia (1020), but clearly overtaking, for example, the much larger Poland (710) or Bulgaria (460) and Slovakia (270). The number of U.S. controlled companies is expected to grow in Romania in the future.

### ***Romanian FDI in the U.S.***

The presence of Romanian companies in the U.S. with registered equity or local subsidiaries is approx. 100 times smaller than the U.S. FDI in Romania.

Most of these companies operate in the IT&C industry (UiPath being the most well-known recent example), where barriers of entry are lower.

Benchmark countries in the CEE region have similarly low levels of outbound FDI to the U.S., Romania not being an exception in this sense. The

five benchmark CEE countries (Romania, Bulgaria, Czechia, Hungary, and Poland) together account for less than 1% of total inbound FDI to the U.S.

### ***Job creation of U.S. companies in Romania***

Currently, more than 100,000 employees work at U.S.-controlled companies in Romania, which accounts for over 2% of the total Romanian workforce.

During the last decade the number of employees working for U.S.-controlled companies showed an overall increase of 51%, while the number of U.S.-controlled companies in Romania remained relatively constant, indicating a dynamic development of these companies.

The 2% proportion of employees working for U.S.-controlled companies from the total number of full-time employees is similar to other countries in the region, where the same figure ranges from 1.18% (Bulgaria) to 2.61% (Czechia).

### ***Trade between the U.S. and Romania***

Foreign trade in the U.S. is 24 times larger than in Romania, although its relative value to the GDP in the U.S. is lower than in Romania (foreign trade accounts for 26% of the country's GDP in the U.S. versus 87% in Romania).

Trade relations between the U.S. and Romania remained stable throughout the years, including a strong recovery after the pandemic, with a general growth trend between 2010 (2.9 billion USD) and 2021 (5.6 billion USD).

Trade between the two countries represents 2.23% of Romania's total trade, and 0.09% of the total trade of the U.S.

In terms of product types, the trade between the U.S. and Romania relies mostly on manufactured goods, especially machinery and transport equipment in both export and import relations. In

terms of services travel, IT&C and financial services represent a significant part of trade between Romania and the U.S.

In terms of goods, the value of foreign trade between the two countries reached almost 4.5 billion USD by 2021 representing more than 80% of the total value of trade between the U.S. and Romania. This value showed a dynamic growth since 2010 (+149%).

Geographical proximity plays a key role in the trade. Romania mostly trades with European partners (80%), and the U.S. is not among the 10 largest trade partners, being on the 20th place in terms of imports, and on the 14th place in terms of exports of goods. The U.S. accounts for 1.3% of total Romanian imports and 3.6% of total Romanian exports of goods (2021).

On the other hand, the top trade partners of the U.S. are located on the American and Asian continent (accounting altogether for 75% of total U.S. foreign trade in goods), Canada, Mexico and China being the most significant countries in this sense. Romania has a lower share in U.S. foreign trade in goods, being the 59<sup>th</sup> largest import partner, and the 69<sup>th</sup> largest export partner of the U.S. Romania accounts for 0.1% of total U.S. imports and 0.08% of total U.S. exports of goods (2021).

Examining the products that are important U.S. export categories and important Romanian import categories, it can be seen that there is an overlap between the two, meaning that future expansion of the trade relations between the two countries can be based on these categories: electronic equipment, vehicles, mineral fuels and oil.

In terms of services, the value of foreign trade between the U.S. and Romania equals 1.1 billion USD in 2021. This value has stagnated since 2010

(+1% compared to the 149% growth in the trade of goods over the same period). The 1.1 billion USD service trade accounts for 2.04% of Romania's total service trade, and 0.08% of the total service trade of the U.S.

Despite the stagnating values, trade in services between the two countries could further be extended, the IT&C sector showing a good potential in this sense as both countries have a strong IT&C base.

In a regional benchmark, the 2.23% U.S. share from total trade volume in Romania is on a par with the benchmark CEE countries where the same ratio ranges from 1.71% (Bulgaria) to 3.59% (Hungary).

### ***Economic relations by sectors***

The **agri-food** industry attracts significant U.S. FDI to Romania, being the second largest sector in terms of revenues achieved by these companies. Trade values, on the other hand, are rather small and heterogeneous in terms of the type of goods imported and exported. Irrigation technology modernization in Romania, supported by EU funds, represents a promising field for future U.S. investments.

In the **energy** sector U.S. FDI is rather small, expected to increase through the cooperation to extract natural gas from the Neptun Deep field in the Black Sea. Romanian imports of energy products from the U.S. include both petroleum and coal, compared to which Romanian exports are much smaller, consisting mainly of oil.

The **IT&C** industry hosts a high number of U.S.-origin companies in Romania, employing a considerable amount of workforce, achieving at the same time a much lower aggregate revenue than U.S. companies in other Romanian industries. While still below 1 million USD, Romanian IT&C

export started to increase sharply since 2012, with an important future development potential.

In the **defense** sector a few important U.S.-origin companies are present on the Romanian market with signed partnerships to extend manufacturing activities. In terms of trade in weaponry, Romania clearly stands out in the region, together with Poland, as the largest buyers of combat equipment from the U.S. during the last decade.

The **manufacturing** industry in Romania is the largest from the perspective of U.S. FDI, generating a little less than 60% of the aggregate turnover reached by all U.S.-origin companies present on the Romanian market. Trade in this sector is also fundamental for the U.S.-Romanian economic relations. Sectoral trade is dominated by machinery and transport equipment, with Romanian exports in 2021 clearly exceeding imports from the U.S. (2.7 billion USD versus 0.9 billion USD).

The **service** sector (excluding IT&C) is dominated by the presence of large U.S.-origin companies that provide accounting, consulting and outsourced business processes. In terms of revenues achieved by companies with U.S. origin in Romania, the combined size of the service sector (excluding IT&C) is roughly equal to the IT&C industry alone. Trade in services (including IT&C) between Romania and the U.S. reached 1.1 billion USD in 2021, with Romania importing more than exporting to the U.S., imports being dominated by financial services, while exports by business services.

## **Part II: Perspectives**

### ***Opportunities and challenges on the Romanian market***

General opportunities for U.S. companies seeking a presence on the Romanian market include the

highly skilled and talented workforce, strong university partnerships for R&D, the favorable geographic location of Romania as a potential relocation option, relatively large market size in the CEE region, but also the strengthening U.S. dollar against the national currency, the Romanian leu (RON).

Government related opportunities include state aid schemes, competitive tax rates and subsidies. Expected infrastructural development funds are another area where further foreign investors can be attracted. The NextGen EU funds will certainly stimulate further investments in the country in the 2022-2026 period, especially in sustainability and digitalization.

Sector-specific opportunities include the further increasing presence of U.S. companies in an expanding Romanian IT&C industry, the increasing significance of Romania in global food supply chains, the crucial role of Romanian energy reserves (especially natural gas) with already existing relations with U.S. actors, the high technology investment needs in several sectors with strong digitalization trends where U.S. technologies are in the global forefront, or the defense industry where U.S. investments and trade are required in light of the growing geostrategic importance of Romania.

Main challenges on the Romanian market include the shortage and increasing costs of skilled workforce, low levels of digitalization, perceived corruption, underdeveloped infrastructure and high inflation.

Regulatory challenges are related to the costs of compliance with EU and national legislation, the general political and regulatory lack of predictability, lack of a clearly defined fiscal stimulus package and bureaucracy.



### ***Opportunities and challenges on the U.S. market***

Main opportunities for Romanian companies on the U.S. market are related to the IT&C sector, where entry barriers are lower. There is already an outgoing trend from Romania to the U.S. in the sector, which could see further Romanian companies active in this industry entering the U.S. market.

General opportunities on the U.S. market include the wider spectrum of financing opportunities, the reputational consequences of being present in a highly competitive market, and the reorientation of U.S. companies towards alternative suppliers and business partners, as a result of the U.S.-China trade rivalry.

General challenges related to the U.S. market include the very low experience of Romanian companies in the U.S., the costs of compliance with U.S. standards and regulations, and the generally high competitiveness of the U.S. market.

### ***Barriers to U.S.-Romanian trade***

The United States Trade Representative reports trade barriers by 14 categories, out of which 7 apply to Romania as well.

These barriers include (1) Romania's compliance with EU import policies, (2) differences in technical regulations, (3) stricter sanitary and phytosanitary measures in the EU, (4) lack of transparency in the governmental procurement processes in Romania, (5) insufficiency of intellectual property protection, (6) non-permissive digital and e-commerce regulations, and (7) difficulties of investing into entities to facilitate trade between the two countries.

Furthermore, representatives of Romanian companies face visa restrictions, products are frequently less attractive for U.S. customers, and

the lack of a U.S.-EU free trade agreement further complicates the already high trade bureaucracy.

### ***Policy recommendations***

Based on the current economic perspective of Romania and the status of U.S.-Romanian economic relations, four broad categories of recommendations are identified related to the Romanian economic context.

(1) Improving political stability: adoption of laws based on a long-term national economic strategy, developed in consultation with the business sector and other stakeholders.

(2) Improving performance conditions for companies: recommendations include the predictability of the tax system, the digitization of the public sector, effective fight against corruption and increased support for education, research and development.

(3) Fiscal coherence: to keep up with competition in the region in attracting FDI to Romania.

(4) Development of infrastructure: as one of the most important factors for multinational companies when considering new locations, and the backbone of any national economy, more investments need to be completed in the near future to ensure its improvement.

### ***Crisis outlook***

Three ongoing crises and their potential consequences for the economic relations between the U.S. and Romania are analyzed in this study.

(1) The Covid-crisis had a significant impact on U.S.-origin companies active in Romania, especially in the manufacturing sector during lockdown. These effects were successfully overcome, but some global trend shifting effects (e.g., new safety measures, work-from-home policies) and decreased FDI flows still persist.

(2) The Russia-Ukraine war seems to have a lower economic impact in Romania than the pandemic, and a serious recession still seems avoidable. Nevertheless, the economic uncertainties caused by the war will almost surely slow down economic growth in Romania.

Besides the negative effects, this period can represent an opportunity for U.S.-origin companies to relocate businesses from the proximity of the war zone to Romania.

(3) The U.S.-China trade rivalry has primarily global consequences, Romania having small economic exposure to both countries. Nevertheless, global price increases can be felt in the Romanian market as well and can pose a challenge to the further development of bilateral economic relations

## **Chapter 1: American FDI in Romania**

### **1.1. Evolution of U.S. FDI in Romania**

Overall, Romania has seen a growing interest from U.S. foreign direct investments (FDI) in the years of the economic transition and even more so after Romania's accession to NATO (2004) and the EU (2007). These two milestones signaled to investors around the world that Romania had become a safe country to invest in.

Our analysis generally comprises the period between 2010-2021. For FDI figures, however, we included the whole period since 1997, when the two countries launched the Strategic Partnership (Figure 1). Furthermore, Table 1 reports both the FDI figures released by the National Bank of Romania (NBR/BNR) and by the U.S. Bureau of Economic Analysis (BEA) (see Methodological note 1). Due to methodological difference, BEA figures are more appropriate for evaluating long-term trends and draw appropriate conclusions. The latest NBR figures, however, offer a closer estimate of the current value of total U.S. FDI stock in Romania (6.17 billion USD in 2020 and 8.87 billion USD in 2021).

Right after the launch of the Strategic Partnership, the presence of U.S. FDI in Romania has started to grow slowly, but steadily. In general, the two and a half decades since 1997 were marked by an exponentially growing trend of U.S. investments. The continuous growth has come to a significant halt only during the economic crisis of 2009-2010. However, as economic growth restarted in 2011, the subsequent years have witnessed an exponential growth until 2016 (Table 1). Starting with 2016 and up until the Covid-19 crisis of 2020, the FDI stock has seen a decline. We will elaborate on some of the reasons for this development later. However, the very latest indirect FDI figures released by the NBR show a very promising subtrend for the last three years (starred figures in Table 1). In terms of the percentage of direct U.S. FDI in the total Romanian FDI stock (last column of Table 1) it can be observed that these are relatively low figures of only a couple of percentages (barely exceeding 5%) throughout the last decade. Geographical and cultural distance, and the absence of long-lasting economic ties are all contributing factors to this relatively low share of U.S.-origin FDI. From the U.S. perspective, the significance of FDI targeting Romania is even smaller: calculating the percentage of U.S.-origin FDI to Romania from the total outbound FDI going out from the U.S., the figures get considerably smaller, below 0.1% throughout the period analyzed.

Table 1. U.S. Foreign Direct Investment to Romania

Year	FDI inflow from USA (BNR), million USD	FDI inbound stock from USA (BNR), million USD	FDI inflow from USA (BEA), million USD	FDI inbound stock from USA (BEA), million USD	Revenue of U.S. controlled companies (million USD)	Percentage of U.S. FDI stock in the total FDI stock
2010	373	1868	2	1543	9463	2.25%
2011	-1	1867	-186	1357	10940	1.95%
2012	499	2366	810	2167	7723	2.84%
2013	-901	1465	-79	2088	8250	2.50%
2014	-69	1396	1015	3103	9343	4.12%
2015	472	1868	671	3774	12088	5.36%
2016	-432	1436	182	3956	12268	5.31%
2017	-168	1268	-195	3761	13805	4.13%
2018	-632	636	36	3797	17539	4.09%
2019	388	1024 (5872)*	-331	3466	16867	3.49%
2020	193	1217 (6170)*	-636	2830	n.a.	2.63%
2021	42	1259 (8874)*	-235	2595	n.a.	n.a.

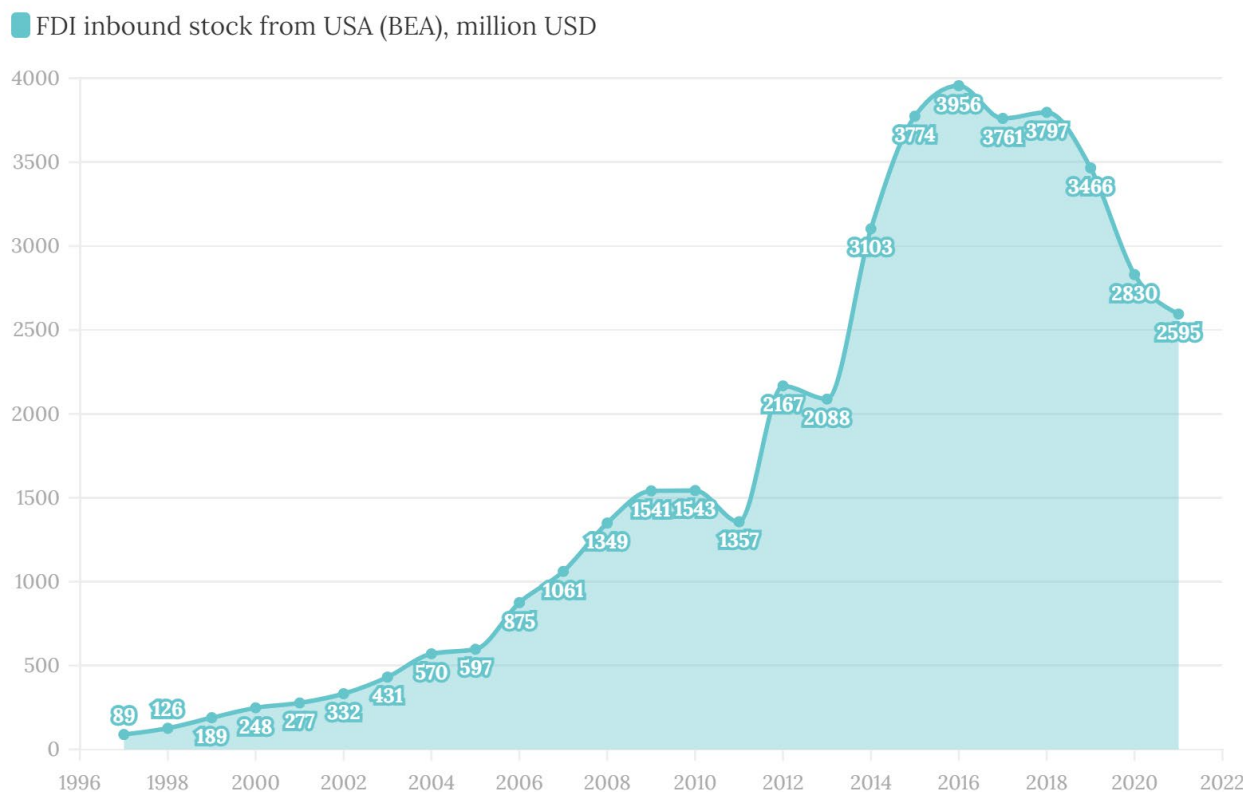
Sources: NBR (National Bank of Romania); BEA (U.S. Bureau of Economic Analysis)

\* Starting with 2019, NBR started to include indirect FDI figures in its report as well, hence the sharp increase of the numbers in parentheses that follow the principle of the final investor state in the calculation of total FDI stock figures.

### Methodological notes 1

In this study, reflecting the specifics of American FDI activity in Europe, in general, and in Romania, in particular, we have differentiated what we call direct FDI from the U.S. from what we call indirect FDI from the U.S. The direct numbers reflect the non-intermediated capital participation of U.S. companies in Romanian companies (usually lower numbers), whereas the indirect numbers reflect U.S.-equity present in Romania indirectly, through a regional company established generally in a European country (usually higher numbers). We also included joint ventures with U.S.-participation into the indirect category. For more on this topic see the IMF's methodological handbook about the statistical construction of the balance of payments. Our data sources are the National Bank of Romania (BNR) and the U.S. Bureau of Economic Analysis (BEA). However, a direct comparison between these two data sources is not warranted since there are significant methodological differences between them: the U.S. BEA uses historical cost basis whereas the EU and BNR uses current prices; to calculate yearly figures, different accounting standards are used (IFRS in the EU and US GAAP in the U.S.).

## U.S. Foreign Direct Investment to Romania



Data source: U.S. Bureau of Economic Analysis

Figure 1. Evolution of U.S. Foreign Direct Investment to Romania since the signing of the Strategic Partnership between the United States and Romania

U.S.-origin companies have established several large manufacturing sites (i.e., plants and factories) in Romania. Although not all these investments have been made in the period analyzed in the present study, they represent an important sign that American FDI has long been interested in the opportunities on the Romanian market (Figure 7).

Despite the relatively small FDI percentage shares, several important U.S.-origin companies, especially those from the manufacturing sector, have made a significant contribution to the long-term growth of U.S. FDI in Romania. The 2000's decade was the most prolific for U.S.-based FDI in Romania, with the most notable manufacturing unit openings happening in this period: the opening of the Ford Craiova plant (2009), the investment of Philip Morris in Bucharest (2000) or the establishment of Bunge Romania (2007) among others.

Nevertheless, data series of the U.S. Bureau of Economic Analysis in Table 1 show that in several years of the last decade, FDI inflow from the U.S. has become negative, therefore the U.S. FDI stock has a rather declining tendency. Several notable events contributed to this moderate decline:

- In 2013 Bechtel Inc. and the Romanian government terminated their contract for the construction of the Transylvania motorway, Bechtel exiting the Romanian market.
- In 2017 the American International Group (AIG), one of the largest insurance companies in the world, conceded their investment to Colonnade Insurance and Metropolitan Life (MetLife).

- In 2018 Delphi Packard, a car components manufacturer closed one of its Romanian plants in Moldova Nouă and sold its other unit in Sânnicolau Mare to a non-U.S. entity. Their third factory, in Miroslava, Iași, was taken over by another U.S. company, BorgWarner.

Although we have used largely the data from the U.S. Bureau of Economic Analysis for reasons of continuity and spatial-temporal comparability, there is also valuable data in the NBR reports. Figure 2 illustrates the composition of the inbound FDI to Romania, first by the principle of the immediate investor (i.e. direct investment) and second by the final investor state (i.e. including indirect investments as well). Data with such features is only available for the years 2019-2021 in the NBR reports. While direct investment figures suggest that the U.S. is not present in the top 10 foreign investor countries in Romania, the situation improves dramatically considering indirect investments as well, the U.S. being the fifth largest foreign investor with a 6.6% share in 2019, and with a 6.8% share in 2020, respectively. In 2021 the situation of U.S.-FDI improves further reaching 7.8% of the total inbound FDI.

*In conclusion, since the launch of the Strategic Partnership between the United States and Romania in 1997, U.S.-FDI had an exponential growth until 2015, after which it began to decline slightly. The slight decrease is mainly caused by market exits or non-U.S. company takeovers of some important U.S.-origin companies active on the Romanian market. Since U.S. companies are present in Romania mainly through indirect subsidiaries, considering also indirect investments, the U.S. is the fifth largest investor in Romania with a share of 7.8% in the total inbound FDI in 2021. Moreover, this type of reporting from NBR, which is available only since 2019, shows that the last three years have witnessed a sustained growth in U.S.-FDI into Romania.*

## Romanian FDI composition by immediate & final investor origin

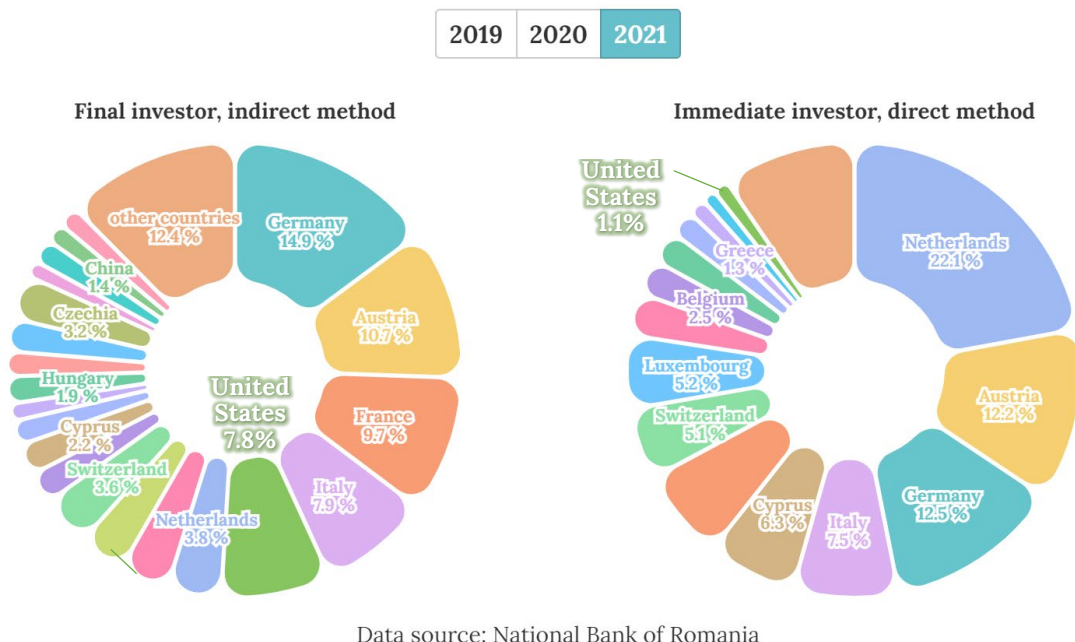


Figure 2. Composition of the Romanian inbound FDI by source countries

## 1.2. Geographical composition of the American FDI in Romania

To investigate the geographical distribution of U.S. FDI into Romania we have carried out three separate analyses:

- First, we looked into the distribution of U.S. FDI over the counties of Romania (Table 2 and Figure 3).
- Second, we have aggregated the previous figures over the higher-level Development Regions according to the NUTS definition (Table 3).
- Third, we have analyzed the origin of the U.S.-FDI in terms of their originating U.S.-state (state level distribution) (Table 4 and Figure 4).

Table 2. The distribution of U.S.-FDI over the counties of Romania (2021)

County	Total turnover (USD)	% of total	No. of companies	% of total	No. of employees	% of total	Direct	In-direct
<b>Bucharest</b>	10,728,628,976	51.72%	123	61.81%	41,349	41.53%	46	74
<b>Dolj</b>	2,742,768,388	13.22%	2	1.01%	6,002	6.03%	-	2
<b>Ilfov</b>	2,149,483,488	10.36%	12	6.03%	3,831	3.85%	1	11
<b>Brasov</b>	980,711,162	4.73%	3	1.51%	9,129	9.17%	-	3
<b>Buzau</b>	874,161,811	4.21%	3	1.51%	1,151	1.16%	-	3
<b>Iasi</b>	644,619,915	3.11%	6	3.02%	6,307	6.33%	2	4
<b>Cluj</b>	632,883,783	3.05%	21	10.55%	10,305	10.35%	10	11
<b>Prahova</b>	488,251,437	2.35%	8	4.02%	3,280	3.29%	4	4
<b>Maramures</b>	437,223,962	2.11%	2	1.01%	4,044	4.06%	-	2
<b>Timis</b>	365,509,296	1.76%	9	4.52%	4,894	4.92%	7	3
<b>Arges</b>	273,173,302	1.32%	1	0.50%	4,780	4.80%	-	1
<b>Bihor</b>	197,919,745	0.95%	2	1.01%	1,743	1.75%	1	1
<b>Arad</b>	196,528,169	0.95%	3	1.51%	2,456	2.47%	1	2
<b>Mures</b>	9,743,429	0.05%	1	0.50%	32	0.03%	1	-
<b>Galati</b>	9,127,844	0.04%	1	0.50%	113	0.11%	1	-
<b>Teleorman</b>	7,512,036	0.04%	1	0.50%	127	0.13%	-	1
<b>Sibiu</b>	5,453,950	0.03%	1	0.50%	27	0.03%	1	-
<b>TOTAL</b>	<b>20,743,700,692</b>	<b>100.00%</b>	<b>199</b>	<b>100.00%</b>	<b>99,570</b>	<b>100.00%</b>	<b>75</b>	<b>122</b>

Source: own research

Analyzing the distribution of U.S. FDI over the Romanian counties which host at least one company with U.S. equity (Table 2 and Figure 3), the following expected pattern emerges: the capital, Bucharest and its surrounding county, Ilfov dominate this list authoritatively (the top and the third position). This comes as no surprise as many subsidiaries of U.S. companies are headquartered in Bucharest or in the close vicinity of the capital, in Ilfov county.

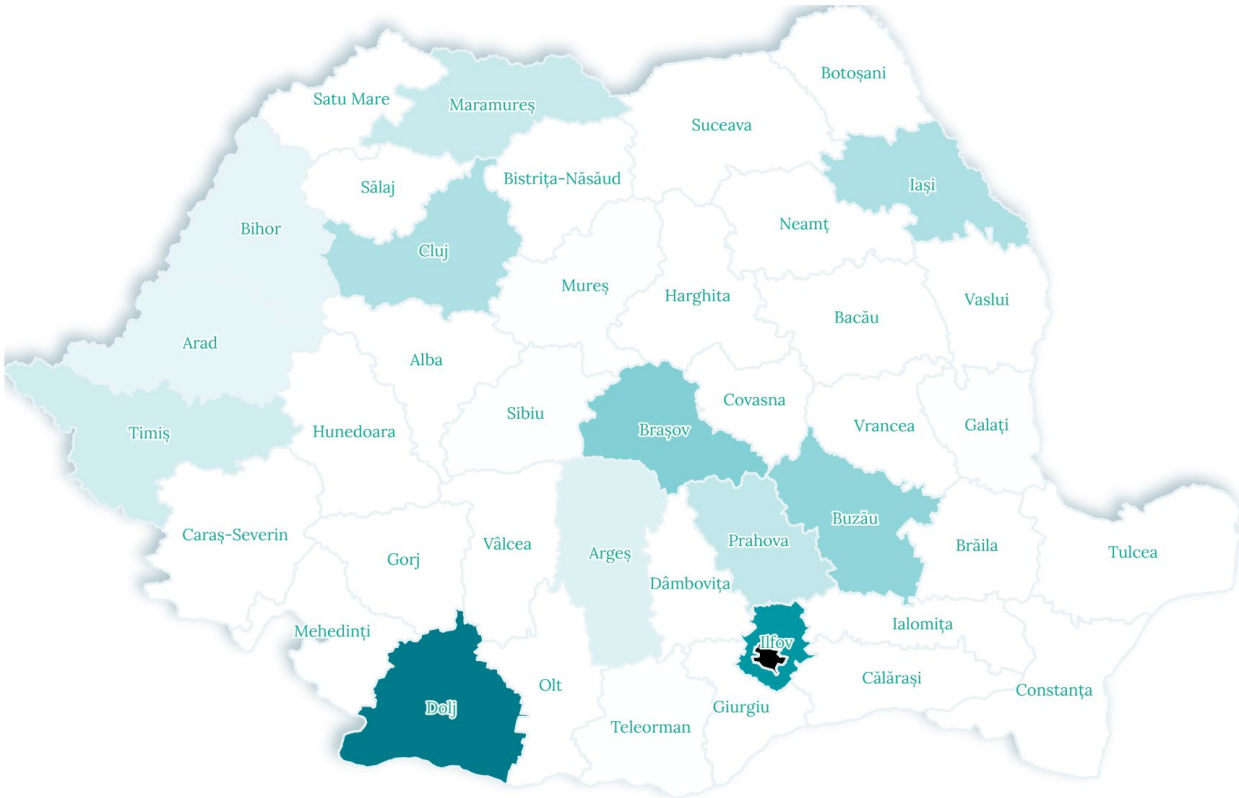
The other pattern that emerges is related to the decisive influence of the presence of large manufacturers such as Ford Motor in Dolj county (Craiova) or Autoliv in Braşov, placing Dolj on second and Braşov on the fourth place of the county list. Buzău county also makes it into the top 5, coming in at the fifth place, owing mainly to the presence of vegetable oil manufacturer and food industry multinational, Bunge.

In terms of the employed workforce, interestingly not Dolj, but Cluj county comes in second, ostensibly due to the large number of IT&C companies, which have a high aggregated workforce but a lower aggregate revenue than manufacturers.

Looking into the ownership structure of the investor companies the indirect investments are by far larger, having an advantage in numbers of over 60% relative to direct investments.

### Distribution of U.S.-FDI over the counties of Romania

million USD 100  10,000



Data source: Own research (based on 2021 data)

Figure 3. Distribution of U.S.-FDI over the counties of Romania



At the NUTS-level development regions, this concentration of U.S. FDI in Romania is even more evident (Table 3). Bucharest-Ilfov and the South-West regions are by far the most dominant, like our findings at the county level: Bucharest has the most U.S.-origin companies by headquarters, but the South-West region has the largest U.S.-origin production facility, the Ford plant in Craiova, Dolj county. In terms of the employed workforce, again the North-West region (including Cluj county) asserts itself after Bucharest, due to the large number of IT&C companies.

Table 3. The distribution of U.S. FDI in Romania at the level of NUTS development regions (2021)

NUTS region	Total turnover (USD)	% of total	No. of companies	% of total	No. of employees	% of total	Direct	Indirect
Bucharest - Ilfov	12,878,112,464	62.08%	135	67.84%	45,180	45.38%	47	85
South - West	2,742,768,388	13.22%	2	1.01%	6,002	6.03%	-	2
North - West	1,268,027,489	6.11%	25	12.56%	16,092	16.16%	11	14
Center	995,908,541	4.80%	5	2.51%	9,188	9.23%	2	3
South - East	883,289,655	4.26%	4	2.01%	1,264	1.27%	1	3
South - Muntenia	768,936,775	3.71%	10	5.03%	8,187	8.22%	4	6
North - East	644,619,915	3.11%	6	3.02%	6,307	6.33%	2	4
West	562,037,464	2.71%	12	6.03%	7,350	7.38%	8	5
<b>TOTAL</b>	<b>20,743,700,692</b>	<b>100.00%</b>	<b>199</b>	<b>100.00%</b>	<b>99,570</b>	<b>100.00%</b>	<b>75</b>	<b>122</b>

Source: own research

In terms of the U.S. states that are the major sources of U.S. FDI in Romania, there are no surprises at the very top of the list (based on yearly revenue): the Detroit-headquartered Ford Motor Company along with a couple of smaller manufacturers render the whole Michigan state as the number one state for U.S.-FDI in Romania (Table 4 and Figure 4). Minnesota comes in second place with the global food industry giants, Cargill and CHS Agritrade. New York is on the third place, again, hardly surprising as many of the world's biggest multinationals are headquartered here. Examples include but are not limited to: IBM, Colgate-Palmolive, Pfizer in the manufacturing (production) and Citibank or McKinsey in the non-manufacturing sectors (services). Virginia claims the fourth place on the list, owing to the headquarters of large multinationals such as Philip Morris or Mars with important investments in Romania. Pennsylvania and Ohio are head-to-head closing our top 5, Pennsylvania hosting Alliance Healthcare, Purolite and Suvoda Software amongst others, while Ohio being represented mainly by Procter and Gamble, Eaton and Timken.

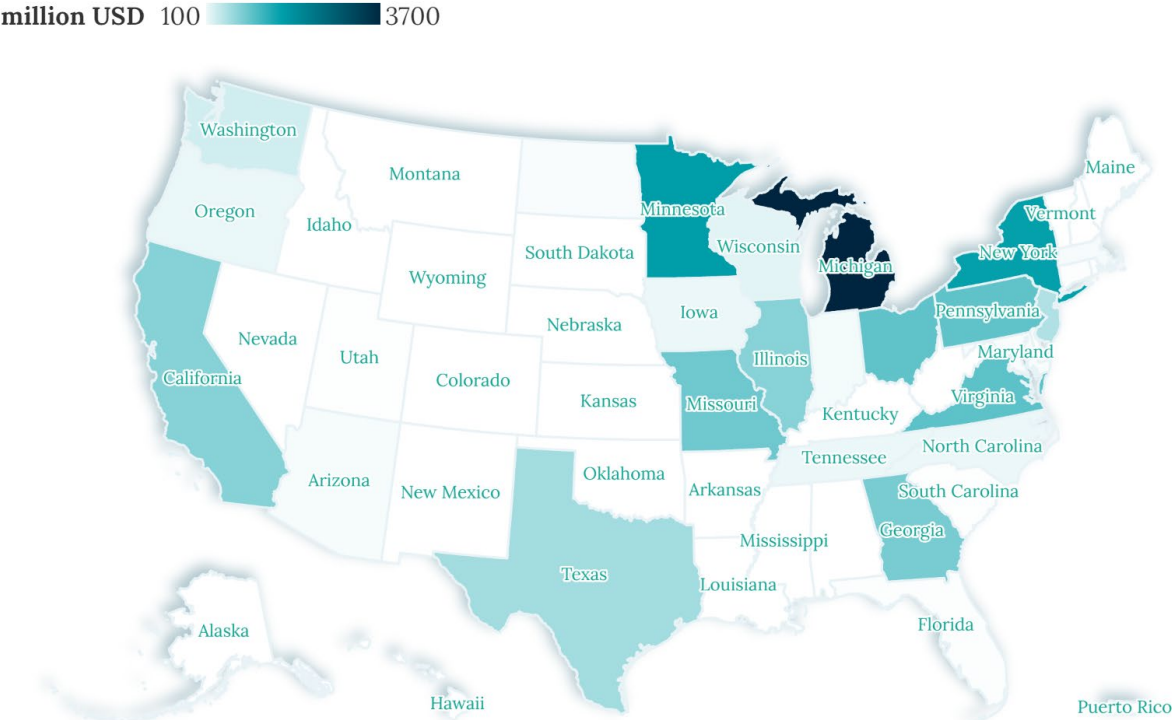
Table 4. The distribution over U.S.-states of the biggest investors  
(in terms of turnover) with economic stake in Romania (2021)

State	Total turnover (USD)	% of total	No. of companies	% of total
Michigan	3,751,497,537	23.25%	16	8.79%
Minnesota	1,682,307,327	10.43%	6	3.30%
New York	1,640,984,017	10.17%	23	12.64%
Virginia	1,057,786,002	6.56%	6	3.30%
Pennsylvania	1,030,673,287	6.39%	5	2.75%
Ohio	1,030,177,150	6.38%	7	3.85%
Missouri	943,487,946	5.85%	2	1.10%
Georgia	873,617,434	5.41%	5	2.75%
California	783,321,448	4.85%	31	17.03%
Illinois	777,064,689	4.82%	13	7.14%
Texas	599,858,186	3.72%	14	7.69%
New Jersey	509,201,576	3.16%	7	3.85%
Washington	301,359,043	1.87%	5	2.75%
Wisconsin	193,294,243	1.20%	1	0.55%
Oregon	137,386,493	0.85%	1	0.55%
Tennessee	124,406,930	0.77%	3	1.65%
North Carolina	123,468,999	0.77%	4	2.20%
Iowa	121,959,482	0.76%	2	1.10%
Indiana	77,224,960	0.48%	2	1.10%
Washington D.C.	67,332,066	0.42%	3	1.65%
Massachusetts	61,920,287	0.38%	5	2.75%
Arizona	59,456,946	0.37%	5	2.75%
North Dakota	46,939,702	0.29%	1	0.55%
Maryland	40,232,278	0.25%	5	2.75%
Connecticut	21,814,718	0.14%	1	0.55%
Florida	20,943,131	0.13%	3	1.65%
South Carolina	17,167,942	0.11%	1	0.55%
Utah	16,076,515	0.10%	2	1.10%
Delaware	13,996,711	0.09%	1	0.55%
Rhode Island	10,545,944	0.07%	1	0.55%
Nebraska	n.a.	0.00%	1	0.55%
<b>TOTAL</b>	<b>16,135,502,989</b>	<b>100.00%</b>	<b>182</b>	<b>100.00%</b>

Source: own research

A picture with a slightly different hue emerges if we look at the number of investor companies (last column of Table 4) originating from each U.S. state. Here we can see that almost every fifth U.S.-investor company in Romania comes from California (around 17%), which is not surprising given the large interest that companies in Silicon Valley are showing for emerging IT-hubs such as Romania. The podium of states is further made up of New York (23) and Michigan (16), confirming our hypothesis that mostly the big multinational companies headquartered in the largest U.S. cities (San Francisco, Los Angeles, New York, Chicago) are the ones who make the most foreign investments in general, and in Romania, in particular.

### Distribution of U.S.-FDI into Romania over the states of the U.S.



Data source: Own research (based on UNCTAD data from 2021)

Figure 4. Distribution of U.S.-FDI into Romania over the state of origin in the U.S.

In conclusion, American FDI is somewhat concentrated geographically both at the destination, in Romania, and at the source, at the level of U.S. states. A few Romanian counties such as Dolj, Prahova, Braşov, and Buzău dominate the manufacturing sector while Michigan, Minnesota, New York, and Virginia are the leading U.S. states as sources of FDI. In terms of the number of employees and the number of U.S. companies in Romania, Bucharest and Cluj county stand out, mostly due to the large number of IT&C companies that are characterized by high aggregated workforce, but a lower aggregate revenue than manufacturers. In parallel, the largest number of U.S. companies investing in Romania are headquartered in California. Furthermore, most of these companies (60%) are indirectly held by U.S. investors (compared to the remaining 40% direct ownership).

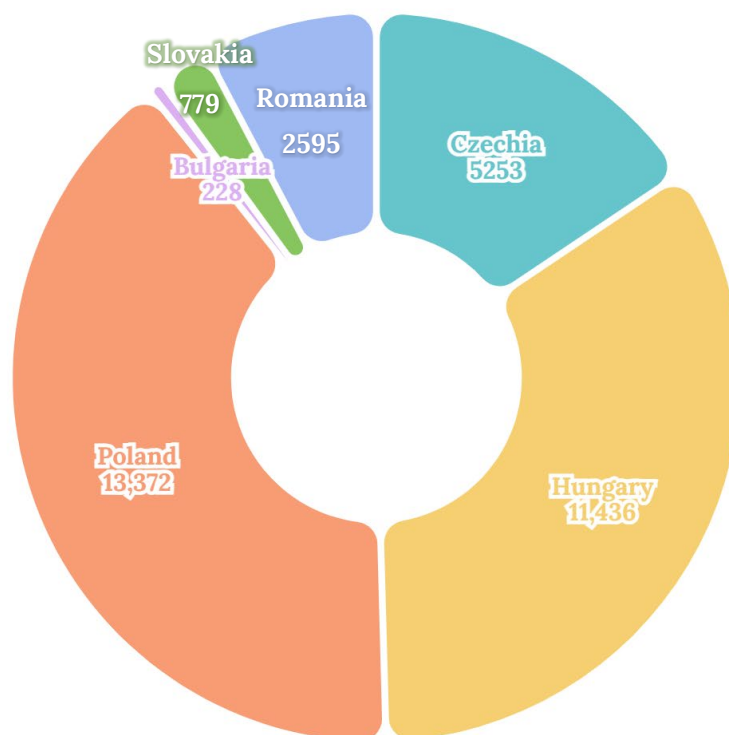
### 1.3. U.S. FDI – a regional comparison

To understand the role of U.S. FDI in Romania in a regional comparison, some of the most relevant close-proximity economies, namely Poland, Hungary, Czech Republic, Slovakia, and Bulgaria (all members of the European Union) were investigated based on the same set of relevant FDI indicators.

In general, the evolution in time and the orders of magnitude of the U.S. FDI into Romania is more or less proportional to Romania's economic size relative to these benchmark countries. There is however one notable exception, Hungary's outstandingly high level of U.S. FDI (Figure 5): while Romania totals 7.7% of U.S. FDI into the region (2.59 billion USD as of 2021), Hungary, with little more than half of Romania's population, hosts a much higher U.S. FDI stock, namely 11.4 billion USD (33.97% of the total region), surpassing on a per capita basis even the much larger, both in terms of population and area, Poland (39.72% of the total region).

## U.S. Foreign Direct Investment to the Region

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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Data source: U.S. Bureau of Economic Analysis

Figure 5. U.S. Foreign Direct Investment to the region (million USD)

Table 5. Evolution of the significance of U.S. FDI in the benchmark CEE countries (FDI stock, job creation) and latest percentages of U.S.-FDI share in the selected countries

Country	CAGR of FDI inbound stock from the U.S. (2010-2021)*	CAGR of Number of employees working in U.S.-controlled companies (2010-2019)*	Inbound FDI from the U.S. percentage from total FDI at country level (2020)	US origin FDI into the analyzed country percentage from total US outbound FDI (2020)
<b>Romania</b>	4.84%	5.16%	2.63%	0.05%
<b>Bulgaria</b>	-4.07%	9.42%	1.01%	0.01%
<b>Czechia</b>	-0.03%	3.10%	2.69%	0.08%
<b>Hungary</b>	9.45%	0.95%	12.67%	0.21%
<b>Poland</b>	0.15%	12.12%	5.19%	0.21%
<b>Slovakia</b>	-2.74%	10.18%	1.43%	0.02%

Source: own calculations

\* CAGR = Compound Average Growth Rate (for calculations see Methodological notes 2)

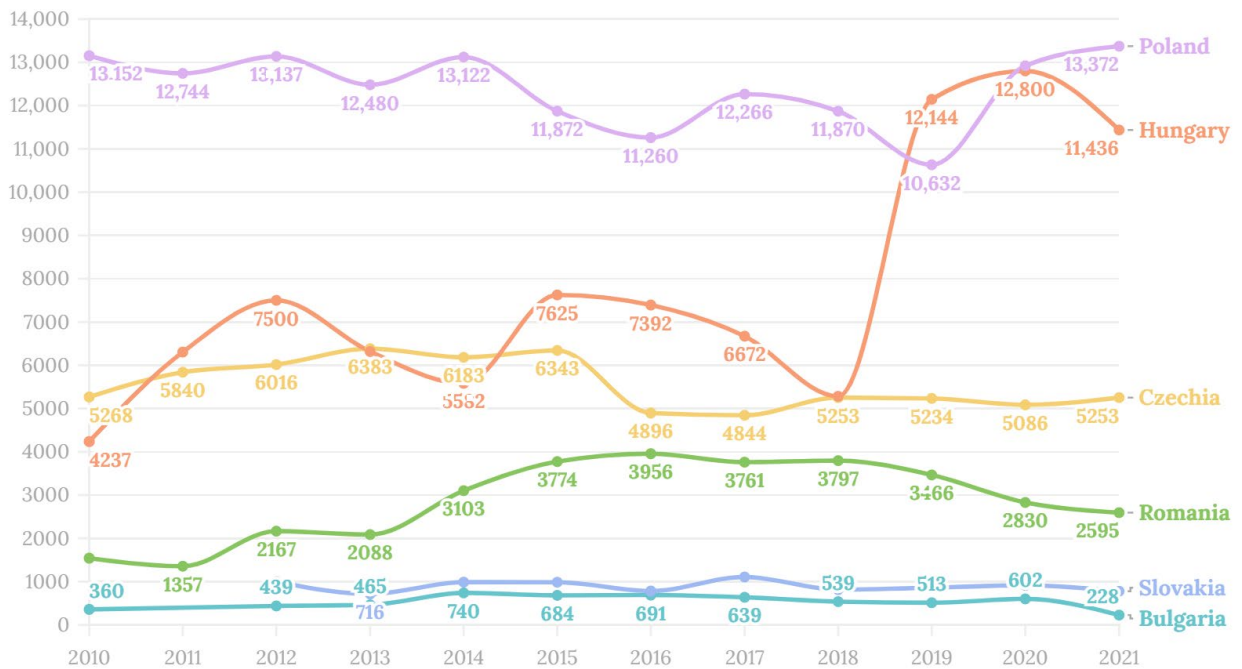
Data in Table 5 suggests very diverse paths of U.S. FDI into the region. Romania is in the upper part of the growth statistic (CAGR), registering a considerable overall yearly growth of 4.84% in terms of U.S. FDI and 5.16% in terms of the workforce employed by U.S.-controlled companies. In Table 5 it can be seen that in several countries (Bulgaria, Slovakia) the average growth rate is negative, indicating an overall decline of the U.S.-origin FDI stock in these countries during the 2010-2021 period.

The relative percentage figures of inbound and outbound U.S. FDI into/from the respective countries confirm in general the tendencies previously shown by the absolute figures in Table 5: indeed, Hungary has the highest percentage of U.S.-FDI from the total inbound FDI of Hungary, namely 12.67%. We have confirmed this somewhat surprising result from other sources as well: as of 2020, the U.S. is the second biggest foreign investor there after Germany. Regarding Hungary, we have to make the observation that the outlier large value for 2019 is a consequence of the very intense investment promoting activity in the country (since 2015, the Hungarian Government has signed more than 88 cooperation agreements with U.S.-based companies) and 2019 was the long-time historical height for all FDI in Hungary.

Romania lies somewhere in the lower-middle interval, with 2.63% U.S. FDI in the total inbound FDI, as of 2020. This percentage translates into the U.S. being only the 15th largest direct investor in Romania.

On the other hand, if we calculate the U.S.-origin FDI percentages compared to, instead of the country's total inbound FDI, to the total outbound FDI originated from the U.S. (last column of Table 5), then Hungary and Poland share the first position with 0.21-0.21% each, and Romania is fourth with 0.05%, still clearly exceeding Bulgaria and Slovakia (0.01% and 0.02%, respectively).

## Evolution of U.S. Foreign Direct Investment to the Region



Data source: own calculations

Figure 6. Evolution of U.S. Foreign Direct Investment to the region since 2010 (million USD)

The takeaway from this regional outlook is that despite significant development and economic growth in the Central and Eastern European (CEE) region (with an average growth rate surpassing that of the developed Western Europe for much of the decade), there is no universal trend for U.S.-origin investments. The evolution of U.S.-origin investments is highly idiosyncratic (country-specific) (Figure 6). Comparing the presence of U.S. FDI in Romania to benchmark countries from the CEE region, Poland, Hungary and Czechia are clearly above Romania, while Slovakia and Bulgaria are far behind. However, in terms of the growth rate in the last decade, Romania is in the top, indicating that there is clearly room and potential for improvement in the near future, to attract more FDI from the U.S.

## **Methodological notes 2**

### **Definitions of FDI and related terms:**

*In general, foreign direct investment is composed of mergers and acquisitions, greenfield-type investments into new facilities, reinvesting profits earned from foreign operations, and intra-company loans or merely a long-term, controlling management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor (Financial Times lexicon).*

*At the macroeconomic level, in the flow of funds schemes, FDI is the sum of equity capital, long-term capital, and short-term capital as shown in the balance of payments.*

*Stock of FDI is the net cumulative FDI for any given period. Flow of FDI is the marginal, yearly net amount of FDI into a certain country. Therefore, flow of FDI is by definition equal to the difference between two consecutive FDI stocks. In the present study we report both FDI flow and FDI stock figures for Romania, for the U.S., and for several Central-Eastern-European countries, these latter being used as a reference in a regional comparison.*

*A higher FDI stock in emerging market economies such as Romania is generally associated with a higher standard of living, higher GDP/capita, successful technology transfer, higher levels of innovation and productivity (Meyer, 2004).*

*With respect to the Romanian statistics about U.S.-originated FDI in Romania we use the definitions of the Romanian Commerce Registry<sup>1</sup>, as follows:*

- A foreign investor entity represents a company that is partially or totally constituted by the equity participation of an individual or legal person that is domiciled or headquartered outside of Romania's jurisdiction.*
- The equity of a company represents the total of contributions, in cash and in physical form, that the associates of the company have committed at the establishment of the company and also during the whole lifetime of the company in the events of seasoned capital offerings (subsequent raises of capital). The subscription and pay-out of the equity by a foreign investor can be done, according to the country's legislation in force, in the legal tender (national currency) of Romania or in any other convertible currency.*

*The subsequent raises of capital (equity) include:*

- amounts contributed by foreign investors from own sources, in cash and/or physical form, in Romanian lei and/or other foreign currency;*
- amounts contributed by foreign investors from dividends obtained in Romania;*
- acquisition of shares by a non-resident person from a resident person.*

*Diminishing/(raising) the equity through capital assignment includes equity participations of shareholders assigned to/from other resident shareholders.*

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<sup>1</sup> Oficiul Național al Registrului Comerțului, <https://www.onrc.ro/>

As an accounting definition, the foreign capital investment in Romania (*Inv*) is equal to the foreign capital subscribed at the registration of the company (*I*), plus subsequent raises of capital (*M*), plus/minus the equity assigned from/to other resident shareholders (*C*), minus the subscribed equity of deregistered companies (*R*):

$$Inv = I + M \pm C - R$$

**NUTS (Nomenclature of Territorial Units for Statistics)-level economic development regions of Romania (composition by counties):**

- North-East: Suceava, Botoșani, Neamț, Iași, Bacău, Vaslui.
- South-East: Vrancea, Galați, Buzău, Brăila, Tulcea, Constanța.
- South-Muntenia: Argeș, Dâmbovița, Prahova, Teleorman, Giurgiu, Călărași, Ialomița.
- South-West Oltenia: Gorj, Vâlcea, Dolj, Mehedinți, Olt.
- West: Arad, Caraș-Severin, Hunedoara, Timiș.
- North-West: Bihor, Bistrița, Cluj, Satu Mare, Sălaj, Maramureș.
- Center: Alba, Brașov, Covasna, Harghita, Mureș, Sibiu.
- Bucharest-Ilfov: Bucharest, Ilfov.

**Currency conversions**

In terms of the absolute figures, in this report we use US dollars as base currency, to make the results comparable and compatible. Sums in EUR and RON are transformed into US dollars. We have followed the following rules for currency conversions:

- The stock variables, which reflect the quantity of a variable at a given moment in time, were converted using the official, nominal exchange rate at the end of the respective year (or at the first date of the next year).
- The flow variables which represent changes in the quantity of a variable during a given period, were converted using the average official, nominal exchange rate for that period.

**The Compound Annual Growth Rate (CAGR):**

The compound annual growth rate can be defined as an average exponential growth rate of a variable between  $T_0$  and  $T_1$ , for a period of length  $\Delta t$ . It can be determined as the unknown (CAGR) from the following equation:

$$(1 + CAGR)^{\Delta t} = (\text{Ending value})/(\text{Starting value})$$

Therefore,

$$CAGR = \sqrt[\Delta t]{(\text{Ending value})/(\text{Starting value})} - 1$$



**Table 6. The 30 largest U.S.-origin companies in Romania (all data for 2021, unless stated otherwise)**

No.	Name	Industry	Turnover (USD, 2021)	HQ County in Romania	Home HQ State in U.S.	Employees	Established	Factory established	Direct or Indirect
1	BRITISH AMERICAN TOBACCO **	Beverages and tobacco	2,868,566,622	Bucharest	n/a	1,670	1996	1996	Indirect (Germany - 100%)
2	FORD ROMANIA SRL	Machinery and transport equipment	2,732,802,351	Doj	Michigan	5,893	1994	2009	Indirect (Netherlands - 100%)
3	CARGILL **	Food and live animals	981,611,484	Bucharest	Minnesota	147	1996	2010	Direct (USA - 70%, Luxembourg - 30%)
4	ALLIANCE HEALTHCARE ROMANIA SRL	Chemicals and related products, n.e.s.	917,567,610	Bucharest	Pennsylvania	866	1996		Indirect (Romania- 100%)
5	AUTOLIV ROMANIA SRL	Miscellaneous manufactured articles	889,950,519	Braşov	n/a	8,644	1997	1997	Indirect - Swedish - American
6	PHILIP MORRIS **	Beverages and tobacco	857,827,698	Ilfov	Virginia	526	1993	2000	Indirect (Netherlands - 100%)
7	BUNGE ROMANIA SRL	Food and live animals	719,018,194	Buzau	Missouri	586	2004	2007	Indirect (Netherlands - 100%)
8	COCA COLA **	Beverages and tobacco	673,689,054	Ilfov	Georgia	1,489	1991	1995	Indirect (Netherlands - 100%)
9	CHS AGRITRADE ROMANIA SRL	Food and live animals	611,419,282	Bucharest	Minnesota	43	2011		Indirect (Switzerland - 100%)
10	PROCTER & GAMBLE **	Miscellaneous manufactured articles	466,968,609	Bucharest	Ohio	561	1992	2010	Indirect (Switzerland - 100%)

11	BORGWARNER ROMANIA SRL	Machinery and transport equipment	444,307,205	Iasi	Michigan	1,964	2007	2011	Indirect (Netherlands - 100%)
12	EATON **	Miscellaneous manufactured articles	343,120,282	Maramureş	Ohio	2,301	1997	2008	Indirect (Germany - 100%)
13	QUADRANT AMROQ BEVERAGES SRL (PEPSICO)	Beverages and tobacco	273,789,672	Bucharest	New York	799	1994	1995	Indirect (Netherlands - 100%)
14	LEAR CORPORATION ROMANIA SRL	Machinery and transport equipment	273,173,302	Argeş	Michigan	4,780	2000	2001	Indirect (Netherlands - 100%)
15	PREMIER RESTAURANTS ROMANIA SRL (MCDONALDS)	Food and live animals	262,823,280	Bucharest	Illinois	4,181	1994		Indirect (Romania - 100%)
16	CAMERON ROMANIA SRL	Miscellaneous manufactured articles	261,549,565	Prahova	Texas	1,630	1991	2004	Indirect (Luxembourg - 100%)
17	PFIZER ROMANIA SRL	Chemicals and related products, n.e.s.	253,565,948 *	Bucharest	New York	210	2004		Indirect (Luxembourg - 100%)
18	NESTLE ROMANIA SRL	Food and live animals	251,976,532	Bucharest	New York	546	1993		Indirect (Switzerland - 100%)
19	IBM ROMANIA SRL	Telecommunications, computer, and information services	233,461,735	Bucharest	New York	3,119	1991		Indirect (Netherlands - 100%)
20	IPSO SRL (JOHN DEERE)	Machinery and transport equipment	226,512,313	Ilfov	n/a	488	1994		Indirect (France - 100%)

21	EMERSON SRL	Miscellaneous manufactured articles	224,469,753	*	Cluj	Missouri	2,685	2006	2006	Indirect (Netherlands - 100%)
22	JOHNSON & JOHNSON ROMANIA SRL	Chemicals and related products, n.e.s.	221,771,718	*	Bucharest	New Jersey	168	2010		Indirect (Netherlands - 100%)
23	STAR FOODS E.M. SRL (PEPSICO)	Food and live animals	200,304,375		Bucharest	New York	862	1994	1995	Indirect (Cyprus - 100%)
24	PLEXUS SERVICES RO SRL	Miscellaneous manufactured articles	193,294,243		Bihor	Wisconsin	1,712	2009	2013	Indirect (United Kingdom - 100%)
25	FLEXTRONICS ROMANIA SRL	Miscellaneous manufactured articles	180,734,783		Timiș	California	3,239	1998	1998	Indirect (Netherlands - 100%)
26	ACCENTURE **	Other business services	175,561,400		Bucharest	n/a	3,659	2000		Indirect Irish-American
27	MONDELEZ ROMANIA SA	Food and live animals	161,172,706		Bucharest	Illinois	131	1991	1998	Indirect (Netherlands - 100%)
28	MARS ROMANIA SRL	Food and live animals	146,346,938		Bucharest	Virginia	199	1994		Indirect (Netherlands - 100%)
29	BRISTOL MYERS SQUIBB ROMANIA SRL	Chemicals and related products, n.e.s.	146,039,844		Bucharest	New York	3	2018		Direct
30	COGNIZANT TECHNOLOGY SOLUTIONS ROMANIA SRL	Telecommunications, computer, and information services	138,382,641		Cluj	New Jersey	2,294	1998		Indirect (United Kingdom - 100%)

\*Data up to 2020 \*\* Combination of multiple legal entities belonging to the same company

Source: own editing

Several U.S.-origin companies, especially those from the manufacturing sector, have made an important contribution to the long-term growth of U.S. FDI in Romania. U.S. companies have established several large manufacturing sites (i.e. plants and factories) in Romania. Although not all these investments have been made in the period analyzed by the present study, they represent an important sign that U.S. FDI has long been interested in the opportunities on the Romanian market (Table 7).

The non-manufacturing sector also has a significant presence in Romania, although these companies made their entrance typically later compared to manufacturing companies. This is of course a consequence of the fact that it took a considerable amount of time for the Romanian society to transition from an agriculture- and manufacturing-based economy to a knowledge-driven one, with higher value-added services, and this transformation is far from complete. Thus, the presence of U.S. companies from the IT&C sector and from financial services has been felt only from the 2000's and especially in the 2010's decade. (Table 8)

*Table 7. Top 30 U.S.-origin manufacturing companies in Romania, by revenue (2021)*

No.	Company	Industry	Plant location	Plant opening	Revenue
1	BRITISH AMERICAN TOBACCO	Beverages and tobacco	Bucharest	1996	\$2,868,566,622
2	FORD MOTOR COMPANY (Ford Otosan as of 2022)	Machinery and transport equipment	Craiova, DJ	2009	\$2,732,802,351
3	CARGILL	Food and live animals	Șura Mare, SB, Craiova, DJ	2010	\$981,611,484
4	AUTOLIV	Miscellaneous manufactured articles	Brașov, BV, Reșița, CS, Lugoj, TM, Rovinari, GJ, Sfântu Gheorghe, CV, Onești, BC	1997	\$889,950,519
5	PHILIP MORRIS	Beverages and tobacco	Bucharest	2000	\$857,827,698
6	BUNGE	Food and live animals	Buzău, BZ Lehliu Gară, CL	2007	\$719,018,194
7	COCA-COLA	Food and live animals	Ploiești, PH, Poiana Negrii, SV, Timișoara, TM	1995	\$673,689,054
8	PEPSICO AND STAR FOODS	Food and live animals	Bucharest, Dragomirești, IF	1995	\$670,819,518
9	PROCTER & GAMBLE	Miscellaneous manufactured articles	Urлаți, PH	2010	\$466,968,609
10	BORGWARNER	Machinery and transport equipment	Iași, IS	2011	\$444,307,205

11	EATON	Miscellaneous manufactured articles	Sarbi, Busag, MM, Arad, AR	2008	\$343,120,282
12	LEAR CORPORATION	Machinery and transport equipment	Pitești, AG Câmpulung, AG	2001	\$273,173,302
13	CAMERON	Mineral fuels, lubricants and related materials	Câmpina, PH, Ploiești, PH	2004	\$271,216,516
14	EMERSON	Miscellaneous manufactured articles	Cluj-Napoca, CJ	2006	\$224,469,753
15	PLEXUS SERVICES RO SRL	Miscellaneous manufactured articles	Oradea, BH	2013	\$193,294,243
16	FLEX (FLEXTRONICS)	Miscellaneous manufactured articles	Timișoara, TM	1998	\$180,734,783
17	MONDELEZ (CHIPITA)	Food and live animals	Clinceni, IF	1998	\$161,172,706
18	ASTRA RAIL INDUSTRIES SA	Machinery and transport equipment	Arad, AR	1891	\$137,386,493
19	TIMKEN	Machinery and transport equipment	Ploiești, PH	1997	\$109,289,634
20	PIONEER HI BRED ROMANIA SRL	Food and live animals	Găneasa, IF	2006	\$109,007,445
21	UNIVERSAL ALLOY CORPORATION EUROPE	Machinery and transport equipment	Dumbravita, MM, Mediesul Aurit, SM, Tautii Maghierus, MM	2009	\$94,103,680
22	HONEYWELL	Industrial conglomerate	Lugoj, TM	1994	\$93,349,537
23	HOEGANAES CORPORATION	Chemicals and related products, n.e.s.	Buzău, BZ	1993	\$80,909,120
24	PUROLITE	Chemicals and related products, n.e.s.	Victoria, BV	1995	\$76,198,953
25	DUCTIL SA (Lincoln Electric)	Miscellaneous manufactured articles	Buzău, BZ	1963	\$74,234,497
26	KIMBALL ELECTRONICS ROMANIA SRL	Miscellaneous manufactured articles	Timișoara, TM	2015	\$67,789,747

27	AZUR	Chemicals and related products, n.e.s.	Timișoara, TM	1923	\$44,480,867
28	LABORMED PHARMA	Chemicals and related products, n.e.s.	Bucharest	1991	\$41,236,553
29	PANDUIT EUROPEAN SOLUTIONS SRL	Miscellaneous manufactured articles	Arad, AR	2009	\$41,110,630
30	WEATHERFORD ATLAS GIP SA	Mineral fuels, lubricants and related materials	Ploiești, Prahova	1991	\$39,625,741

Data source: own editing

Table 8. Top 30 non-manufacturing U.S.-origin companies in Romania, by revenue (2021)

No.	Company	Industry	Revenue	HQ
1	IBM ROMANIA SRL	Telecommunications, computer, and information services	233,461,735	Bucharest
2	ACCENTURE *	Other business services	175,561,400	Bucharest
3	COGNIZANT TECHNOLOGY SOLUTIONS ROMANIA SRL	Telecommunications, computer, and information services	138,382,641	Cluj
4	AMAZON DEVELOPMENT CENTER SRL	Various services	131,745,505	Iasi
5	DELOITTE *	Other business services	130,410,513	Bucharest
6	ORACLE GLOBAL SERVICES ROMANIA SRL	Telecommunications, computer, and information services	113,844,237	Bucharest
7	MICROSOFT ROMANIA SRL	Telecommunications, computer, and information services	109,092,130	Bucharest
8	ERNST & YOUNG *	Other business services	94,526,208	Bucharest
9	FEDEX *	Other business services	74,472,113	Bucharest
10	PRICEWATERHOUSECOOPERS	Other business services	74,016,460	Bucharest
11	ELECTRONIC ARTS ROMANIA SRL	Personal, cultural, and recreational services	68,105,251	Bucharest
12	B.V. MCCANN ERICKSON SRL	Other business services	67,331,861	Bucharest
13	ADOBE SYSTEMS ROMANIA SRL	Telecommunications, computer, and information services	66,130,725	Bucharest
14	STEFANINI ROMANIA SRL	Telecommunications, computer, and information services	57,485,175	Bucharest
15	BRINKS CASH SOLUTIONS RO SRL	Various services	52,511,407	Bucharest

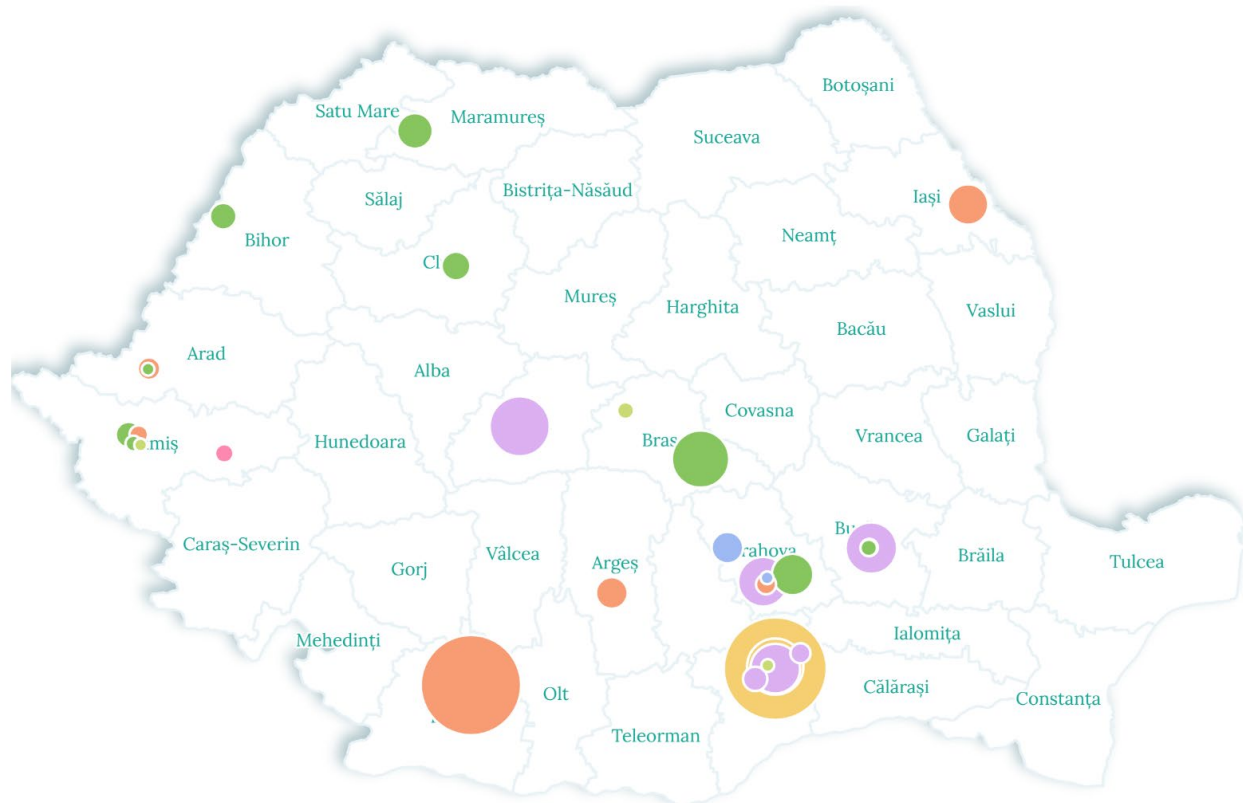
16	SECUREWORKS EUROPE SRL	Telecommunications, computer, and information services	43,078,465	Bucharest
17	DELL TECHNOLOGY SRL	Telecommunications, computer, and information services	42,872,136	Bucharest
18	UPS ROMANIA SRL	Transport	36,803,106	Ilfov
19	3PILLAR GLOBAL SRL	Telecommunications, computer, and information services	34,055,996	Cluj
20	AUTOMATIC DATA PROCESSING ADP ROMANIA SRL	Other business services	28,608,888	Bucharest
21	AVANGATE SRL	Other business services	25,943,129	Bucharest
22	INTEL SOFTWARE DEVELOPMENT SRL	Telecommunications, computer, and information services	25,931,274	Timiș
23	EXPEDITORS INTERNATIONAL ROMANIA SRL	Transport	25,554,919	Bucharest
24	FITBIT DEVELOPMENT SRL	Personal, cultural, and recreational services	24,331,500	Bucharest
25	PROPERTY SHARK SRL	Services not allocated	22,495,229	Cluj
26	8X8 INTERNATIONAL SRL	Telecommunications, computer, and information services	21,745,598	Cluj
27	IRON MOUNTAIN SRL	Telecommunications, computer, and information services	21,657,148	Ilfov
28	APPLE SALES ROMANIA SRL	Telecommunications, computer, and information services	21,624,997	Bucharest
29	YARDI CALL CENTER SRL	Other business services	19,546,026	Cluj
30	ADSWIZZ RO SRL	Other business services	19,256,694	Bucharest

*Data source: own editing, \*combination of multiple legal entities belonging to the same company*

A separate rendering by geographical location of the main manufacturing and non-manufacturing companies present in Romania is illustrated in Figure 7 and Figure 8. We can see on these maps that manufacturing facilities are generally concentrated in several counties with industrial traditions such as Iași, Dolj, Ilfov, Prahova or Brașov. In terms of non-manufacturing, service-oriented industries, the concentration is even more evident, we can speak of an almost monopoly position of Bucharest and Ilfov county, as the majority of these companies have their Romanian headquarters in the capital. However, large university centers such as Cluj-Napoca and Iași are coming up as challengers.

## Map of the TOP 30 manufacturing U.S. companies in Romania

- Beverages and tobacco
- Machinery and transport equipment
- Food and live animals
- Miscellaneous manufactured articles
- Mineral fuels, lubricants and related materials
- Industrial conglomerate
- Chemicals and related products, n.e.s.



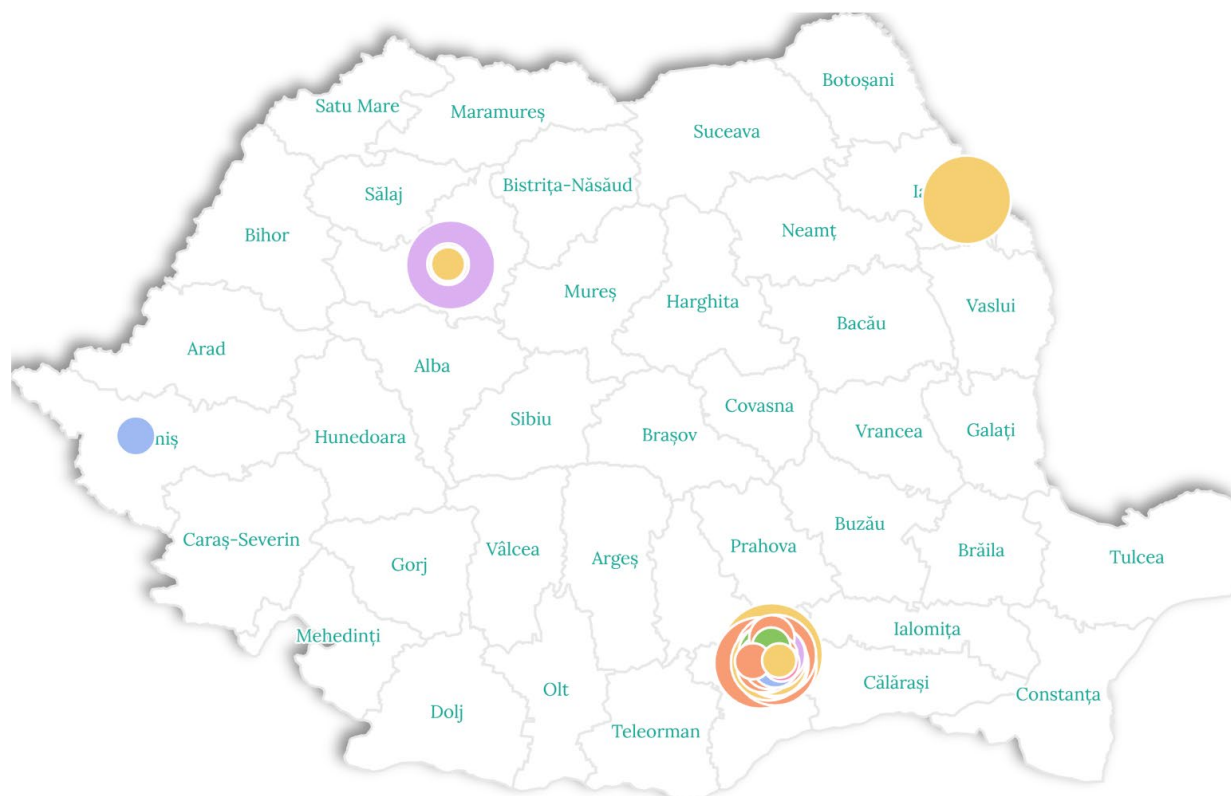
Data source: Own research (based on 2021 data)

Figure 7. Map of the top manufacturing U.S. companies in Romania



## Map of the TOP 30 non-manufacturing U.S. companies in Romania

■ Other business services ■ Telecommunications, computer, and information services  
■ Various services ■ Personal, cultural, and recreational services ■ Transport ■ Services not allocated



Data source: Own research (based on 2021 data)

*Figure 8. Map of the top non-manufacturing U.S. companies in Romania*

The number of U.S.-origin companies operating in Romania has not changed significantly in the last 10 years (Table 9), but the number of people working for these companies has increased significantly (see Chapter 3:). Although, in 2021 there were around 900 such companies in the country, 95% of the employees working at U.S.-controlled companies were working for one company in the TOP 200.

Thus, the number of U.S.-controlled companies in Romania remained stable in the last decade, with only a slight decrease from 964 such companies in 2010 to only about 900 in 2021. Examining similar data from neighboring countries (Table 10), it seems that Romania is not the first location option for U.S. companies. While Hungary is half the size of Romania, there are 50% more U.S.-controlled companies operating there. Poland, which is twice the size of Romania, has fewer American companies, but with a much greater aggregate revenue-generation.

Table 9. Evolution of the number of U.S. controlled companies in Romania

No. of companies	
2010	964
2011	596
2012	873
2013	762
2014	796
2015	917
2016	934
2017	950
2018	942
2019	887
2020*	890
2021*	900

Source: Eurostat, \*own estimation

Table 10. The evolution of the number of U.S.-controlled companies in benchmark countries

	Romania	Bulgaria	Czechia	Hungary	Poland	Slovakia	Region TOTAL
2010	964	514	1056	2014	355	82	4985
2011	596	483	891	1744	596	94	4404
2012	873	444	911	1750	563	57	4598
2013	762	406	935	1645	581	89	4418
2014	796	377	951	1715	631	86	4556
2015	917	368	916	1563	675	99	4538
2016	934	310	916	1407	651	204	4422
2017	950	376	1006	1429	688	264	4713
2018	942	453	1026	1384	648	250	4703
2019	887	451	1006	1249	693	253	4539
2020*	890	460	1020	1260	700	265	4595
2021*	900	460	1020	1280	710	270	4640

Source: Eurostat; \*own estimation

The establishment of large U.S.-origin companies in Romania had, of course, a significant spillover effect, the extent of which is not easily quantifiable. For example, Ford Motor Company has induced an additional 20 foreign supplier companies that have created several thousand jobs.

*In conclusion, U.S. FDI is mostly present in Romania in traditional industries such as manufacturing (Ford, Autoliv, Philip Morris, etc.), FMCG (Coca-Cola, Pepsico, P&G, etc.), but also in innovative sectors such as IT&C (IBM, Amazon, Microsoft, etc.). The non-manufacturing sector is highly concentrated in Bucharest and Ilfov county, whereas manufacturing sites are more spread out throughout the country in locations such as Bucharest, Dolj, Braşov, Prahova, Buzău, Sibiu and Iaşi. The number of U.S.-controlled companies operating in Romania has not changed significantly in the last decade, but the number of people working for these companies has increased significantly. In terms of indicators relevant to investments, Romania is not worse off than any of the surrounding countries (the only exception is the relatively underdeveloped infrastructure), coupled with promising development perspectives, and as a result, the number of U.S.-controlled companies is expected to increase in the future.*

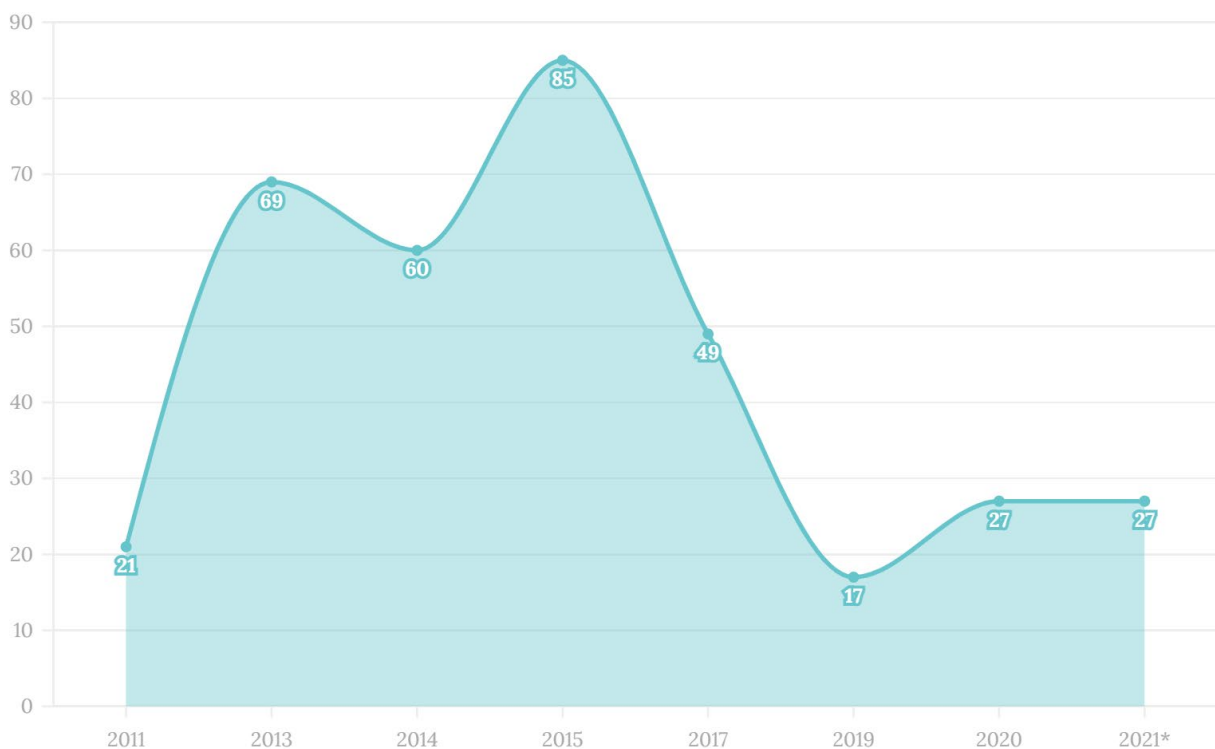
## Chapter 2: Romanian FDI in the U.S.

Data illustrated in Figure 9 indicates that the participation of Romanian companies in the U.S. with registered equity or local subsidiaries is orders of magnitude smaller than the U.S. FDI in Romania (2021: 2.6 billion USD in U.S. FDI stock in Romania compared to 27 million USD in Romanian FDI stock in the U.S.). This is in line with our expectations given the small size of the Romanian economy (2021 GDP of 284.09 billion USD exchanged on nominal exchange rate, 0.21% of the world economy) compared to that of the U.S. (2021 GDP of 23 trillion USD, 17.20% of the world economy).

The evolution in time of Romanian investments (Figure 9) shows that after an initial increase of FDI outflows, starting with 2015, the FDI stock began to drop significantly. This is synchronized with a similar decrease in the inbound U.S. FDI that we have illustrated in Chapter 1:

### Romanian Foreign Direct Investment to U.S.

■ FDI outbound stock to USA (BEA), million USD



Data source: U.S. Bureau of Economic Analysis, \*own estimation

Figure 9. Evolution of Romanian FDI to the U.S. since 2011

However, there are certain noteworthy observations to be made if we look at some of the larger Romanian companies operating in the U.S. (Table 11).

Firstly, we can observe the presence in the U.S. of quite a few IT&C companies, spearheaded by Bitdefender and UiPath, the first Romanian business unicorn. This phenomenon can be explained by the low barriers to

entry of the IT&C sector as well as by the fact that Romania has established itself in the last decade as a serious player on the regional IT&C market, with a well-qualified, educated, English-speaking and cost-effective workforce. Historically started as an outsourcing IT&C target, Romanian companies in this sector are slowly moving towards also developing their own products and services.

Secondly, apart from the IT&C sector, some well-established brands like Bilka (roof manufacturer), and innovative endeavors such as the Salad Box restaurant chain are also present on the U.S. market.

Table 11. Selected examples of Romanian FDI in the U.S.

No.	Name	Industry	Turnover (USD, 2021) – RO	Employees (2021) - RO	HQ County in Romania	Home HQ State in U.S.	Year of entry to USA	Year of factory establishment
1	ALEXANDRION SABER DISTILLERIES 1789 SRL	Beverages and tobacco	39,403,110	110	Prahova	New York	2018	2019
2	APPSCEND MOBILE PLATFORM SRL	Telecommunications, computer, and information services	62,671	-	Bucharest	California	2011	n/a
3	BGS DIVIZIA DE SECURITATE SRL	Various services	15,691,807	1,030	Bucharest	n/a	2022	n/a
4	BILKA STEEL SRL	Miscellaneous manufactured articles	253,267,823	542	Brasov	Pennsylvania	2019	n/a
5	BITDEFENDER SRL	Telecommunications, computer, and information services	248,140,330	1,350	Bucharest	California	2004	n/a
6	DRUID SA	Telecommunications, computer, and information services	1,659,071	43	Prahova	n/a	2018	n/a
8	FINTECH OS SRL	Telecommunications, computer, and	7,309,264*	107	Bucharest	New York	2021	n/a

		information services						
9	FLOWX.AI BUSINESS SYSTEMS SRL	Telecommunications, computer, and information services	225,131	-	Bucharest	California	2021	n/a
10	Impact Plus (Hora)	Personal, cultural, and recreational services	n/a	n/a	n/a	Illinois	2019	n/a
11	LATERAL SRL	Telecommunications, computer, and information services	2,918,038	43	Mures	California	2008	n/a
12	OVEIT	Telecommunications, computer, and information services	n/a	n/a	n/a	Texas	2018	n/a
13	QUALITANCE QBS SA	Telecommunications, computer, and information services	15,231,201	178	Bucharest	California	2014	n/a
14	SALAD BOX INTERNATIONAL SRL	Food and live animals	284,006	2	Cluj	Florida	2017	n/a
15	SMARTDREAMERS SA	Telecommunications, computer, and information services	1,342,329	15	Mures	New York	2014	n/a
16	SOFT GALAXY INTERNATIONAL SRL	Telecommunications, computer, and information services	2,554,561	26	Bucharest	Washington	2009	n/a

17	SOFTBINATOR TECHNOLOGIE S SA	Telecommuni- cations, computer, and information services	3,462,003	59	Bucharest	n/a	2020	n/a
18	TAIL PATH	Telecommuni- cations, computer, and information services	n/a	n/a	n/a	Delaware	2018	n/a
19	TREMEND SOFTWARE CONSULTING SRL	Telecommuni- cations, computer, and information services	33,343,110	463	Bucharest	California	n/a	n/a
20	TYPINGDNA SRL	Telecommuni- cations, computer, and information services	1,530,806	24	Bihor	New York	2018	n/a
21	UIPATH SRL	Telecommuni- cations, computer, and information services	305,531,44 8*	828	Bucharest	New York	2015	n/a
22	OMNIPERFOR M SRL	Telecommuni- cations, computer, and information services	2,528,250	3	Bucharest	n/a	2022	n/a

\* data only available for 2020

Source: own editing

Lastly, typical for the sizeable Romanian diaspora in Western states (around 5.7 million<sup>2</sup>), there are a lot of diaspora-owned restaurants with Romanian cuisine, shops with Romanian products, regular shops and

<sup>2</sup> <https://www.digi24.ro/stiri/actualitate/social/secretar-de-stat-cel-putin-8-milioane-de-romani-au-plecat-din-tara-1945889>

trading companies catering to the needs of this large community (around 1 million Romanian diaspora citizens living in the U.S.<sup>3</sup>).

On a regional level, following the numbers presented in Chapter 1: the average annual growth rate of Romanian FDI into the U.S. is somewhere in the middle between extremely large (Bulgaria) and extremely low (Poland) values. Naturally, the relative figures of outbound FDI show even more precisely the smaller size of the Romanian-U.S. investment relationship compared to the Romanian-EU relationship: less than 0.01% of the yearly FDI inbound stock of the U.S. has originated from Romania (Table 12). Romania is second to last on this list, only Slovakia having a smaller figure. Despite strong geopolitical ties, the investment ties between Romania and the U.S. are smaller, showing that there is definitely room for further expansion.

*Table 12. Growth rate and percentages of outbound FDI to the U.S. in the countries of the benchmark CEE region*

Country	CAGR of FDI outbound stock to the U.S. (2010-2021)	Outbound FDI to the U.S. as a percentage from U.S. total inbound FDI (2021)
<b>Romania</b>	2.83%	0.0006%
<b>Bulgaria</b>	50.85%	0.00136%
<b>Czechia</b>	13.35%	0.01%
<b>Hungary</b>	1.35%	0.92%
<b>Poland</b>	-19.27%	0.04%*
<b>Slovakia</b>	16.95%	0.0003%**

\* data for 2015 \*\* data for 2018

Source: own calculations

*In conclusion, Romanian FDI into the U.S., similarly to the situation of other neighboring countries, is very scarce, making up only a small fraction of total U.S. inbound FDI and of Romanian investments abroad in general. The presence of Romanian companies in the U.S. with registered equity or local subsidiaries is approx. 100 times smaller than the U.S. FDI in Romania. Most of these companies operate in the IT&C industry (UiPath being the most well-known recent example), where entry barriers are lower. Benchmark countries in the CEE region have similarly low levels of outbound FDI to the U.S., Romania not being an exception in this sense. The five benchmark CEE countries (Romania, Bulgaria, Czechia, Hungary and Poland) together account for less than 1% of total inbound FDI to the U.S. The overall trend in the last ten years shows only a slight increase.*

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<sup>3</sup> [https://adevarul.ro/locale/pitesti/topul-localitatilordin-statele-unite-cei-mai-rezidenti-origine-romana-1\\_5b2b8493df52022f755eefc/index.html](https://adevarul.ro/locale/pitesti/topul-localitatilordin-statele-unite-cei-mai-rezidenti-origine-romana-1_5b2b8493df52022f755eefc/index.html)



## **Chapter 3: Job creation potential of U.S. companies in Romania**

### **3.1. Evolution of the role of U.S. companies on the Romanian job market**

The creation of jobs is an important measure of the presence of foreign capital in each country. In Chapter 1, we mentioned that approximately 90,000 full-time employees are working for the largest 200 U.S.-origin companies present in Romania (Table 13).

In 2021, according to Eurostat (see Methodological notes 3), more than 100,000 employees worked for U.S.-origin companies in Romania. If we look at this figure as a proportion of the total full time employee number, more than 2% of the employed workforce in Romania works for U.S.-origin companies. This rate is slightly higher than in most of the surrounding countries. More than 90% of Romanian employees work for companies controlled by Romanian or European companies, followed by the number of people working for U.S.-origin companies. Consequently, apart from European ones, U.S. companies are the most dominant on the Romanian labor market.

Furthermore, during the last decade, the number of employees working for U.S.-origin companies showed an overall increase of 51% (while the number of U.S.-controlled companies were relatively constant), despite the fact that stock value of FDI inbound slightly decreased in the same period (see Chapter 1). This trend might indicate that the Romanian workforce employed by U.S.-origin companies is mostly highly-educated: the number of employees did not decrease with the fall in the stock value of FDI, as it should have been the case if they were mostly jobs with low added value. Nevertheless, the ratio of employees working for U.S.-origin companies per total full-time employees can be misleading, as the total number of employees is relatively low compared to the population of Romania. There are two main reasons for this. One reason is that the most significant emigration from Romania happened in the last 10 years, and the other is that the official labor statistics do not include the employees working for the Ministry of Internal Affairs, or for institutions directly subordinated to the Ministry. That is, the real number of employees in Romania is higher than that measured by the statistics of the Ministry of Labor. The real ratio of employees working for U.S.-origin companies per total number of employees is probably slightly below 2%, but it can be considered significant, as it is not lagging the referenced CEE countries.

It is also important to note that, while the number of full-time employees in Romania has increased by 21% since 2010, the number of employees working for U.S.-origin companies has increased by 51%. In other words, the number of people working at U.S.-origin companies grew more than twice as fast as the total number of Romanian full-time employees. This trend together with the dynamics analyzed in the previous chapters makes it highly likely that the proportion of employees working for U.S.-controlled companies will continue to increase in Romania in the future.

Table 13. Relevant labor statistics in Romania and the share of U.S.-origin companies

	Number of employees working for U.S.-controlled companies	Total number of full-time employees	Percentage of employees working for U.S.-controlled companies from total number of full-time employees	Employment rate	Unemployment rate
2010	67,587	4,102,000	1.65%	58.90%	6.80%
2011	71,853	4,172,000	1.72%	58.70%	7.40%
2012	47,071	4,312,000	1.09%	60.00%	6.80%
2013	41,186	4,328,000	0.95%	59.90%	7.10%
2014	59,264	4,423,000	1.34%	60.80%	6.50%
2015	78,155	4,571,000	1.71%	61.40%	6.60%
2016	86,237	4,733,000	1.82%	61.60%	5.40%
2017	101,393	4,850,000	2.09%	63.40%	4.50%
2018	105,076	4,973,000	2.11%	64.50%	4.00%
2019	106,267	5,165,000	2.06%	66.00%	4.00%
2020	101,021*	4,910,000	2.06%	65.80%	6.40%
2021	102,605*	4,987,000	2.06%	61.90%	5.70%

Source: Eurostat; National Institute of Statistics, Romania; \*own estimation

### Methodological notes 3

For the statistics presented in this chapter we used the Eurostat database of Foreign Affiliates Statistics (FATS), which measures the commercial presence through affiliates in foreign markets. Inward FATS describe the overall activity of foreign affiliates resident in the compiling economy. From the reference year 2007 onwards, inward FATS data has been collected according to the Regulation (EC) No 716/2007 of the European Parliament and the Council on Community statistics on the structure and activity of foreign affiliates (the FATS Regulation - consolidated version). From 2007, the FATS Recommendations Manual lays down detailed guidelines for the methodology, collection, and compilation in the European Union. The statistics refer to enterprises and branches under foreign control. More information on the definition of the statistical unit can be found in the FATS Recommendations Manual (under I.1.1.4 and I.2.1.1).

All the statistics provided by Eurostat were denominated in EUR, which we converted to US dollars following Methodological notes 2.

In conclusion, currently more than 100,000 Romanian employees work at U.S.-controlled companies in Romania, which accounts for 2.06% of the total Romanian workforce. During the last decade the number of employees working for U.S.-controlled companies showed an overall increase of 51% (in the same period the total number of all employees grew by only 21%), while the number of U.S.-controlled companies in Romania remained relatively constant, indicating a dynamic development of these companies.

### 3.2. Job creation potential in regional comparison

In 2021, in the benchmark CEE countries (Romania, Bulgaria, Czechia, Hungary, Poland, Slovakia), a total of 717,000 employees worked for U.S.-origin companies (Table 14), which represents 1.92% of the total number of employees (Table 16). This number was only 393,000 in 2010, resulting thereby in an 82% increase for the entire period. The total number of full-time employees for the same region was 37.4 million in 2021 (Table 15), which increased by only 15% from 2010. The faster growth of employee numbers at U.S.-origin companies is also visible in the percentage figures: in 2010, only 1.2% of the employees in the region worked for U.S.-origin companies, which by 2021 had increased to 1.9%. In the referenced CEE countries, the proportion of people working for U.S.-origin companies (in the total number of full-time employees) is roughly the same as in Romania, where this figure is 2.06%. This percentage is slightly higher in Romania than in most of the surrounding countries, except for the Czech Republic (2.6%) and Slovakia (2.1%). However, looking at the trends, the growth rate of Romanian employees working for U.S.-origin companies is below-average compared to the benchmarked countries. From 2010 to 2021, the number of employees of U.S.-origin companies increased by 51% in Romania (from 67,587 to 102,605), while the increase in the region was 82% (from 393,623 to 717,559). The largest increase was observed in Poland (+197%), followed by Slovakia (+141%), Bulgaria (+115%), Romania (+51%), Czech Republic (+30%), and Hungary (+10%). There may be several reasons for this, but the most significant is that, during the last decade, Romania had low unemployment rates, and even had a significant labor shortage for years. On the other hand, in countries where the number of employees working for U.S.-origin companies grew faster, the job prospects for investors were better, i.e. it was easier to hire workers.

Table 14. Number of employees working for U.S.-controlled companies

	Romania	Bulgaria	Czechia	Hungary	Poland	Slovakia	Region TOTAL
2010	67,587	16,847	105,332	80,894	100,076	22,887	393,623
2011	71,853	16,561	106,758	86,205	173,172	28,493	483,042
2012	47,071	17,507	107,847	89,817	163,824	10,074	436,140
2013	41,186	17,821	112,560	91,464	161,550	30,689	455,270
2014	59,264	18,933	116,100	93,315	175,580	30,982	494,174
2015	78,155	28,908	119,286	98,088	196,664	32,904	554,005
2016	86,237	20,427	117,304	100,226	198,161	53,321	575,676
2017	101,393	27,428	133,863	97,151	224,108	54,984	638,927
2018	105,076	28,936	139,202	90,404	229,467	54,568	647,653
2019	106,267	37,884	138,580	88,055	280,195	54,750	705,731
2020*	101,021	36,756	136,307	87,579	293,120	53,651	708,434
2021*	102,605	36,203	137,404	89,007	297,104	55,236	717,559

Source: Eurostat; \*own estimation

Table 15. The evolution of the total number of full-time employees

	Romania	Bulgaria	Czechia	Hungary	Poland	Slovakia	Region TOTAL
2010	4,102,000	3,024,000	4,864,000	3,866,000	14,232,000	2,339,000	32,427,000
2011	4,172,000	2,974,000	4,885,000	3,898,000	14,172,000	2,315,000	32,416,000
2012	4,312,000	2,952,000	4,916,000	3,948,000	14,244,000	2,313,000	32,685,000
2013	4,328,000	2,932,000	4,957,000	4,119,000	14,563,000	2,327,000	33,226,000
2014	4,423,000	2,990,000	5,017,000	4,244,000	14,829,000	2,390,000	33,893,000
2015	4,571,000	3,062,000	5,075,000	4,372,000	15,293,000	2,452,000	34,825,000
2016	4,733,000	3,006,000	5,186,000	4,530,000	15,710,000	2,512,000	35,677,000
2017	4,850,000	3,168,000	5,262,000	4,569,000	15,949,000	2,540,000	36,338,000
2018	4,973,000	3,149,000	5,326,000	4,619,000	16,120,000	2,589,000	36,776,000
2019	5,165,000	3,223,000	5,304,000	4,626,000	15,825,000	2,591,000	36,734,000
2020	4,910,000	3,127,000	5,217,000	4,601,000	16,555,000	2,539,000	36,949,000
2021	4,987,000	3,080,000	5,259,000	4,676,000	16,780,000	2,614,000	37,396,000

Source: National Statistical Institutes

Table 16. Proportion of employees working for American-controlled companies from total number of full-time employees

	Romania	Bulgaria	Czechia	Hungary	Poland	Slovakia	Region AVERAGE
2010	1.65%	0.56%	2.17%	2.09%	0.70%	0.98%	1.21%
2011	1.72%	0.56%	2.19%	2.21%	1.22%	1.23%	1.49%
2012	1.09%	0.59%	2.19%	2.28%	1.15%	0.44%	1.33%
2013	0.95%	0.61%	2.27%	2.22%	1.11%	1.32%	1.37%
2014	1.34%	0.63%	2.31%	2.20%	1.18%	1.30%	1.46%
2015	1.71%	0.94%	2.35%	2.24%	1.29%	1.34%	1.59%
2016	1.82%	0.68%	2.26%	2.21%	1.26%	2.12%	1.61%
2017	2.09%	0.87%	2.54%	2.13%	1.41%	2.17%	1.76%
2018	2.11%	0.92%	2.61%	1.96%	1.42%	2.11%	1.76%
2019	2.06%	1.18%	2.61%	1.90%	1.77%	2.11%	1.92%
2020*	2.06%	1.18%	2.61%	1.90%	1.77%	2.11%	1.92%
2021*	2.06%	1.18%	2.61%	1.90%	1.77%	2.11%	1.92%

Source: own editing \*own estimation

In conclusion, the 2% of employees in Romania working for U.S.-origin companies (from the total number of full-time employees) is similar to other countries in the region, where the same figure ranges from 1.18%

*(Bulgaria) to 2.61% (Czechia). However, the growth rate of Romanian employees working for U.S.-controlled companies is slightly lower than in most of the benchmarked CEE countries.*

## Chapter 4: Trade between the U.S. and Romania

Romania's total foreign trade, including both goods and services, amounted to 250 billion USD in 2021, an 88% increase in value since 2010. U.S. foreign trade was 5.9 trillion USD in 2021, a 43% increase over the same period. Although the share of foreign trade of the United States is lower than that of Romania relative to the GDP (26% of the country's GDP in the U.S. versus 87% in Romania), it is approximately 24 times as large in absolute terms (Table 17).

Table 17. Total trade of Romania and U.S. (million USD)

	Romania			United States		
	Exports	Imports	Value of trade	Exports	Imports	Value of trade
2010	60,762	71,397	132,158	1,872,318	2,375,408	4,247,726
2011	70,003	80,321	150,323	2,143,551	2,698,074	4,841,625
2012	72,501	82,000	154,502	2,247,453	2,773,359	5,020,812
2013	86,525	87,994	174,519	2,313,121	2,759,982	5,073,103
2014	83,649	83,151	166,800	2,392,615	2,876,566	5,269,181
2015	79,021	80,272	159,293	2,280,778	2,771,554	5,052,332
2016	80,265	82,304	162,569	2,240,823	2,720,281	4,961,104
2017	99,640	105,995	205,635	2,394,477	2,904,821	5,299,298
2018	105,567	113,087	218,655	2,542,462	3,121,057	5,663,519
2019	108,473	118,124	226,597	2,546,276	3,105,952	5,652,228
2020	103,846	115,239	219,085	2,158,651	2,812,640	4,971,291
2021	117,187	132,890	250,077	2,556,638	3,401,685	5,958,323

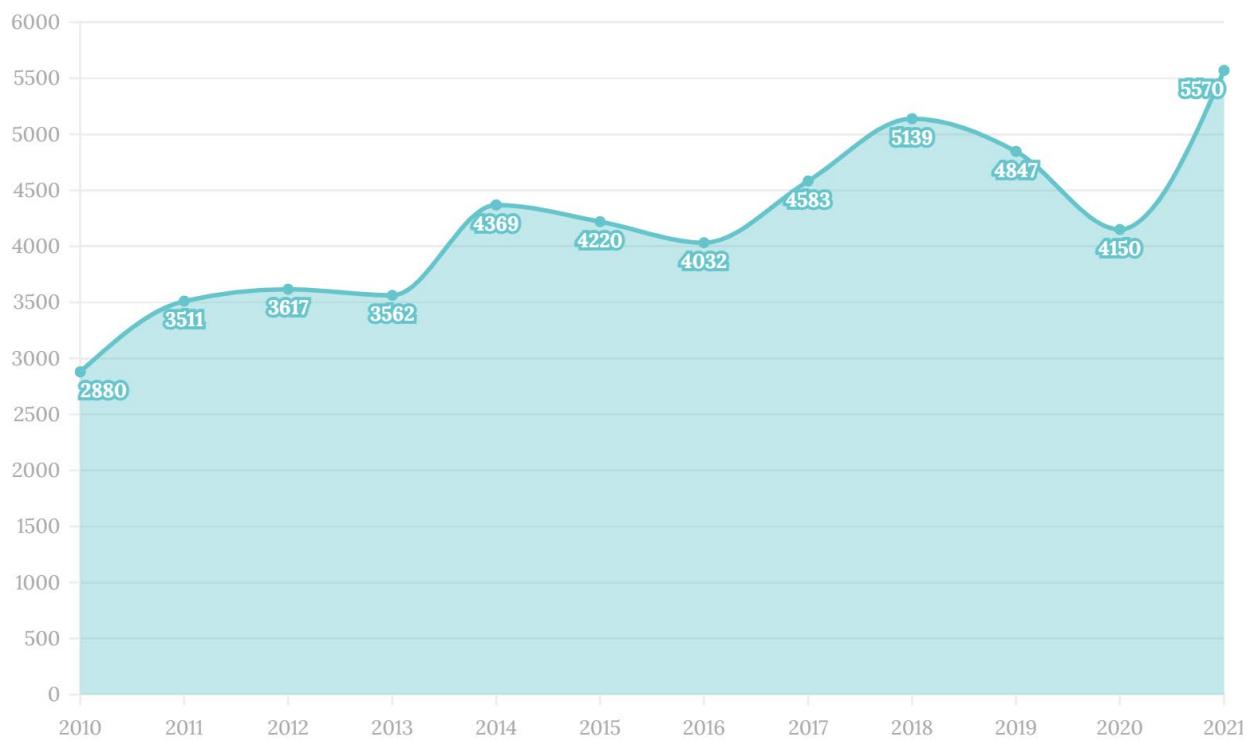
Source: U.S. Census Bureau, National Institute of Statistics, Romania, National Bank of Romania

It is true for both Romania and the U.S. that most of their foreign trade is in goods. 80% of Romania's foreign trade consists of trade in goods and only 20% in services (see Appendix, Table 47), while the same ratio for the United States is 78% and 22% respectively (see Appendix, Table 48). In the last decade, individual aggregate trade values of the two countries increased significantly.

In line with this trend, trade between the two countries also showed a rapid growth, growing even faster than aggregate trade values. Total trade between the U.S. and Romania amounted to USD 2.8 billion in 2010, and exceeded USD 5.5 billion by 2021, representing a 96% increase in value (Figure 10). The 2021 trade value between the two countries represents 2.23% of the total Romanian trade value, but only 0.09% of the total U.S. trade value (Table 18).

## Evolution of trade between the U.S. and Romania

■ Value of trade with the U.S. (million USD)



Data source: Own calculations based on U.S. Bureau of Economic Analysis, National Institute of Statistics, Romania and National Bank of Romania

Figure 10. The evolution of trade between the U.S. and Romania (million USD)

Table 18. The significance of trade between Romania and the U.S. (million USD)

Year	Value of trade between Romania and the U.S. (million USD)	% of total Romanian trade value	% of total U.S. trade value
2010	2,880	2.18%	0.07%
2011	3,511	2.34%	0.07%
2012	3,617	2.34%	0.07%
2013	3,562	2.04%	0.07%
2014	4,369	2.62%	0.08%
2015	4,220	2.65%	0.08%
2016	4,032	2.48%	0.08%
2017	4,583	2.23%	0.09%
2018	5,139	2.35%	0.09%
2019	4,847	2.14%	0.09%
2020	4,150	1.89%	0.08%
2021	5,570	2.23%	0.09%

Source: Own calculations based on U.S. Bureau of Economic Analysis, National Institute of Statistics, Romania, National Bank of Romania

In 2021, Romania's total trade value with the U.S. amounted to more than 5.5 billion USD, out of which 4.45 billion USD were in goods and 1.11 billion USD in services (Table 19). Trade in goods with the United States therefore accounts for more than 80% of joint trade, a ratio that is the same as the ratio of goods/services in Romania's total foreign trade with all trade partners. It should be noted, however, that while trade in goods between the U.S. and Romania increased by 149% in the last decade, the increase in trade in services was only 1%. It deserves further emphasis that while Romania exports more goods to the U.S. than it imports in value, the opposite is true for services.



Table 19. Trade in goods and services between Romania and the U.S. (million USD)

	RO exports of goods to the U.S.	RO exports of services to the U.S.	Total RO exports to the U.S.	RO imports of goods from the U.S.	RO imports of services from the U.S.	Total RO imports from the U.S.
2010	1,057	473*	1,530	730	621*	1,351
2011	1,498	473*	1,971	919	621*	1,540
2012	1,690	473	2,163	833	621	1,454
2013	1,784	377	2,161	747	654	1,401
2014	2,189	518	2,707	977	684	1,661
2015	2,243	574	2,817	754	650	1,404
2016	2,038	613	2,651	696	685	1,381
2017	2,275	591	2,866	954	763	1,717
2018	2,699	545	3,244	1,114	781	1,895
2019	2,465	604	3,069	943	835	1,778
2020	2,213	484	2,697	914	539	1,453
2021	3,044	494	3,538	1,415	617	2,032

Source: United Nations COMTRADE Database, U.S. Bureau of Economic Analysis; RO = Romanian;

\* 2012 service trade data was used to fill the blanks, as 2010 and 2011 data was missing from the original database

Romania exported more and more goods and services to the U.S. during the period examined: while in 2010 the total value of exports was slightly more than 1.5 billion USD, by 2021 it had more than doubled, exceeding 3.5 billion USD (Table 20).

In terms of the type of goods and services Romania exported to the U.S., it can be seen that the largest category was "machinery and transport equipment", while the most significant export services were "travel", "telecommunication, computer and information services" and "other business services" (Table 20). Comparing these products to what Romania generally exports abroad, it appears that there are no significant differences. Thus, there is plenty of potential to build on existing export experiences and increase exports to the U.S. in the future.

Top export categories remained stable in the period analyzed: Romania mostly exported products to the U.S. belonging to the "machinery and transport equipment" category, and services belonging to the "travel", "telecommunication, computer and information services" and "other business services" category. In the last 10 years, the total value of exported "machinery and transport equipment" products has increased significantly from 415.4 million USD to 1,326.8 million USD. It is worth highlighting that their share in total exports of goods has also increased: in 2010, it started from 39.3%, growing to 43.6% in 2021. Over these years, this product category reached its peak in 2016, when it accounted for 51.8% of the value of all exports of goods (Table 20). Further examining the "machinery and transport equipment" category, it can be seen that "electrical machinery, apparatus and appliances" was the largest subcategory in 2021, accounting for

33.3% of the category. "General industrial machinery and equipment" (23.5%), "telecommunications and sound-recording and reproducing apparatus and equipment" (18.9%), and the "road vehicles (including air-cushion vehicles)" (11.5%) subcategories are also worth mentioning.

While the exports of goods had a growing trend, service exports were relatively constant. Growing trend can be only observed in the IT&C service category, where exports grew from 23 million USD in 2012 to more than 79 million USD in 2021. In 2021, while Romania exported around 0.5 billion USD in value in services, the U.S. exported services worth slightly more than 0.6 billion USD to Romania.

Table 20. Romanian export values to the U.S. by categories (million USD)

Category	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Food and live animals	7.3	5.5	9.9	23.5	40.1	135.3	30.3	24.1	20.8	16.5	26.5	20.2
Beverages and tobacco	2.7	2.5	2.0	2.0	3.7	2.4	2.6	3.7	5.2	4.8	4.4	3.8
Crude materials, inedible, except fuels	3.1	5.1	6.7	10.0	9.1	26.6	22.8	29.6	72.8	46.1	87.6	169.0
Mineral fuels, lubricants and related materials	12.5	9.0	17.8	17.6	0.2	2.5	0.1	4.7	22.1	16.8	10.3	1.1
Animal and vegetable oils, fats and waxes	0.0	0.0	0.0	0.0	5.6	2.4	0.2	0.0	0.1	0.2	0.4	0.6
Chemicals and related products, n.e.s.	126.7	230.2	167.8	133.8	103.6	52.6	43.4	75.8	72.1	56.8	115.8	78.0
Manufactured goods classified chiefly by material	231.9	331.0	440.5	399.0	457.1	439.6	363.4	445.3	610.7	528.4	421.4	762.5
Machinery and transport equipment	415.4	566.0	662.0	777.1	1,055.9	1,053.3	1,055.0	1,152.6	1,341.9	1,181.0	1,067.1	1,326.8
Miscellaneous manufactured articles	234.7	322.7	354.4	388.3	479.8	457.6	460.9	468.6	486.8	524.5	412.4	568.6
Commodities and transactions not classified elsewhere in the SITC	22.4	26.0	29.1	33.0	34.1	70.5	59.1	70.4	66.2	89.9	67.3	113.4
<b>All goods</b>	<b>1056.6</b>	<b>1498.1</b>	<b>1690.3</b>	<b>1784.4</b>	<b>2189.3</b>	<b>2242.8</b>	<b>2037.8</b>	<b>2274.7</b>	<b>2698.6</b>	<b>2465.1</b>	<b>2213.2</b>	<b>3044.0</b>
Manufacturing services on physical inputs owned by others	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maintenance and repair services n.i.e.	N/A	N/A	(D)	(D)	(D)	9	1	(*)	1	2	1	(D)
Transport	N/A	N/A	17	11	10	14	7	7	7	6	11	6
Travel	N/A	N/A	159	171	182	215	214	217	200	200	37	94
Construction	N/A	N/A	(*)	0	0	(*)	(D)	(D)	1	(D)	(D)	(D)
Insurance and pension services	N/A	N/A	0	(*)	(*)	0	0	(*)	(*)	(*)	(*)	(*)
Financial services	N/A	N/A	44	21	14	12	16	18	24	26	(D)	(D)
Charges for the use of intellectual property n.i.e.	N/A	N/A	8	16	3	2	3	7	8	8	12	13
Telecommunications, computer, and information services	N/A	N/A	23	36	70	79	82	93	72	90	81	79
Other business services	N/A	N/A	191	104	207	219	258	214	201	225	256	202
Personal, cultural, and recreational services	N/A	N/A	(D)	6	(D)	12	12	11	5	10	13	15
Government goods and services n.i.e.	N/A	N/A	13	(D)	12	11	(D)	(D)	28	(D)	33	33
<b>All services</b>	<b>473.0*</b>	<b>473.0*</b>	<b>473.0</b>	<b>377.0</b>	<b>518.0</b>	<b>574.0</b>	<b>613.0</b>	<b>591.0</b>	<b>545.0</b>	<b>604.0</b>	<b>484.0</b>	<b>494.0</b>
<b>Grand TOTAL</b>	<b>1,529.6</b>	<b>1,971.1</b>	<b>2,163.3</b>	<b>2,161.4</b>	<b>2,707.3</b>	<b>2,816.8</b>	<b>2,650.8</b>	<b>2,865.7</b>	<b>3,243.6</b>	<b>3,069.1</b>	<b>2,697.2</b>	<b>3,538.0</b>

Source: United Nations COMTRADE Database, U.S. Bureau of Economic Analysis

*about the data:*

*Miscellaneous manufactured articles: Prefabricated buildings (sanitary, plumbing, heating and lighting fixtures and fittings n.e.s.); Furniture and parts thereof (bedding, mattresses, mattress supports, cushions and similar stuffed furnishings); Travel goods, handbags and similar containers; Articles of apparel and clothing accessories; Footwear; Professional, scientific and controlling instruments and apparatus n.e.s.; Photographic apparatus, equipment and supplies and optical goods n.e.s., watches and clocks; Miscellaneous manufactured articles n.e.s.*

*Other business services: Research and development services (Work undertaken on a systematic basis to increase the stock of knowledge; Other research and development services); Professional and management consulting services (Legal, accounting, management consulting, and public relations services; Advertising and related services); Technical, trade-related, and other business services (Architectural, engineering, scientific, and other technical services; Waste treatment and de-pollution, agricultural, and mining services; Operating leasing services; Trade-related services; Other business services n.i.e.)*

*N/A - The data are not available, do not apply, or are not defined.*

*(\*) - Transactions between zero and +/- \$500,000.*

*(D) - indicates that the data in the cell have been suppressed to avoid disclosure of data of individual companies.*

*0 - Transactions are possible but are zero for a given period.*

*\* - own estimation*

In terms of Romania's imports from the U.S., they are significantly lower than export values. The main imported goods are "machinery and transport equipment" followed by "mineral fuels, lubricants and related materials", while main imported services are in the "financial services" category (Table 21).

Romania's imports from the U.S. also increased significantly, their value in 2021 being 50% higher than in 2010. However, the total value of imports remained much smaller compared to exports throughout the period examined. Romania mostly imports "machinery and transport equipment" products from the U.S. (more than 40% of total import value of goods from the U.S.). Most important subcategories that form these imports are: "Electrical machinery, apparatus and appliances" (33.3%), "General industrial machinery and equipment" (18.2%) and "Telecommunications and sound-recording and reproducing apparatus and equipment" (15.1%).

In 2010, the "Mineral fuels, lubricants and related materials" category (including coal, petrol, and gas) followed the "Machinery and transport equipment" group, having a significant 19.5% share, but by 2021 it had decreased to only 4.4%. This is mostly due to the drastic reduction of the "Coal, coke and briquettes" subcategory. In terms of the other subcategories, annual values of the "Petroleum, petroleum products and related materials" subcategory showed an increasing tendency, while the "Gas, natural and manufactured" subcategory was typically not significant at all, since, except for 2019, it recorded zero values.

Romania mainly imported financial and travel services from the U.S (177 million USD in 2021 and 28.7% from the total service import from the U.S.), but the travel category (which includes two main categories: Business - expenditures by border, seasonal, and other short-term workers and other business travel; and Personal - health related; education related and other personal travel) is also worth mentioning (113 million USD in 2021, which accounts for 18.2% of the total service import from the U.S.).

*Table 21. Romanian import values from the U.S. by categories (million USD)*

Category	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Food and live animals</b>	17.6	8.0	35.0	15.6	9.9	9.9	10.8	21.6	32.2	27.5	16.2	17.2
<b>Beverages and tobacco</b>	16.8	14.8	22.0	22.8	24.0	27.8	27.6	30.7	29.6	21.8	23.5	19.4
<b>Crude materials, inedible, except fuels</b>	21.0	29.2	38.2	23.6	23.1	46.8	27.8	17.4	51.5	32.5	49.1	51.9
<b>Mineral fuels, lubricants and related materials</b>	142.3	238.1	247.0	126.5	204.2	79.3	64.2	87.9	197.7	114.2	52.3	62.0
<b>Animal and vegetable oils, fats and waxes</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Chemicals and related products, n.e.s.</b>	33.1	43.1	34.8	39.2	46.8	46.7	52.1	59.3	53.9	58.2	71.1	73.3
<b>Manufactured goods classified chiefly by material</b>	32.5	49.1	48.8	59.3	84.7	67.4	50.3	59.7	66.9	71.6	68.5	65.1
<b>Machinery and transport equipment</b>	347.4	377.3	290.6	325.6	442.1	343.5	310.8	464.4	428.3	463.0	404.1	434.2
<b>Miscellaneous manufactured articles</b>	53.1	78.8	78.0	80.3	103.5	85.3	82.3	72.9	111.2	103.9	201.9	362.5
<b>Commodities and transactions not classified elsewhere in the SITC</b>	66.2	80.2	38.3	53.6	39.3	46.9	70.4	140.4	142.6	49.8	27.2	329.3

<b>All goods</b>	<b>729.8</b>	<b>918.6</b>	<b>832.7</b>	<b>746.5</b>	<b>977.5</b>	<b>753.7</b>	<b>696.2</b>	<b>954.1</b>	<b>1114</b>	<b>942.5</b>	<b>914</b>	<b>1414.9</b>
<b>Manufacturing services on physical inputs owned by others</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Maintenance and repair services n.i.e.</b>	N/A	N/A	23	21	11	12	19	19	12	11	(D)	6
<b>Transport</b>	N/A	N/A	54	58	64	52	48	53	59	68	35	35
<b>Travel</b>	N/A	N/A	206	228	244	251	278	287	301	325	99	113
<b>Construction</b>	N/A	N/A	(*)	(*)	(*)	(*)	(*)	(*)	1	(*)	0	0
<b>Insurance and pension services</b>	N/A	N/A	(*)	1	2	2	1	1	1	1	1	1
<b>Financial services</b>	N/A	N/A	72	54	59	54	64	74	91	117	129	177
<b>Charges for the use of intellectual property n.i.e.</b>	N/A	N/A	90	106	105	103	108	106	105	98	76	100
<b>Telecommunications, computer, and information services</b>	N/A	N/A	31	28	26	25	26	35	34	47	32	32
<b>Other business services</b>	N/A	N/A	59	87	110	93	95	118	113	101	102	89
<b>Personal, cultural, and recreational services</b>	N/A	N/A	65	50	38	34	16	36	17	12	9	10
<b>Government goods and services n.i.e.</b>	N/A	N/A	20	20	25	23	30	34	47	54	(D)	53
<b>All services</b>	<b>621.0*</b>	<b>621.0*</b>	<b>621.0</b>	<b>654.0</b>	<b>684.0</b>	<b>650.0</b>	<b>685.0</b>	<b>763.0</b>	<b>781.0</b>	<b>835.0</b>	<b>539.0</b>	<b>617.0</b>
<b>Grand TOTAL</b>	<b>1,350.8</b>	<b>1,539.6</b>	<b>1,453.7</b>	<b>1,400.5</b>	<b>1,661.5</b>	<b>1,403.7</b>	<b>1,381.2</b>	<b>1,717.1</b>	<b>1,895.0</b>	<b>1,777.5</b>	<b>1,453.0</b>	<b>2,031.9</b>

Source: United Nations COMTRADE Database, U.S. Bureau of Economic Analysis

about the data:

Miscellaneous manufactured articles: Prefabricated buildings (sanitary, plumbing, heating and lighting fixtures and fittings n.e.s.); Furniture and parts thereof (bedding, mattresses, mattress supports, cushions and similar stuffed furnishings); Travel goods, handbags and similar containers; Articles of apparel and clothing accessories; Footwear; Professional, scientific and controlling instruments and apparatus n.e.s.; Photographic apparatus, equipment and supplies and optical goods n.e.s., watches and clocks; Miscellaneous manufactured articles n.e.s.

Other business services: Research and development services (Work undertaken on a systematic basis to increase the stock of knowledge; Other research and development services); Professional and management consulting services (Legal, accounting, management consulting, and public relations services; Advertising and related services); Technical, trade-related, and other business services (Architectural, engineering, scientific, and other technical services; Waste treatment and de-pollution, agricultural, and mining services; Operating leasing services; Trade-related services; Other business services n.i.e.)

N/A - The data are not available, do not apply, or are not defined.

(\*) - Transactions between zero and +/- \$500,000.

*(D) - indicates that the data in the cell have been suppressed to avoid disclosure of data of individual companies.*

*0 - Transactions are possible but are zero for a given period.*

*\* - own estimation*

*In conclusion, the foreign trade in the U.S. is 24 times larger than in Romania, although its relative value to the GDP in the U.S. is lower than in Romania (foreign trade accounts for 26% of the country's GDP in the U.S. versus 87% in Romania). Value of trade between the two countries reached USD 5.5 billion dollars by 2021, which represents 2.23% of Romania's total trade, and 0.09% of the total trade of the U.S. In terms of product types, the trade between the U.S. and Romania relies mostly on manufactured goods. Within manufactured goods, "machinery and transport equipment" is the most important trade category, both in terms of Romanian exports to the U.S. and in terms of U.S. exports to Romania. In terms of services travel, IT&C and financial services represent a significant part of trade between Romania and the U.S. It is also worth highlighting that Romania is a net exporter of goods to the U.S., while in terms of services it is a net importer.*

In the following sections, we analyze separately the trade between the two countries, in terms of goods and services, from the perspective of both countries.

#### **4.1. Trade in goods**

As mentioned before, different trends can be observed in the trade in goods and services. Therefore, the two main categories are analyzed separately. First, we look at the general trading trends in goods of Romania, and the U.S., and then we examine the trade in goods between the two countries.

##### **4.1.1. International trade in goods of Romania**

Between 2010 and 2021, the value of Romania's foreign trade of goods increased almost permanently, except for 2014 and 2015, years in which a decrease in trade value occurred due to the high volatility in the RON/USD exchange rate<sup>4</sup>. Expressed however in RON, foreign trade of goods increased in these two years as well. Romanian trade balance deficits (in goods) grew from 12.7 billion USD in 2010 to 26.8 billion USD in 2021 (Table 22), which shows a faster increase in imports compared to exports. This trend can be attributed to the fact that after 2016 the phenomenon of economic overheating reappeared, which attracted an increase in incomes and consumer loans, with an impact on the faster growth of imports. Consequently, the foreign trade of goods in Romania had a significant increase in the past ten years, with a minor setback in 2020, due to the COVID crisis. In 2020 the evolution of Romanian foreign trade in goods was marked by the impact of the Covid-19 pandemic, especially after the establishment of the state of emergency (from March 16, 2020) and later the state of alert (which started on May 14, 2020 and was successively extended for periods of 30 days until March 8, 2022) in the country.

According to the data of the National Institute of Statistics (INS)<sup>5</sup>, the total value of trade in goods in Romania amounted to USD 195.6 billion US dollars in 2021 (representing 87% of the GDP, which compared

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<sup>4</sup> In December 31, 2013 1 RON = 0.308 USD, in December 31, 2014 1 RON = 0.2702 USD, in December 31, 2015 1 RON = 0.2404 USD

<sup>5</sup> National Institute of Statistics only reports trade data for goods.

to the 23% U.S.' trade/GDP ratio, can be considered a high value), composed of 84.4 billion USD export and 111.2 billion USD import (Table 22). Compared to 2020, an increase of 12% was recorded in 2021 (calculated in U.S. dollars, denominated in EUR the increase was 21%), where exports grew by 11%, while imports by 13%. Taken these values together it can be observed that international trade in goods in Romania increased significantly in 2021, not only catching up with the 2019 level, but also exceeding it significantly.

Table 22. Romanian trade in goods (million USD)

	Exports	Imports	Value of trade	Balance
2010	49,917	62,622	112,539	-12,705
2011	58,580	71,074	129,654	-12,494
2012	59,586	72,323	131,909	-12,737
2013	68,158	76,072	144,230	-7,915
2014	63,479	70,806	134,285	-7,328
2015	59,306	68,386	127,693	-9,080
2016	60,124	70,571	130,695	-10,447
2017	75,211	90,770	165,981	-15,560
2018	77,645	94,976	172,621	-17,331
2019	77,724	97,205	174,929	-19,481
2020	75,945	98,417	174,361	-22,472
2021	84,405	111,184	195,589	-26,779

Source: National Institute of Statistics, Romania

Table 23. TOP 10 partners of Romania in the trade in goods (2021)

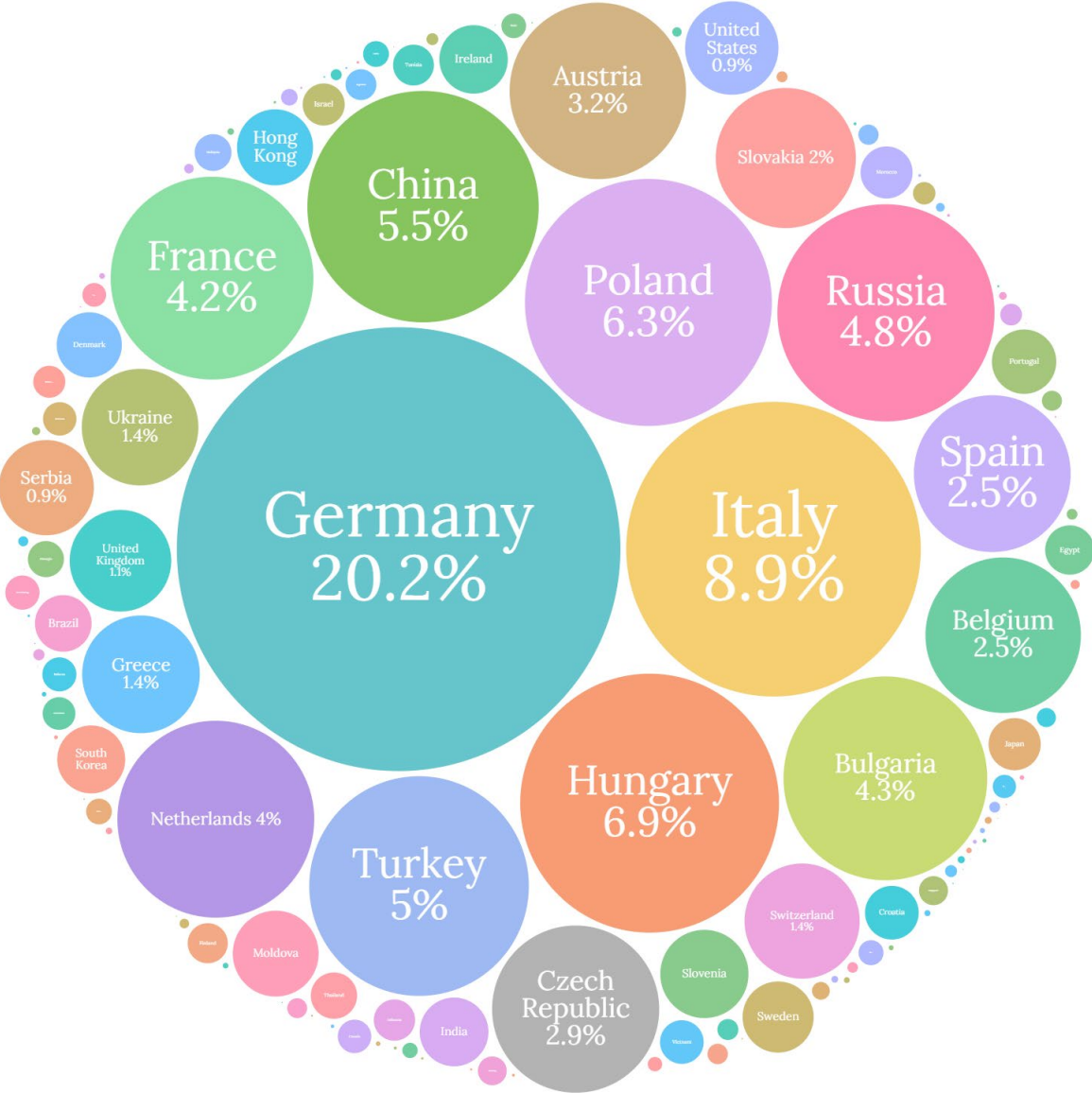
No.	TOP import partners	No.	TOP export partners
1.	Germany 21.1%	1.	Germany 21.5%
2.	Italy 9.3%	2.	Italy 10.9%
3.	Hungary 7.2%	3.	France 6.7%
4.	Poland 6.5%	4.	Hungary 5.9%
5.	China 5.7%	5.	Poland 4.2%
6.	Turkey 5.2%	6.	Bulgaria 4.1%
7.	Russia 5.1%	7.	Turkey 4.0%
8.	Bulgaria 4.5%	8.	Netherlands 3.9%
9.	France 4.4%	9.	Czechia 3.8%
10.	Netherlands 4.2%	10.	Spain 3.8%
...		...	
<b>20.</b>	<b>USA 1.3%</b>	<b>14.</b>	<b>USA 3.6%</b>

Source: United Nations COMTRADE Database (1); National Institute of Statistics, Romania (2);



\* Individual country-level trade values are from database (1), while total trade values are from database (2); percentage values represent the ratio between the two. The two different data sources are used to remain consistent with all trade statistics in this chapter. Given the two different databases, the sum of the percentages of all countries may slightly differ from 100%, but country ranks and proportions are preserved.

Taking into consideration the country breakdown of Romanian imports and exports in goods, the U.S. falls outside the top 10 partners in both cases (Table 23). In terms of goods, the largest trading partners of Romania are all European countries, of which Western European partners (Germany, Italy and France) clearly stand out (Figure 11 and Figure 12). In comparison, in 2021, Romania's foreign trade in goods with Germany amounted to 41.62 billion USD, while with the United States it was only 4.46 billion USD, meaning that Romania trades goods with Germany almost 10 times as much as with the U.S.



Data source: National Institute of Statistics, Romania

Figure 11. Romanian imports of goods by country (2021)



Looking at trade values in goods by continent, it can be seen that more than 80% of Romania's foreign trade is conducted with European partners (Table 24).

*Table 24. Romania's top trade partners in goods by continent (2021)*

	<b>Romanian exports of goods by continent</b>	<b>Romanian imports of goods by continent</b>
<b>Americas</b>	3.2%	1.6%
<b>Asia</b>	10.0%	10.0%
<b>Europe</b>	83.0%	84.0%
<b>Africa</b>	3.0%	0.8%
<b>Other</b>	0.8%	3.6%

*Source: National Institute of Statistics, Romania*

In terms of the breakdown of trade by categories of goods, the main Romanian import categories in 2021 were electronic equipment (15%), machinery (12%), vehicles (8.9%), minerals and fuels (7.5%), plastics (5.6%) and pharmaceutical products (4,1%) (Figure 13). Romania mainly exported electronic equipment (18%), vehicles (15%) and machinery (11%) (Figure 14).





#### 4.1.2. International trade in goods of the U.S.

Foreign trade in goods accounts for only 23% of the country's GDP in 2021 compared to 87% in Romania. In 2021, the GDP of the United States was 80 times higher than that of Romania (22,996 billion USD, compared to 284 billion USD in Romania), while the value of international trade in goods was 30 times higher than in Romania (5,958 billion USD compared to 195 billion USD in Romania). The U.S. has signed a total of 14 reciprocal free trade agreements, 5 preferential trade programs, 51 trade and investment framework agreements, and 48 bilateral investment treaties, including the ones signed with Romania (for details see Snapshot 1. "Diplomatic and economic relations between Romania and the U.S. in terms of international agreements").

Historically, the fundamental view of the U.S has been that trade contributes to economic growth, prosperity, social stability, and democracy. Nevertheless, in recent years this trend was reversed with the resurgence of several trade disputes (e.g., with China, accused of unfair trade practices). Trade relations between the U.S. and China finally started to normalize towards the end of the 2010's, with the countries signing the U.S. - China Phase One trade deal in Washington, D.C. Despite this development, the trade relations between the two countries did not improve significantly so far.

Although trade relations with China have deteriorated in recent years, the value of trade with China has increased by 32% from 2010 to 2021 (compared to Romania's 73% increase over the same period).

Table 25. U.S. trade in goods (million USD)

	Export of goods	Import of goods	Value of trade in goods	Balance of trade in goods
2010	1,290,278	1,938,952	3,229,230	-648,674
2011	1,498,886	2,239,885	3,738,771	-740,999
2012	1,562,630	2,303,749	3,866,379	-741,119
2013	1,593,708	2,294,247	3,887,955	-700,539
2014	1,635,563	2,385,480	4,021,043	-749,917
2015	1,511,381	2,273,249	3,784,630	-761,868
2016	1,457,392	2,207,194	3,664,586	-749,802
2017	1,557,003	2,356,346	3,913,349	-799,343
2018	1,676,913	2,555,662	4,232,575	-878,749
2019	1,655,098	2,512,358	4,167,456	-857,260
2020	1,432,218	2,346,103	3,778,321	-913,885
2021	1,761,364	2,851,660	4,613,024	-1,090,296

Source: U.S. Census Bureau

Similar to Romania, the U.S. trade balance in goods is structurally negative and the trade deficit has further increased in recent years: in 2021 it exceeded 1,000 billion USD (Table 25), and stood at an estimated 3.6% of the GDP (compared with 10% in Romania). In the same year, exports in goods increased to 1,761 billion USD, up by 18% year-on-year; with imports increasing at a faster pace (21% - at \$3,401 billion). However, Romania has a much lower share in the total trade of goods of the U.S. than the U.S. has in the total trade of goods of Romania (Table 26). As a basis for comparison, the U.S. trades 157 times as many goods with China as it does with Romania (692.5 billion USD compared to 4.4 billion USD).

Canada (17.4%), Mexico (15.7%), China (8.6%), Japan (4.3%), South Korea (3.7%), and Germany (3.7%) were the main export trading partners of the U.S. in goods in 2021, whereas imports came mainly from China (19%), Mexico (13.6%), Canada (12.8%), Japan (4.9%) and Germany (4.8%). In terms of the trade in goods, top partners of the U.S. are summarized in Table 26 and visualized in Figure 15 and Figure 16.

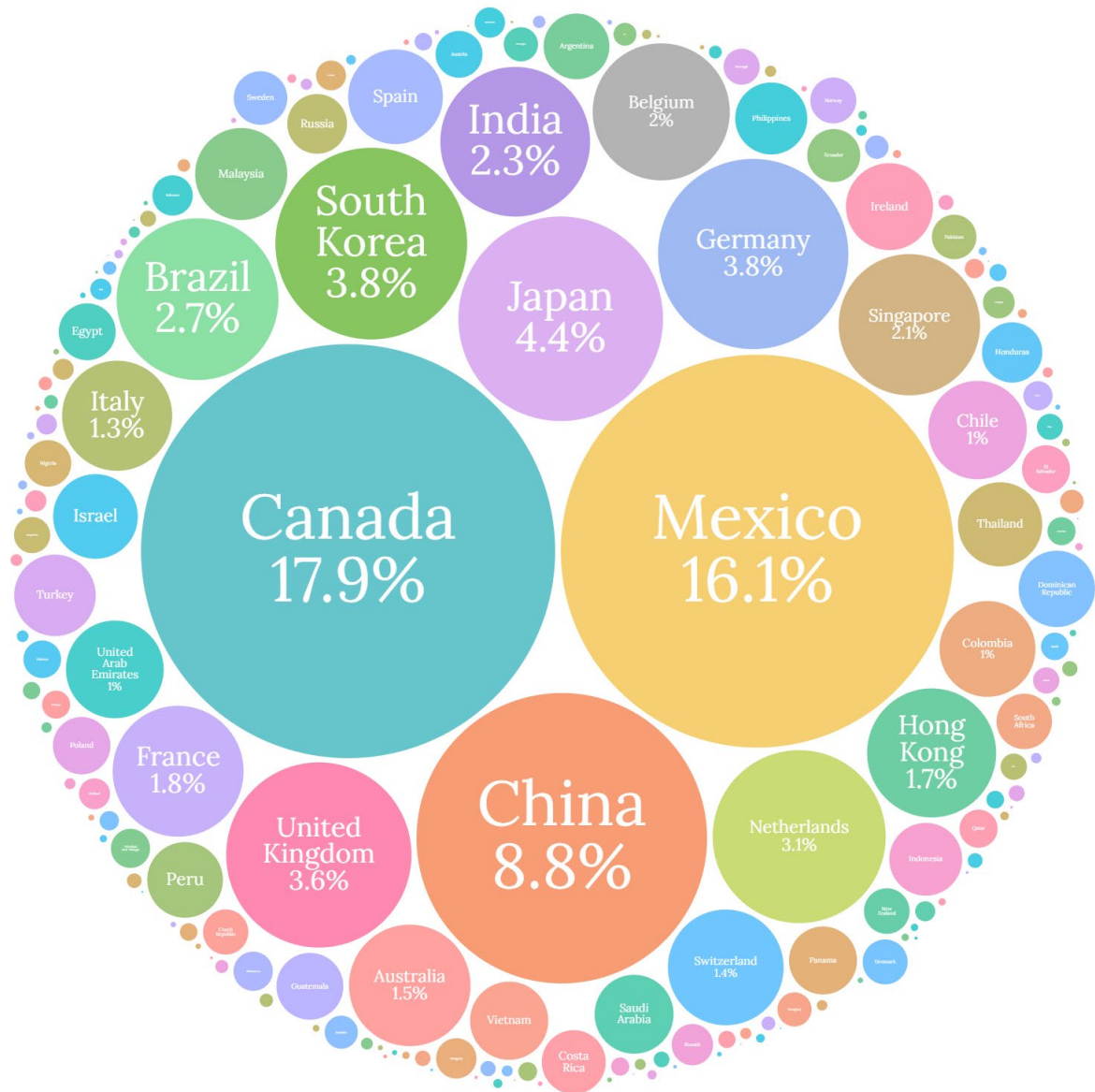
Table 26. TOP 10 partners of the U.S. in the trade of goods (2021)

No.	TOP import partners	No.	TOP export partners
1.	China 19%	1.	Canada 17.4%
2.	Mexico 13.6%	2.	Mexico 15.7%
3.	Canada 12.8%	3.	China 8.6%
4.	Japan 4.9%	4.	Japan 4.3%
5.	Germany 4.8%	5.	South Korea 3.7%
6.	Vietnam 3.8%	6.	Germany 3.7%
7.	South Korea 3.5%	7.	United Kingdom 3.5%
8.	India 2.7%	8.	Netherlands 3.0%
9.	Ireland 2.6%	9.	Brazil 2.7%
10.	Switzerland 2.2%	10.	India 2.3%
...		...	
<b>59.</b>	<b>Romania 0.1%</b>	<b>69.</b>	<b>Romania 0.08%</b>

Source: U.S. Census Bureau







Data source: United Nations COMTRADE Database

Figure 16. U.S. exports of goods by country (2021)

The U.S. exports goods mainly to the American continent and imports mainly from Asia, although its foreign trade is less concentrated than that of Romania, which has more than 80% of its foreign trade with Europe (Table 27).

Table 27. Top partners of the U.S. by continent in the trade in goods (2021)

	U.S. export of goods by continent	U.S. import of goods by continent
Americas	44%	31%
Asia	31%	44%
Europe	22%	23%
Africa	2%	1%
Other	1%	1%

Source: United Nations COMTRADE Database

The five biggest categories imported by the U.S. were “machinery, nuclear reactors, boilers” (14.6%); “electrical, electronic equipment” (14.2%); “vehicles other than railway, tramway” (9.7%); “mineral fuels, oils, distillation products” (7.6%) and “pharmaceutical products” (5.1%). The five most exported categories of goods are somewhat similar to the imported ones, but the order is different: “mineral fuels, oils, distillation products” (13.7%) is in the first place, followed by the “machinery, nuclear reactors, boilers” (11.9%); “electrical, electronic equipment” (10.6%); “vehicles other than railway, tramway” (7.0%); the fifth place is taken by the “optical, photo, technical, medical apparatus” (5.2%) category. U.S. import and export breakdown by category are illustrated in Figure 17 and Figure 18.



Data source: United Nations COMTRADE Database

Figure 17. U.S. import of goods by category (2021)



#### **Methodological notes 4**

*Each country calculates its foreign trade balance based on a different methodology, which often leads to the fact that two partner countries report the same trade data (import at one side, and export at the other) differently. For example, the exports of goods to Romania reported by the U.S. should be equal to the imports of goods from the U.S. reported by Romania. However, due to the differences in methodology applied by the two national statistical institutes, differences become significant, in several cases by orders of magnitude. This makes it difficult to develop trade comparisons and formulate conclusions.*

*For the sake of transparency, comparability, and accuracy, in the sections about trade of goods between the U.S. and Romania, data reported by the United States for the U.N. Comtrade Database were primarily taken into account wherever available.*

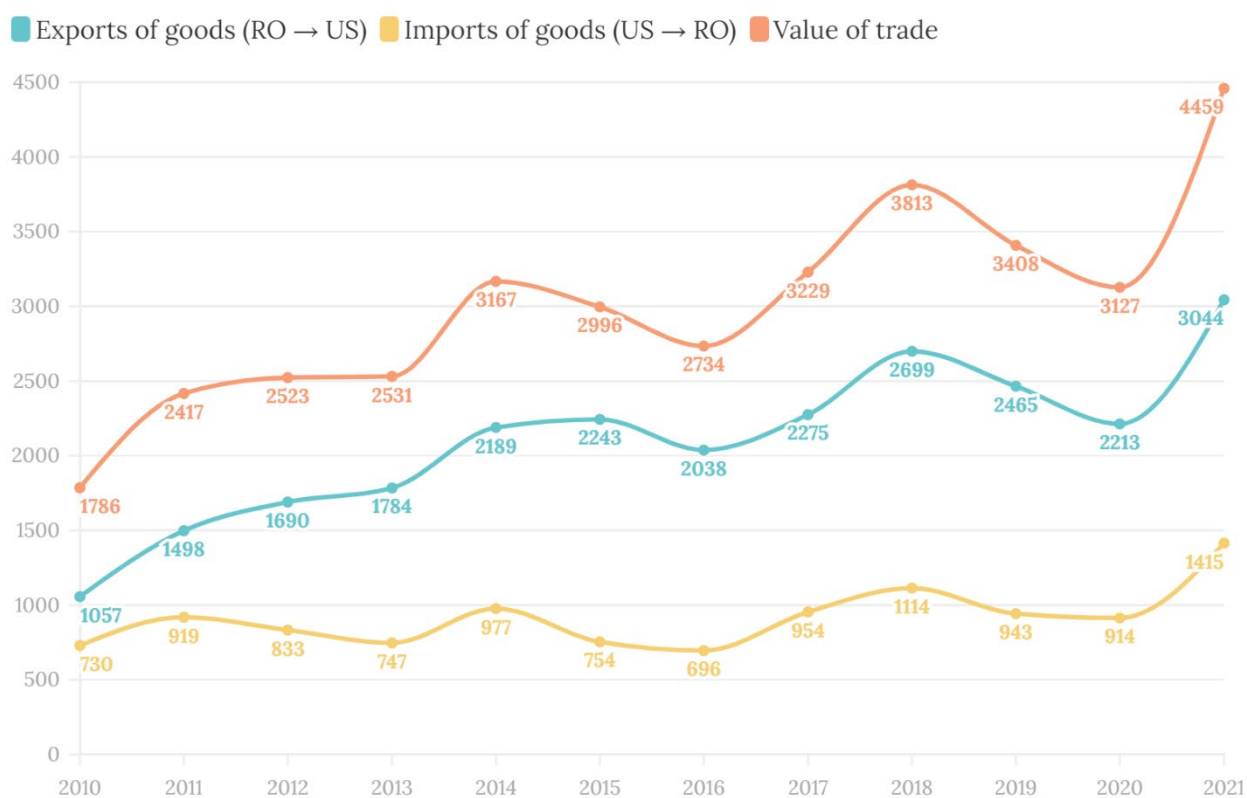
*In terms of service trade, various databases were used. Service trade data related to the U.S. comes from the U.S. Bureau of Economic Analysis and from the U.S. Census Bureau, while data about Romania was gathered from the National Bank of Romania. The trade of services between the U.S. and Romania was reported based on data from the U.S. Bureau of Economic Analysis.*

*The total trade data in case of the U.S. is based on the U.S. Census Bureau, and the Romanian total trade data comes from the National Institute of Statistics, Romania (goods) and from the National Bank of Romania (services).*

#### **4.1.3. Trade in goods between the U.S. and Romania**

Covid-19 direct measures, as well as connected ones (such as limitations on business activities), imposed during the last years have seriously affected international trade in goods, and as signs of an economic recession appeared, they had an impact on most countries. In 2020, the Romanian GDP decreased by 3.7%, while the GDP of the U.S. decreased by 3.4%, which had a negative impact on their foreign trade as well. Despite these negative signs, foreign trade of goods between the two countries only decreased by 8% in 2020 and started to grow again in 2021 (Table 28). In comparison, in 2020, the total amount of Romanian foreign trade of goods decreased by 1% (calculated in U.S. dollars, denominated in EUR it fell by approximately 8%), while in the U.S. it decreased by more than 10%. Although the U.S. and Romania are not the largest trading partners, their trade relations are constant, commercial transactions remaining stable even in years of high economic risk (Figure 19).

## Value of trade in goods between Romania and the U.S.



Data source: Own calculations based on U.S. Bureau of Economic Analysis, National Institute of Statistics, Romania and National Bank of Romania

Figure 19. Value of export and import of goods and total value of trade in goods between Romania and the U.S. (million USD)

In terms of the breakdown of trade by categories of goods, the main Romanian import categories in 2021 were electronic equipment (15%), machinery (including weapons) (12%), vehicles (8.9%), minerals and fuels (7.5%), plastics (5.6%) and pharmaceutical products (4.1%) (Figure 13). In the same time, main export categories of the U.S. were mineral fuels, oils and distillation products (14%), machinery (12%), electrical equipment (11%), and vehicles (7%) (Figure 18). Correlating the two sides, there are several categories in the import and export profiles of the two countries, which would enable a further growth of U.S. exports of goods to Romania. Romania imports a significant amount of electronic equipment, while the U.S. is an important exporter of the same category, the same being true for vehicles. Due to the Russian-Ukrainian conflict, a shortage of energy carriers in Europe is expected, so foreign trade between the two regions may increase in this sector in the future, especially concerning liquefied natural gas (LNG) trade.

Romania typically exports goods with low value-added and imports goods with higher value-added. This is especially true for food products, where low-processed products are exported, and highly processed products are imported. In contrast, U.S. trade is more balanced, since the export of high value-added products is more significant. The difference in size between the two countries results in the fact that the U.S. has a higher share in total Romanian trade value than the other way around, even though the trade between the two countries

can be said to be quite small in absolute terms from the perspective of both countries. In 2021, the U.S. exported 1.4 billion USD in goods to Romania and imported 3.04 billion USD from Romania, which is less than 0.1% of the total foreign trade in goods of the U.S, and it amounts to 2.28% of the total foreign trade (in goods) of Romania (Table 28).

*Table 28. Value of trade in goods between Romania and the U.S. (million USD)*

<b>Year</b>	<b>Value of trade in goods between Romania and the U.S.</b>	<b>% of total goods trade value of Romania</b>	<b>% of total goods trade value of the U.S.</b>
<b>2010</b>	1,786.4	1.59%	0.04%
<b>2011</b>	2,416.7	1.86%	0.05%
<b>2012</b>	2,523.1	1.91%	0.05%
<b>2013</b>	2,531.0	1.75%	0.05%
<b>2014</b>	3,166.8	2.36%	0.06%
<b>2015</b>	2,996.5	2.35%	0.06%
<b>2016</b>	2,734.1	2.09%	0.06%
<b>2017</b>	3,228.8	1.95%	0.06%
<b>2018</b>	3,812.5	2.21%	0.07%
<b>2019</b>	3,407.6	1.95%	0.06%
<b>2020</b>	3,127.1	1.79%	0.06%
<b>2021</b>	4,458.8	2.28%	0.07%

*Source: own calculations based on United Nations COMTRADE Database, U.S. Census Bureau, U.S. Bureau of Economic Analysis, National Institute of Statistics, Romania, National Bank of Romania*

*In conclusion, the value of foreign trade in goods between the U.S. and Romania reached almost 4.5 billion USD by 2021, representing 2.28% of Romanian trades in goods, and 0.07% of the trade in goods of the U.S. Examining the products that are important U.S. export categories and important Romanian import categories, it can be seen that there is an overlap between the two, meaning that future expansion of the trade relations between the two countries can be based on these categories: electronic equipment, vehicles, mineral fuels and oil. These categories represent suitable areas where the trade relationship between the two countries can be improved. In principle, this is also possible the other way around, i.e., it is also possible for Romania to increase its exports to the United States, especially in case of electronic equipment and vehicles.*

## 4.2. Trade in services

As mentioned earlier, trade in services accounts for roughly 20% of total trade between the U.S. and Romania, and trends differ significantly from those observed in the trade in goods. In this chapter, we follow a similar structure as in the previous one: we examine the composition of entire international trade in services of Romania and the U.S., and then the trade in services between the two countries.

### 4.2.1. International trade in services of Romania

Romania's international trade in services has more than doubled in 10 years (from 19.6 billion USD in 2010 to 54.4 billion USD in 2021), while the trade balance in this category is positive (Table 29) (for goods, it has a significantly negative value). Trade in services accounts for only 20% of total trade, the main trade categories being transport services, IT&C, travel, and business services. Romania's international service exports stood at 32.7 billion USD in 2021, while international service imports stood at \$21.7 billion USD.

Table 29. Romanian trade of services (million USD)

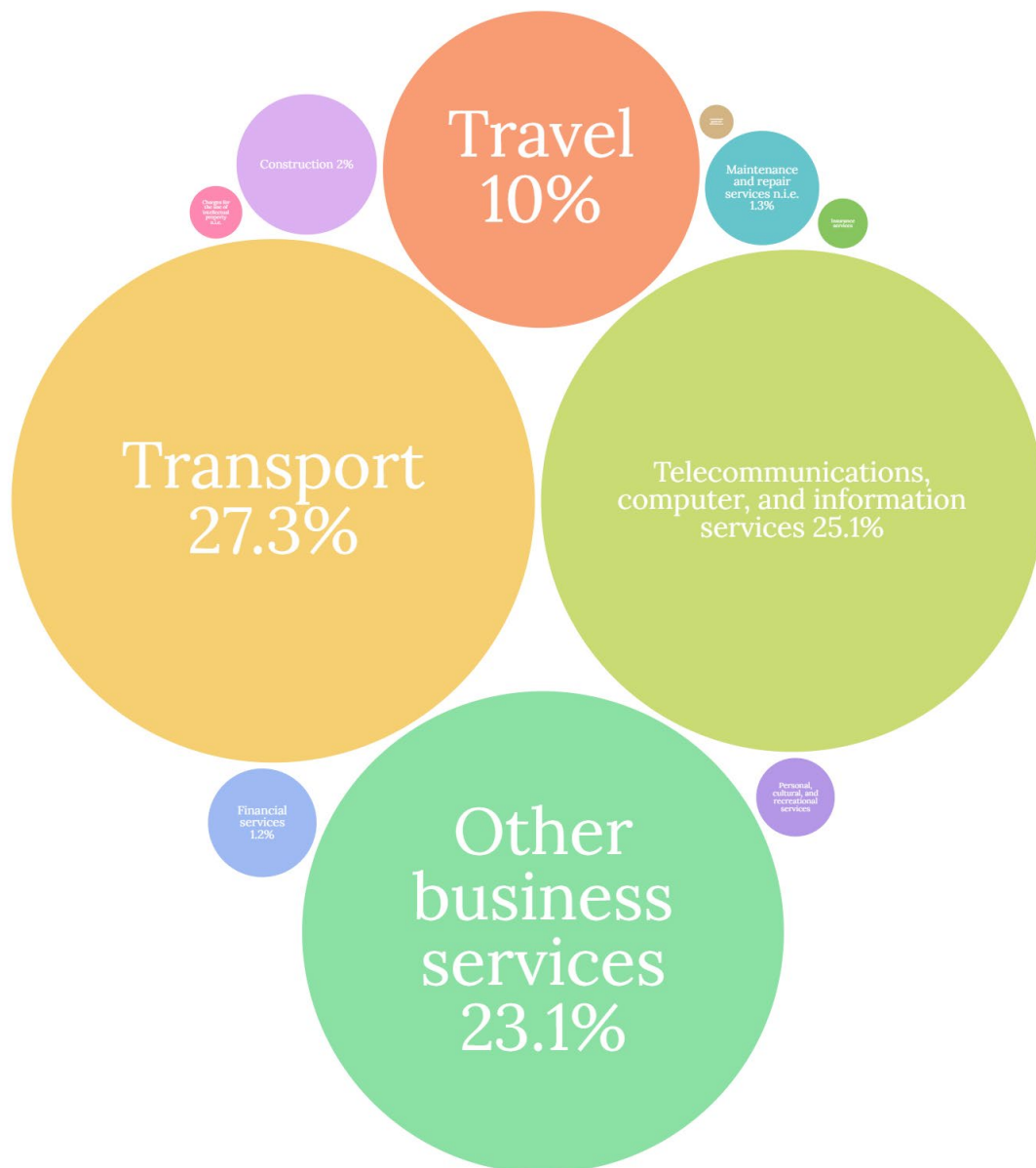
	Exports of services	Imports of services	Total trade of services	Trade balance
2010	10,845	8,775	19,619	2,070
2011	11,423	9,247	20,669	2,176
2012	12,915	9,677	22,593	3,238
2013	18,367	11,922	30,289	6,445
2014	20,170	12,345	32,515	7,825
2015	19,715	11,886	31,601	7,829
2016	20,141	11,733	31,874	8,409
2017	24,429	15,225	39,654	9,204
2018	27,922	18,111	46,034	9,811
2019	30,749	20,919	51,668	9,830
2020	27,901	16,822	44,723	11,080
2021	32,782	21,706	54,488	11,076

Source: National Bank of Romania

Romania mainly exports transport, IT&C, and business services, these three categories accounting for more than 75% of Romania's total service exports in value (Figure 29).



## Romanian exports of services by categories

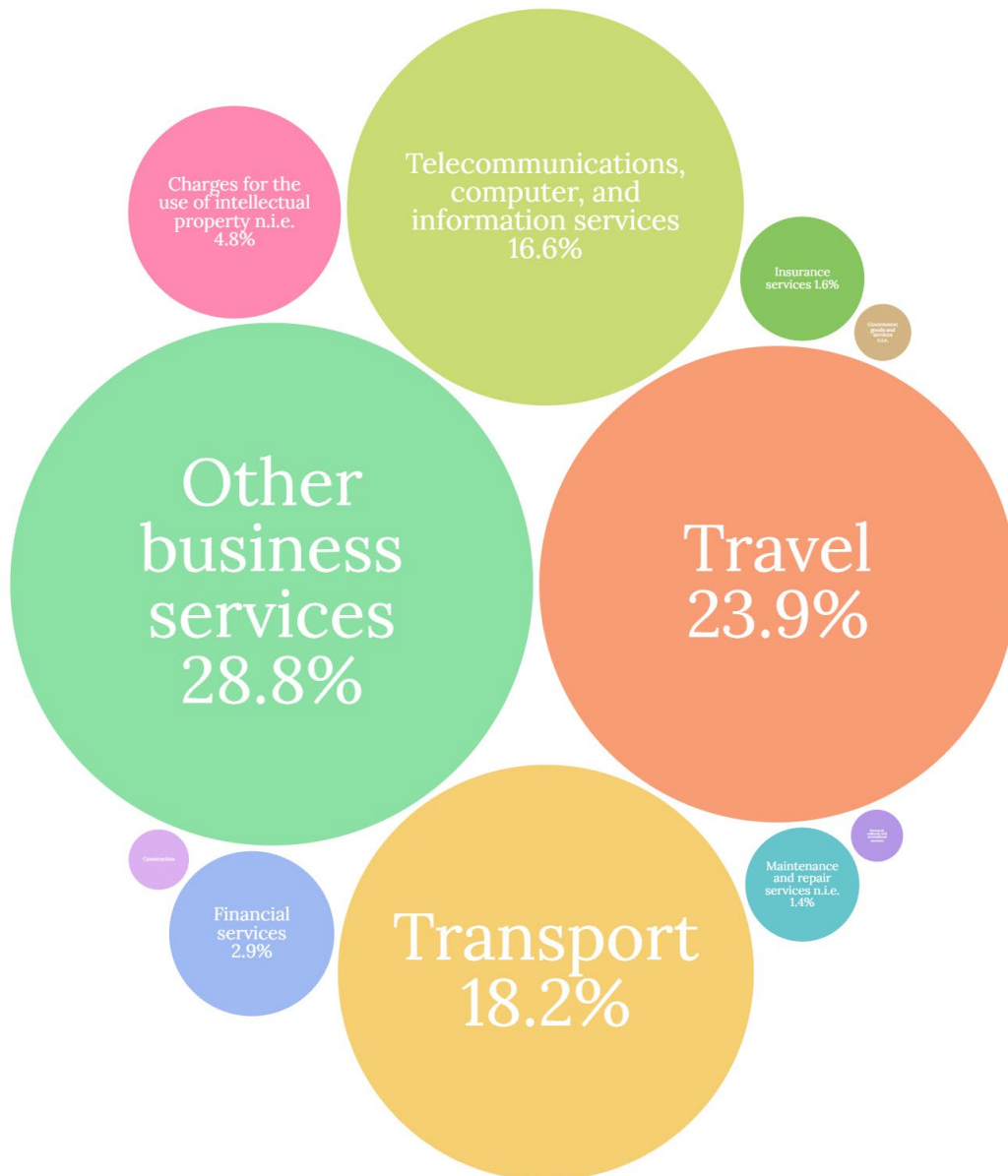


Data source: National Bank of Romania, Romania, 2021

Figure 20. Romanian exports of services by categories (2021)

Romania's main service import categories are business services, travel, transport and IT&C services (Figure 30). These four categories account for more than 87% of total service imports. It is worth highlighting that in Romania's service trade, business, transport, and IT&C services are significant both in terms of imports and exports.

## Romanian imports of services by categories



Data source: National Bank of Romania, Romania, 2021

Figure 21. Romanian imports of services by categories (2021)

*In conclusion, Romania's international trade in services has more than doubled in the last decade, while the positive trade balance has increased fivefold. Main export categories are transport, IT&C, and business services, while the main import categories are business services, travel, transport and IT&C services.*

#### 4.2.2. International trade in services of the U.S.

U.S. trade in services has grown by 32% in 10 years (from 1,018 billion USD in 2010 to 1,345 billion USD in 2021), while the trade balance in this category is positive (for goods, it is a significantly negative value) for the U.S. as well (Table 30). Trade in services accounts for only 22% of total trade, the main trade categories being financial, business, transport services and charges for use of intellectual properties. The total service exports of the U.S. accounted for 795 billion USD in 2021, while its total services imports stood at 550 billion USD in the same year.

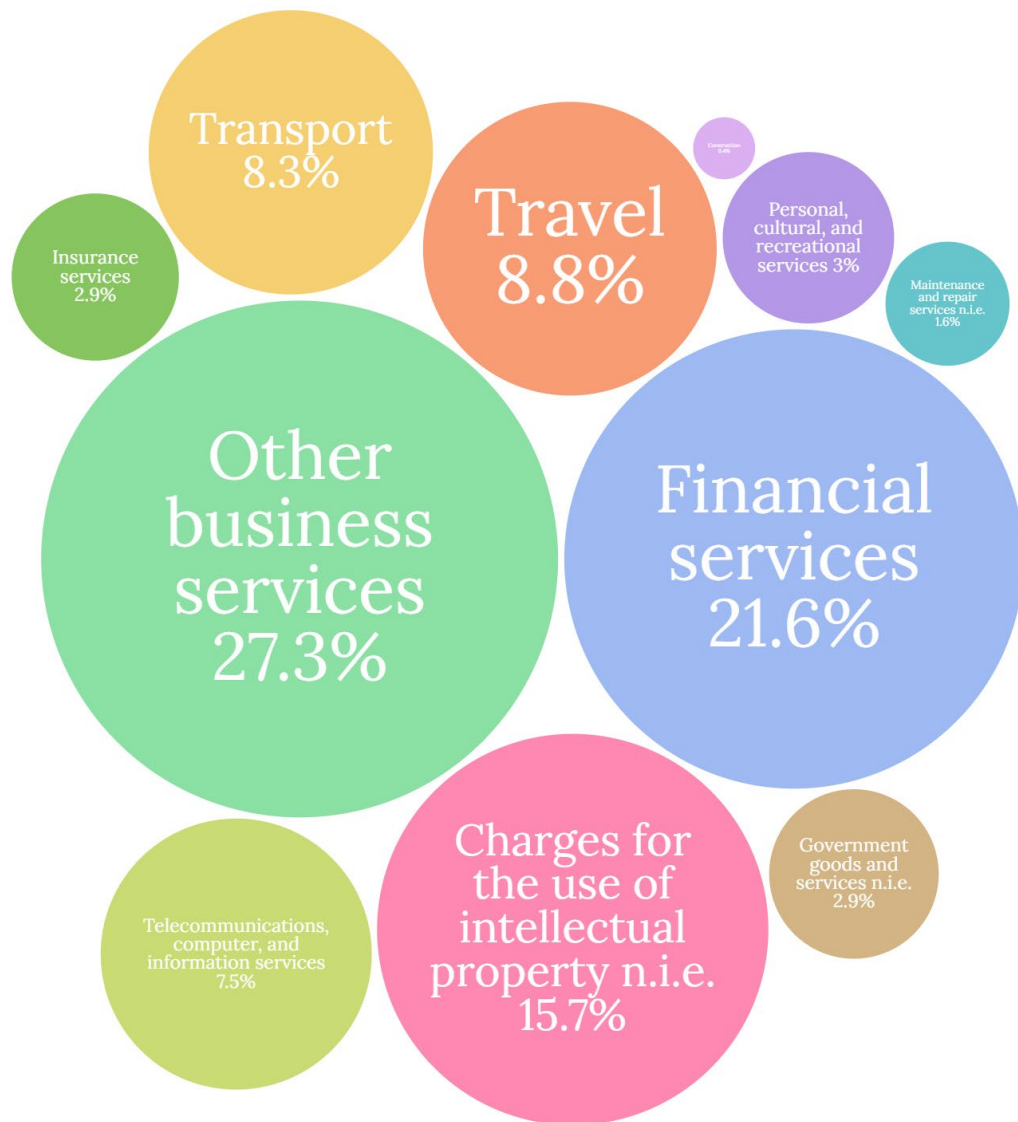
Table 30. U.S. trade of services (million USD)

	Exports of services	Imports of services	Total trade of services	Trade balance
2010	582,041	436,456	1,018,497	145,585
2011	644,665	458,188	1,102,853	186,477
2012	684,823	469,610	1,154,433	215,213
2013	719,413	465,736	1,185,149	253,677
2014	757,051	491,086	1,248,137	265,965
2015	769,397	498,305	1,267,702	271,092
2016	783,431	513,088	1,296,519	270,343
2017	837,474	548,475	1,385,949	288,999
2018	865,549	565,395	1,430,944	300,154
2019	891,177	593,594	1,484,771	297,583
2020	726,433	466,537	1,192,970	259,896
2021	795,273	550,025	1,345,298	245,248

Source: U.S. Census Bureau

The U.S. exports mainly “financial services” (21.6%) and “other business services” (27.3%), and “charges for use of intellectual properties” (15.7%), these three categories accounting for almost 65% of its service exports (Figure 22).

## U.S. exports of services by categories

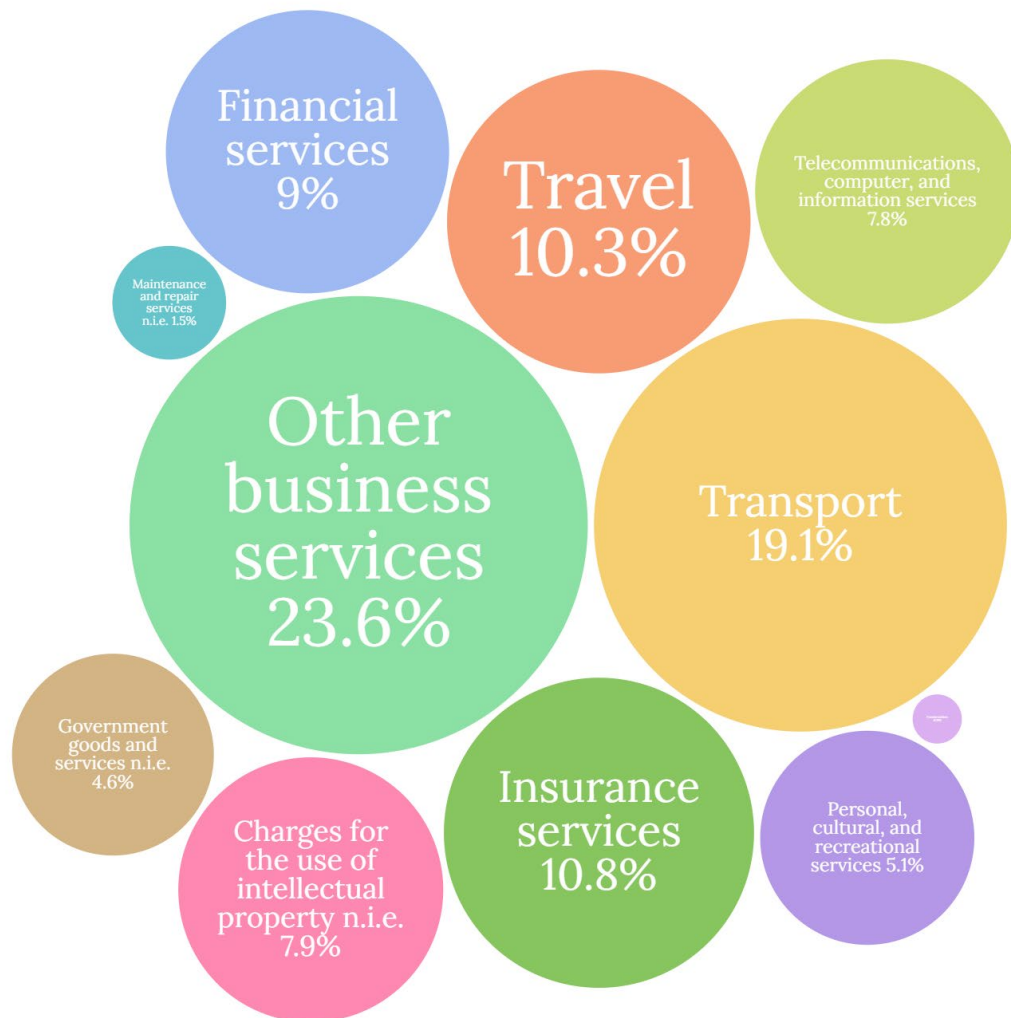


Data source: U.S. Bureau of Economic Analysis, 2021

Figure 22. U.S. exports of services by categories (2021)

The main service import categories of the U.S. are “transport” and “business services”. These two categories account for almost half of total service imports (Figure 23).

## U.S. imports of services by categories



Data source: U.S. Bureau of Economic Analysis, 2021

Figure 23. U.S. imports of services by categories (2021)

*In conclusion, international trade of the U.S. in services has grown by 32% in the last decade, while the positive trade balance has grown by 68%. Main export categories are financial and business services, and charges for use of intellectual properties, while the main import categories include transport and business services.*

### 4.2.3. Trade in services between the U.S. and Romania

Compared to goods, the value of services traded between the two countries is significantly lower: in 2021 the trade value of services was 20% of the total trade value between the two countries (Table 19). In 2021, the U.S. exported services worth slightly more than 0.6 billion USD to Romania, while Romania exported to the U.S. less than 0.5 billion USD in value. Although the absolute values in services trade are much lower than in the case of goods, the relative values are similar to what we saw with the trade in goods. Romania conducts 2.04% of its services trade with the U.S., while this ratio is 2.28% for goods. The U.S. handles 0.07% of trade in services with Romania, the same ratio for goods being 0.08%. Therefore, Romania and the U.S. are roughly equally large partners in the trade in services as in the trade in goods. One significant difference still exists: while trade in goods between the two countries has grown significantly in the past 10 years (+149%), trade in services has stagnated (+1%), and even the relative size of the U.S. has decreased in Romania's trade in services (Table 31).

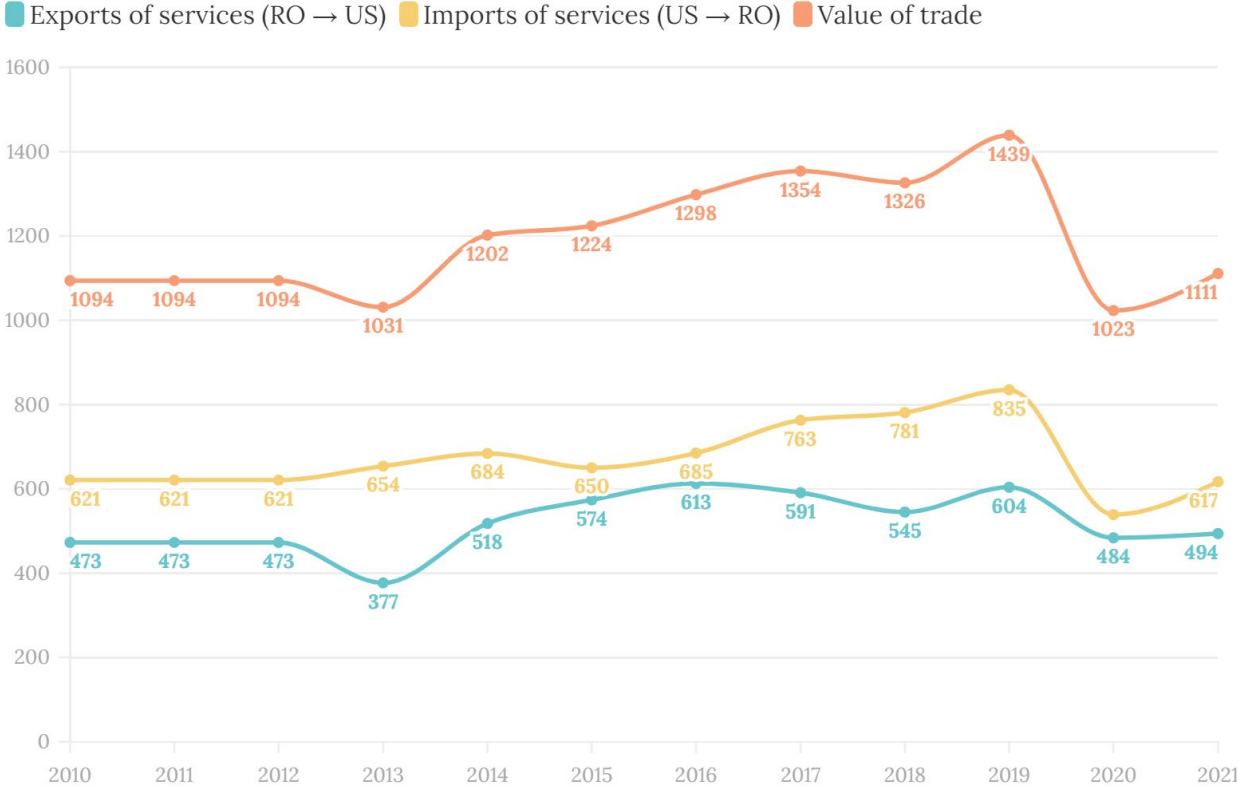
Table 31. Value of trade in services between Romania and the U.S. (million USD)

Year	Value of trade in services with the U.S. (million USD)	% of services trade value of Romania	% of services trade value of the U.S.
2010	1,094	5.58%	0.11%
2011	1,094	5.29%	0.10%
2012	1,094	4.84%	0.15%
2013	1,031	3.40%	0.09%
2014	1,202	3.70%	0.10%
2015	1,224	3.87%	0.10%
2016	1,298	4.07%	0.10%
2017	1,354	3.41%	0.10%
2018	1,326	2.88%	0.09%
2019	1,439	2.79%	0.10%
2020	1,023	2.29%	0.09%
2021	1,111	2.04%	0.08%

Source: Own calculations based on United Nations COMTRADE Database, U.S. Census Bureau, U.S. Bureau of Economic Analysis, National Institute of Statistics, Romania, National Bank of Romania

The pandemic has resulted in a significant decrease of service trade values in 2020, with only a slight recovery in 2021 (Figure 24).

### Value of trade in services between Romania and the U.S.

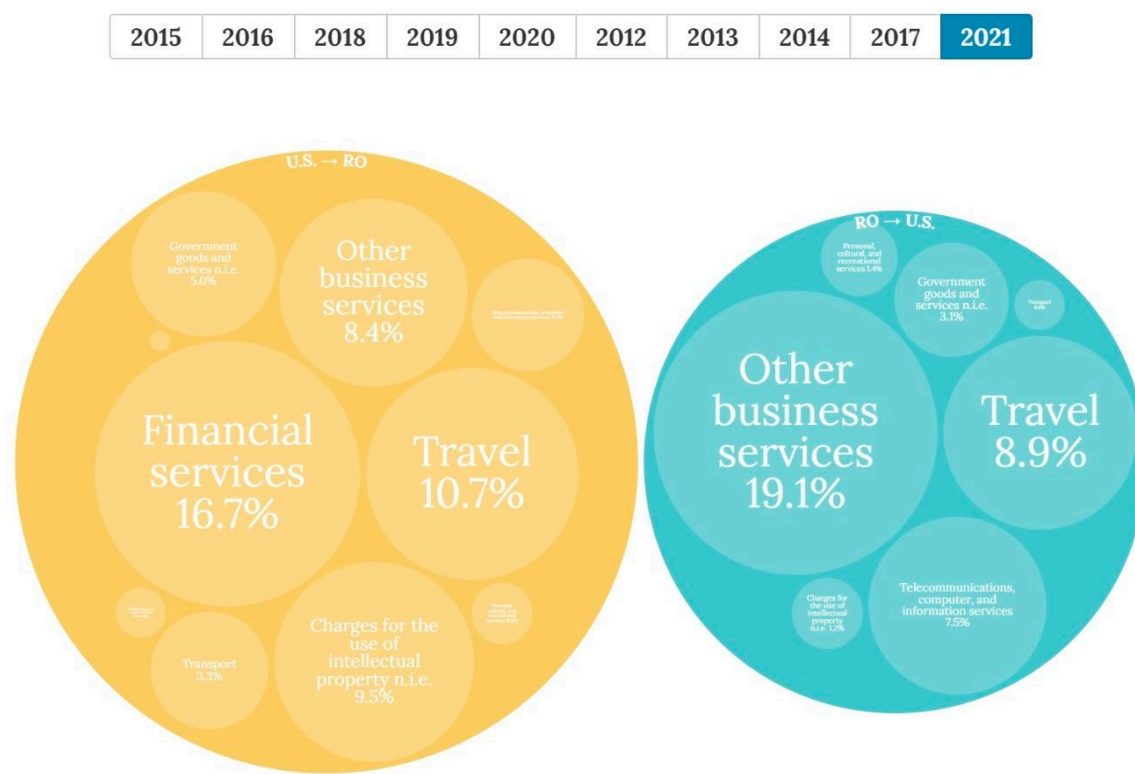


Data source: Own calculations based on U.S. Bureau of Economic Analysis, National Institute of Statistics, Romania and National Bank of Romania

Figure 24. Export and import value of services and total value of trade in services between Romania and the U.S. (million USD)

Romania mainly imports financial (16.7%) and travel (10.7%) services from the U.S., while it exports mainly business (19.1%), travel (8.9%) and IT&C (7.5%) services (Figure 25). Romania achieved one of the largest increases in service exports in IT&C services, representing thereby a sector on which future growth can be based.

## Structure of the U.S.-Romanian trade in the services sector



Data source: United Nations COMTRADE Database

Figure 25. Structure of the U.S.-Romanian trade in the service sector

In conclusion, the value of foreign trade in services between the U.S. and Romania stands at 1.1 billion USD in 2021, representing 2.04% of Romania's total services trade, and 0.08% of the total services trade of the U.S. Trade in services between the two countries could further be expanded, because in the last decade service trade increased by only 1% (while trade in goods increased by 149%). Future growth in services trade could be based on the IT&C sector, which is strong in both countries.



### 4.3. U.S.-Romanian trade in regional comparison

Comparing Romanian trade with the U.S. to the total trade of the benchmark countries from the CEE region (including both trade in goods and services), it can be seen that Romania ranks fifth among these countries (Table 32). It conducts 2.23% of its total foreign trade with the United States, while the same ratio is higher in Hungary (3.59%), Czechia (2.76%), Slovakia (2.65%) and Poland (2.36%) as well. However, differences are quite small, showing that there is no significant lag in this sense. Nevertheless, there is still plenty of growth potential in improving the foreign trade relations between the two countries. Romania is in the worst position when we examine the deficit of the trade balance (which was 10% of the GDP in 2021). Trade deficit is the highest in Romania among the benchmark countries, both in absolute terms and relative to the GDP. The main reason for this is the strongly expansive, consumption-based economic policy of the country. Due to the twin deficits (deficit of current account and budget deficit), Romania must take steps in the coming years to be more competitive and to be able to increase exports faster than imports.

*Table 32. Evolution of the trade with the U.S. in the benchmark countries  
(% of the total volume of trade of the respective country, 2010-2021)*

	<b>Romania</b>	<b>Bulgaria</b>	<b>Czechia</b>	<b>Hungary</b>	<b>Poland</b>	<b>Slovakia</b>
<b>2010</b>	2.18%	0.89%	1.53%	1.99%	1.73%	1.00%
<b>2011</b>	2.34%	1.17%	1.88%	2.20%	2.05%	1.16%
<b>2012</b>	2.34%	1.26%	2.07%	2.38%	2.10%	1.34%
<b>2013</b>	2.04%	1.27%	2.09%	2.61%	2.16%	1.23%
<b>2014</b>	2.62%	1.55%	2.32%	3.41%	2.15%	1.59%
<b>2015</b>	2.65%	1.57%	2.41%	3.76%	2.38%	1.77%
<b>2016</b>	2.48%	1.62%	2.50%	3.82%	2.55%	1.94%
<b>2017</b>	2.23%	1.59%	2.33%	3.21%	2.56%	2.12%
<b>2018</b>	2.35%	1.90%	2.45%	2.84%	2.59%	2.43%
<b>2019</b>	2.14%	1.90%	2.59%	2.97%	2.72%	3.04%
<b>2020</b>	1.89%	1.77%	2.76%	3.08%	2.53%	3.07%
<b>2021</b>	2.23%	1.71%	2.76%	3.59%	2.36%	2.65%

*Source: United Nations COMTRADE Database; own calculations*

*In conclusion, the 2.23% U.S. share from total trade value of goods in Romania is fairly similar to the benchmark CEE countries where the same ratio ranges from 1.71% (Bulgaria) to 3.59% (Hungary).*

### **Snapshot 1. Diplomatic and economic relations between Romania and the U.S. in terms of international agreements**

*In 1880, following Romania's independence, the U.S established diplomatic relations with Romania. The two countries suspended their diplomatic ties after Romania declared war on the United States in 1941; diplomatic ties were reestablished in 1947. Diplomatic relations were weaker during the Cold War, when Romania became a communist state. After the 1989 regime change, Romania's policies became unequivocally pro-Western. In the period that followed, diplomatic relations were further deepened, based on economic and political development, non-traditional threats such as transnational crime and non-proliferation of nuclear weapons, and deterrence and defense.*

*After the regime change, Romania became a committed supporter of rebuilding the market economy, which laid the foundation for the country's subsequent accession to NATO and later to the EU. Romania became a member of NATO in 2004, member of the European Union (EU) in 2007, and in 2022 discussions were opened for OECD accession.*

*As for economic relations, in 1992, the U.S. and Romania signed a bilateral investment treaty (BIT), which came into force in 1994. Romania is an attractive investment destination for the U.S. in many ways: it is located in a strategic region in Europe (with a Black Sea port), labor costs are relatively low, and the workforce is well-educated. The bilateral economic relations between the U.S. and Romania are strong. There are several important U.S-origin companies in Romania, but foreign trade is quite low between the two countries. Only 2% of total Romanian foreign trade is made with the U.S., a ratio that has not changed significantly in the last 10 years.*

## Chapter 5: U.S.-Romanian economic relations by most relevant sectors

In this chapter, six relevant economic sectors are analyzed according to several dimensions. The industries investigated are the following:

- Agriculture and food industry (Agri-food henceforth)
- Energy
- Defense
- Manufacturing
- Information technology and communication (IT&C)
- Services (other than IT&C).

For each of these sectors, first the parameters of American FDI are detailed, followed by an analysis of foreign trade (export-import) aspects in each industry.

Table 33 (together with Figure 26 and Figure 27) shows the relative size of these industries by revenue, number of companies and employees of U.S.-based companies in Romania. These figures provide the starting point for the analysis of each industry. According to Table 34, the manufacturing sector is dominated by companies from the beverages and tobacco industries (22.21% of the total), while the non-manufacturing sector is led by IT&C industries (5.72% of the total).

*Table 33. Industry composition of U.S.-origin companies in Romania by revenue, number of companies and number of employees (2021)*

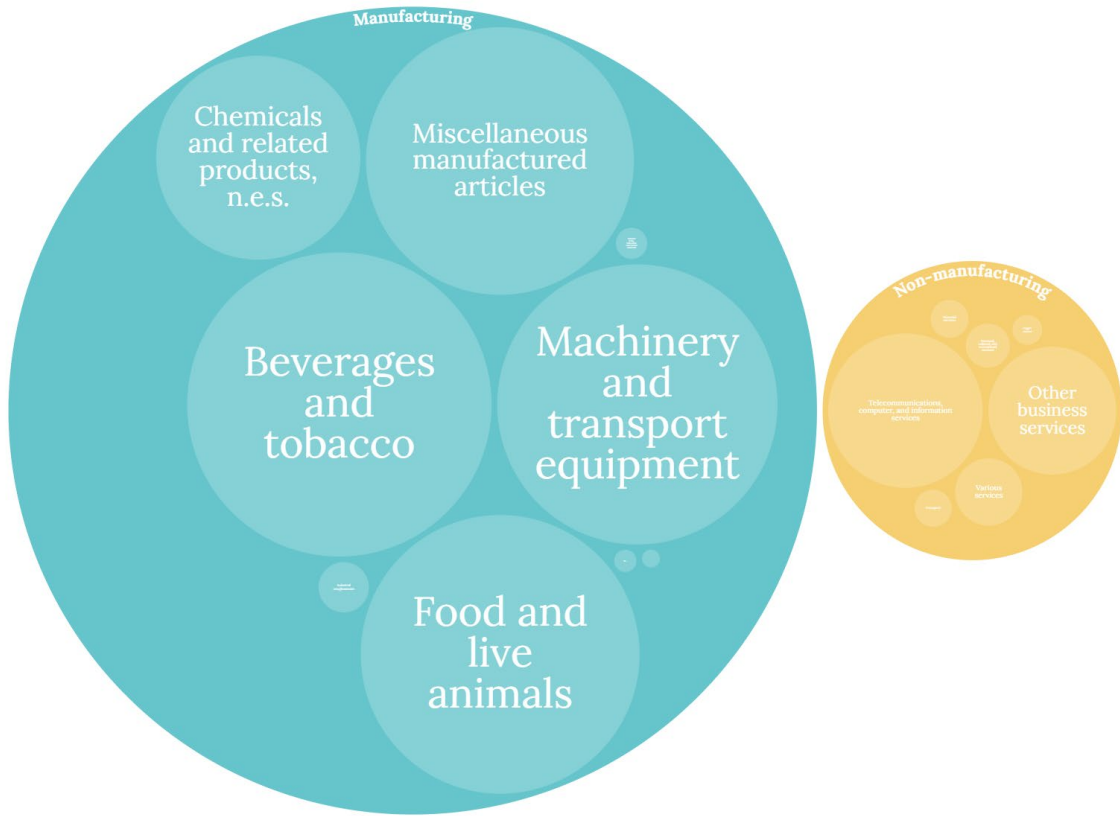
Sector	Total Turnover (USD)	% of total	No. of companies	% of total	No. of employees	% of total
Agri-food	6,065,651,504	28.82%	37	18.50%	19,011	18.61%
Manufacturing	12,290,409,627	58.40%	62	31.00%	45,963	45.00%
Energy	127,593,414	0.61%	2	1.00%	1,335	1.31%
IT&C	1,203,067,565	5.72%	43	21.50%	16,898	16.54%
Services	1,340,255,248	6.37%	51	25.50%	18,920	18.52%
Defense	18,698,099	0.09%	5	2.50%	12	0.01%
<b>TOTAL</b>	<b>21,045,675,458</b>	<b>100.00%</b>	<b>200</b>	<b>100.00%</b>	<b>102,139</b>	<b>100.00%</b>

*Data sources: own calculations*

Table 34. Subdivision-level distribution of U.S.-origin companies in Romania by revenue, number of companies and number of employees (2021)

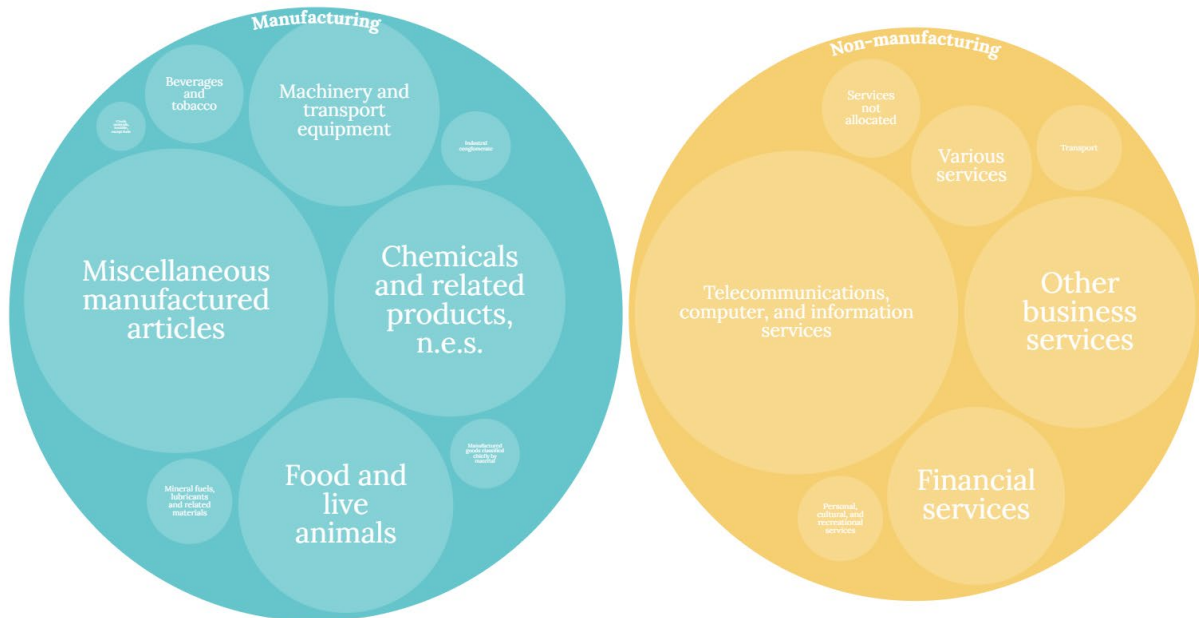
Sector	Total Turnover (USD)	% of total	No. of companies	% of total	No. of employees	% of total
<b>MANUFACTURING</b>						
Beverages and tobacco	4,673,873,046	22.21%	4	2.00%	4,484	4.39%
Machinery and transport equipment	3,962,398,834	18.83%	15	7.50%	15,472	15.15%
Food and live animals	3,923,223,360	18.64%	19	9.50%	11,130	10.90%
Miscellaneous manufactured articles	3,621,385,000	17.21%	38	19.00%	29,889	29.26%
Chemicals and related products, n.e.s.	2,103,252,670	9.99%	22	11.00%	3,539	3.46%
Industrial conglomerate	127,593,414	0.61%	2	1.00%	1,335	1.31%
Mineral fuels, lubricants and related materials	49,280,067	0.23%	3	1.50%	300	0.29%
Manufactured goods classified chiefly by material	25,115,730	0.12%	2	1.00%	148	0.14%
Crude materials, inedible, except fuels	16,230,524	0.08%	1	0.50%	24	0.02%
Construction		0.00%		0.00%		0.00%
<b>NON - MANUFACTURING</b>						
Telecommunications, computer, and information services	1,203,067,565	5.72%	43	21.50%	16,898	16.54%
Other business services	826,565,143	3.93%	22	11.00%	11,188	10.95%
Various services	227,984,442	1.08%	6	3.00%	5,440	5.33%
Personal, cultural, and recreational services	97,909,281	0.47%	3	1.50%	758	0.74%
Financial services	72,616,190	0.35%	13	6.50%	548	0.54%
Transport	70,392,214	0.33%	3	1.50%	270	0.26%
Services not allocated	44,787,977	0.21%	4	2.00%	716	0.70%
<b>TOTAL</b>	<b>21,045,675,458</b>	<b>100.00%</b>	<b>200</b>	<b>100.00%</b>	<b>102,139</b>	<b>100.00%</b>

Data sources: own calculations



Data source: Consulate General of Romania in New York, United States of America

Figure 26. Sectoral distribution of revenues earned by U.S. companies in Romania (2021)



Data source: Consulate General of Romania in New York, United States of America

Figure 27. Sectoral distribution by the number of U.S. companies in Romania (2021)

### 5.1. Agri-food industry

In terms of the actual U.S. investor companies in the Romanian agri-food industry, large multinational companies, mostly food, beverage and tobacco processors, such as British-American Tobacco, Cargill, Philipp Morris, Bunge and Coca-Cola dominate the FDI landscape (Table 35).

Table 35. TOP 5 U.S. companies from the Romanian agri-food sector

Company	Turnover (USD, 2021 or latest)
<b>BRITISH AMERICAN TOBACCO *</b>	\$2,868,566,622
<b>CARGILL *</b>	\$981,611,484
<b>PHILIP MORRIS *</b>	\$857,827,698
<b>BUNGE ROMANIA SRL</b>	\$719,018,194
<b>COCA COLA *</b>	\$673,689,054

Data source: own editing, \*combination of multiple legal entities belonging to the same company

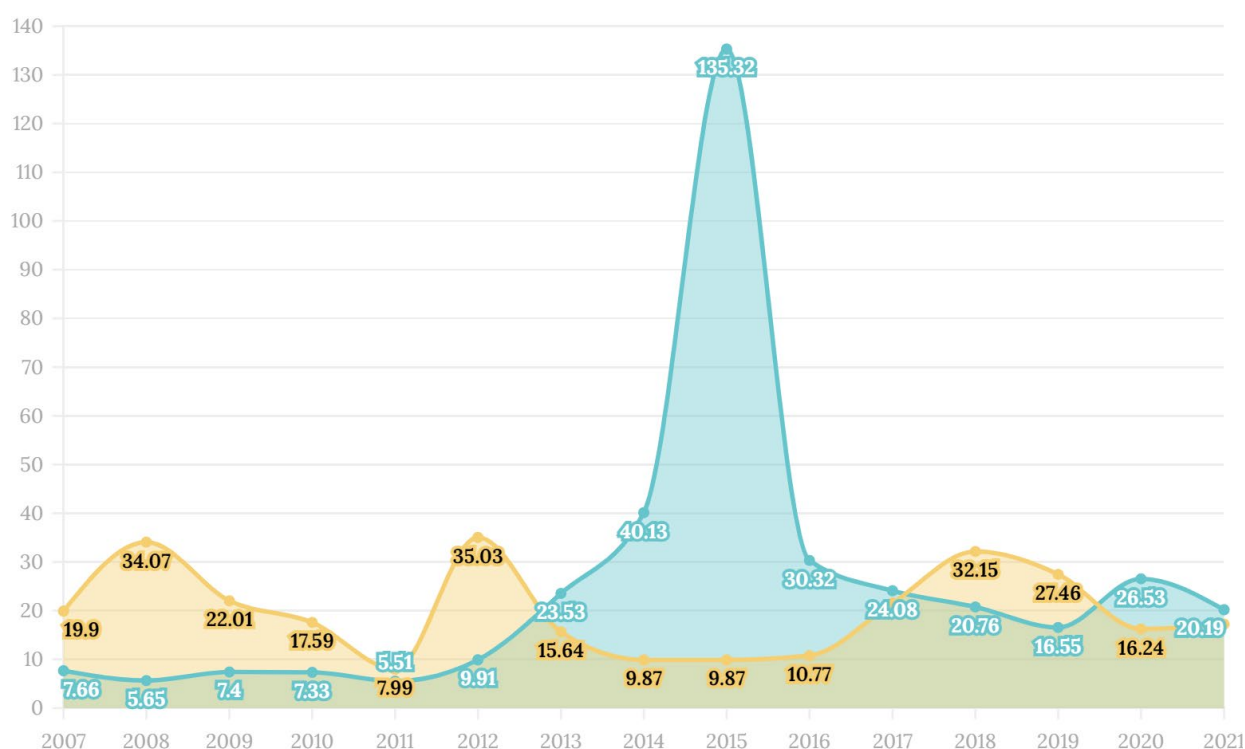
Although second in terms of revenue (28.82%), the agri-food industry reaches only the fourth place with respect to the number of companies, with 18.5% of the total number of American companies in Romania in 2021 (Table 33). This provides a hint that agri-food U.S.-companies in Romania have a high level of automation of processes and a relatively high productivity compared to other industries. The percentage share in terms of the workforce shows a picture similar to that of revenue, the agri-food industry being the second largest (18.61%).

In general, nearly 20% of Romanians are employed in agricultural-related activities, a relatively high number compared to the EU average of 4%. Romania is one of the important agricultural players in the EU, however, U.S. agricultural exports to Romania continued to maintain an upward trend until 2018, reaching a record value of 32 million USD. After 2018 U.S. export volumes to Romania have started to decrease, and by 2021 they have almost halved.

The evolution of agri-food import and exports can be seen on Figure 28. It can be said, that -in this industry - the trade between the U.S. and Romania is balanced throughout the years, except for 2015.

## U.S.-Romanian trade in agri-food products

■ RO → U.S. trade direction, million USD ■ U.S. → RO trade direction, million USD



Data source: United Nations COMTRADE Database

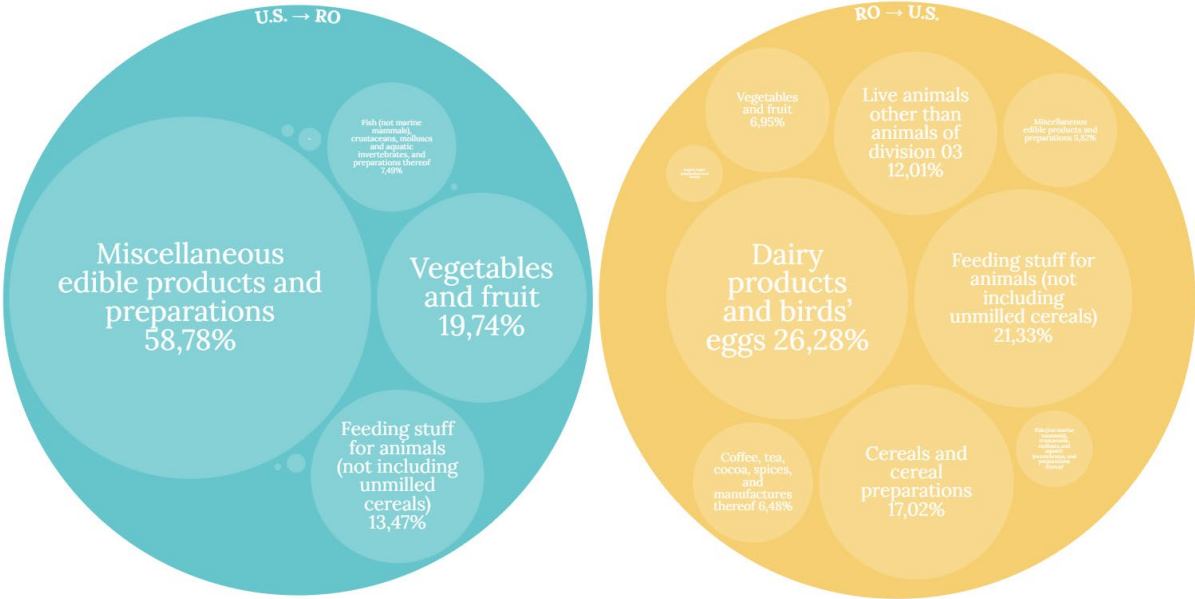
Figure 28. The evolution of U.S.-Romanian imports and exports of agri-food products, 2010-2021 (USD)

The outlier value of Romanian exports in 2015 is mostly related to the "Maize (not including sweet corn), unmilled" subcategory, due to the following potential explanations:

- In general, the U.S. imported a lot of corn used for feed (poultry and cows). Around 2015, GMO products began to be rejected by local (U.S.) farmers and the sudden surge in demand for organic feed corn (maize/corn) could only be satisfied by imports. One of the big fodder corn exporters was Romania.
- The significantly reduced value of the following years is explained by the fact that there were numerous abuses of GMO-free feed by exporting countries, the shipments from Romania did not always meet the GMO requirements either, so next year Romanian exports decreased in this category.

Looking at the trade structure of the agri-food industry between the U.S and Romania, the U.S. seems to export mostly products belonging to the "miscellaneous edible products" category (including, for example, protein powders, food preparations, tea, coffee, spirits, etc.), and the "vegetables and fruits" category to Romania. The two categories consist approximately 80% of the total value of agri-food export to Romania. In contrast, Romanian exports to the U.S. are much more heterogeneous, the largest categories in value being

connected to dairy products and feeding stuff for animals which together represent only 47% of the total trade value of Romanian agri-food exports to the U.S. (Figure 29).



Data source: United Nations COMTRADE Database

Figure 29. U.S.-Romanian import and export structure in the agri-food industry in 2021 (%)

Breaking down the “Miscellaneous edible products and preparations” category, top U.S. exports to Romania include protein powders, food preparations, spirits. Fruits, vegetables, feeding stuff for animals, and seafood are also significant import categories. For example, within the “Vegetables and fruits” category, the U.S. is one of Romania’s largest suppliers of nuts, accounting for 21% by value and 15% by volume of total agricultural imports from the U.S. In the following paragraphs, we highlight the most significant categories and subcategories of foreign trade with the U.S. in the agri-food category.

*Vegetables and fruits*

In the last 10 years, Romania typically imported ten times as much vegetables and fruit as it exported. The reason for this is that the demand for vegetables and fruits that are not grown in Romania has grown significantly in Romania. In 2021, Romania's total fruit and vegetable imports exceeded 700 million USD, of which it imported more than 10% from the US. The most imported vegetable and fruits were: oranges, lettuce, sweet potatoes, and cauliflower, and nuts.

*Beverages*

Similar to the evolution of overall agricultural exports from the U.S. to Romania, the export of beverages has also generally increased until 2018, starting a decreasing trend afterwards. Romanian consumers continue to gravitate towards mainstream beverage brands, which account for around 80% of the market. Romanian



imports from the U.S. account for about one-fifth of the Romanian beverage market by value. From this, whiskey is the most important category, accounting for half of the imported whiskey market, followed by liqueur, where the same ratio is 30%, and vodka with 9%.

#### *Fish*

In Romania, the fisheries sector is developing slowly, imports still accounting for a large portion (60-70%) of consumption. Limited availability of local species and poor processing options encourage imports. Seafood imports from the U.S. remained relatively stable during the last decade, reaching around 2 million USD in 2021. Among the species of U.S.-origin, Pacific salmon accounts for 25%.

#### *Grains*

Even though Romania is a net grain exporter (and has significant grain exports to the U.S.), in terms of soybean production Romania is not self-sufficient, despite generous support programs from the EU. Domestic soybean production meets approximately one-third of livestock needs. Nearly 90% of imported soybeans and soybean meal come from soybean producers in the U.S and in South America. The U.S. share of total soybean imports to Romania rose from 11% in 2017 to more than double in 2021.

In terms of EU and country-level programs, new tenders present an opportunity for U.S. suppliers of irrigation technologies. These water solution technologies include pumping stations and irrigation systems utilizing clean energy as well as smart water management technologies supporting digital irrigation, software sensors and other technologies like water monitoring, usage, conservation, filtration, purification, and desalination<sup>6</sup>.

*In conclusion, the agri-food industry attracts a sizeable amount U.S. FDI to Romania, being the second largest sector in terms of revenues achieved by these companies. Trade values, on the other hand, are rather small and heterogeneous in terms of the type of goods imported and exported. The modernization of irrigation technology in Romania, supported by EU funding, represents a prospective area for future U.S. investments.*

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<sup>6</sup> U.S. Department of Commerce, International Trade Administration

## 5.2. Energy sector

The largest U.S.-origin companies active in the Romanian energy industry are Cameron, Weatherford, NCH Romania and Black Sea Oil and Gas (BSOG) (Table 36). Although the most recent revenue figure of BSOG does not indicate it yet, BSOG has become a geo-strategically important player by beginning the drilling for Black Sea natural gas in the Neptun Deep field in 2022. Another significant development in the energy sector is the cooperation agreement between Nuclearelectrica and the U.S.-based NuScale Power for the delivery and deployment of small modular reactors to the site of the previous thermal power station in Doicești, Dâmbovița, cooperation which began in 2019. The cost of a single module is estimated to be around 300 million USD and it is estimated that the investment will be functional in 2027-28<sup>7</sup>.

Table 36. TOP 4 companies from the energy sector

Company	Turnover (USD, 2021 or latest)
<b>CAMERON ROMANIA SRL</b>	\$271,216,516
<b>WEATHERFORD ATLAS GIP SA</b>	\$39,625,741
<b>NCH ROMANIA PRODUSE DE INTRETINERE SRL</b>	\$9,654,121
<b>BLACK SEA OIL &amp; GAS SA</b>	\$205

Data source: own editing, \*combination of multiple legal entities belonging to the same company

In terms of U.S. FDI, the energy sector is the second smallest among the industries analyzed in every aspect looked at in our analysis: as percentage of total revenue (0.61%), number of companies (1%) and the size of the employed workforce (1.31%) (Table 33). This is partially because large enterprises in the energy sector are still state-owned. On the other hand, this is a sector especially sensitive to geographical proximity, therefore European companies have an advantage over their U.S. counterparts.

U.S. energy exports to Romania are volatile, which is a general industry-specific feature. It is explained by several factors, such as changes in consumption in Romania, local investments, and of course the prices of different energy carriers in the U.S., Europe, and Romania. For the period examined, energy imports from the U.S. in Romania were the highest in 2012, when they amounted to more than 240 million USD. Since then, this value has significantly decreased, falling in 2021 below 62 million USD. This may change in the near future and it may begin to increase again, due to the Russia-Ukraine war which created a lot of uncertainty in the European, and thus also in the Romanian energy market, meaning that alternative energy sources will be high in demand, creating a new potential for U.S. exports.

Romania has significant oil and gas reserves, some of which are not yet under exploration. For U.S.-origin companies active in this industry, this is an opportunity in the future, although ExxonMobil just sold in 2021 the Neptun Deep offshore gas exploration and development project in the Black Sea to Romgaz. ExxonMobil and Romgaz have worked together on this large block in the Black Sea since 2008. The asset is estimated to

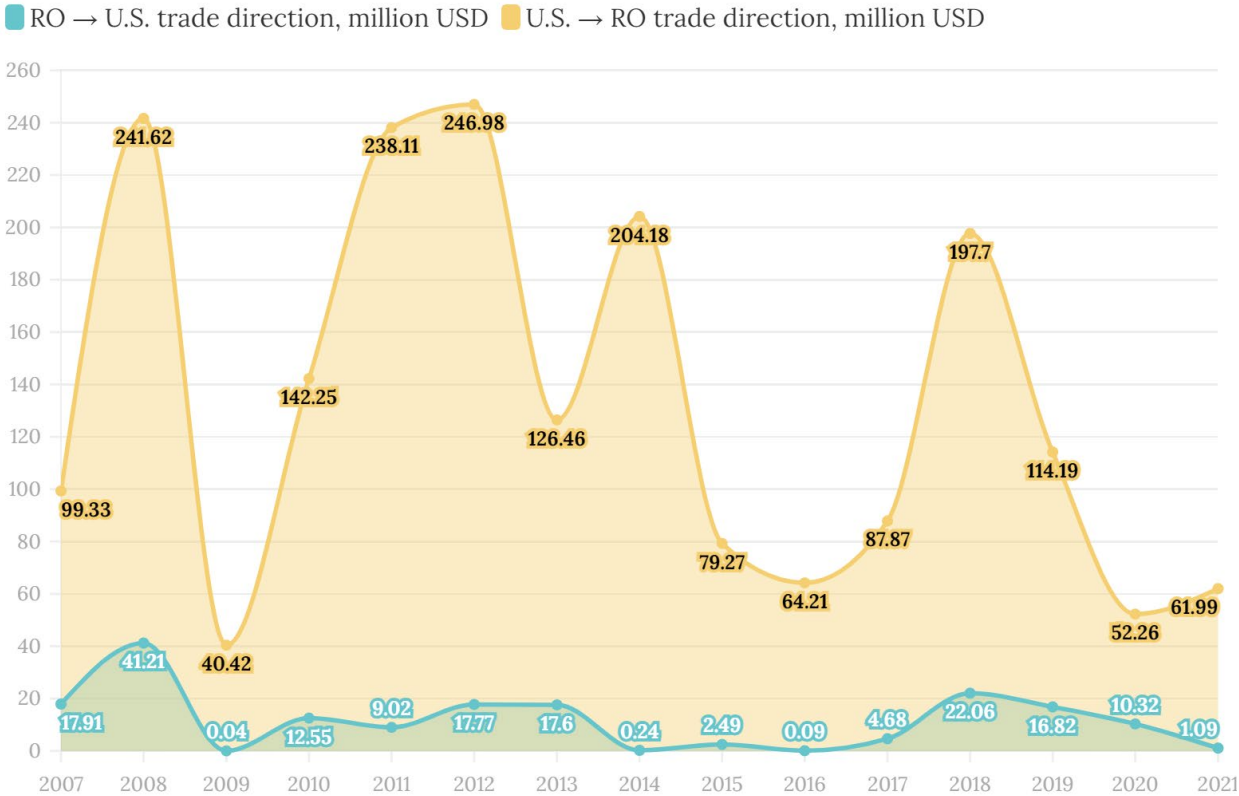
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<sup>7</sup> <https://ro.usembassy.gov/ro/cooperarea-dintre-statele-unite-si-romania-cu-privire-la-reactoarele-modulare-de-mici-dimensiuni-smr-fisa-informativa/>

have recoverable reserves of between 42 billion to 84 billion cubic meters of gas. The value of the transaction was 1.07 billion USD.

In general, time series data related to trade in this sector shows that U.S. exports to Romania were significantly higher throughout the last decade than Romanian energy exports to the U.S. (Figure 30). This latter category covers mainly Romanian oil exports to the U.S.

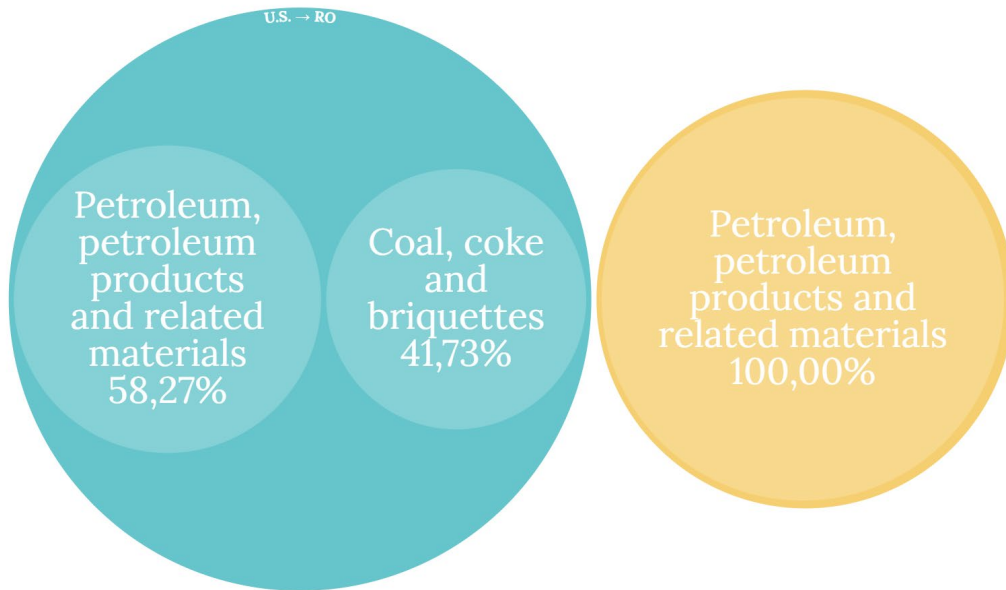
### U.S.-Romanian trade in the energy sector



Data source: United Nations COMTRADE Database

Figure 30. The evolution of U.S.-Romanian imports and exports of energy products, 2010-2021 (USD)

The large discrepancy between export and import figures is also present in the structure of the trade in the sector: Romania imports from the U.S. both coal and petroleum products, while exporting only oil to the U.S. (Figure 31).



Data source: United Nations COMTRADE Database

Figure 31. U.S.-Romanian import and export structure in the energy sector in 2021 (%)

*In conclusion, the U.S. FDI is rather small in the energy sector, expected to increase through the cooperation to extract natural gas from the Neptun Deep field in the Black Sea. Romanian imports of energy products from the U.S. include both petroleum and coal, compared to which Romanian exports are much smaller, consisting mainly of oil only.*

### 5.3. IT&C industry

As pointed out in previous chapters, the IT&C industry is one of the fastest emerging industries in Romania which is reflected also in the importance of the industry for U.S. investors. Some of the largest U.S.-based multinationals in this area are present as FDI investors in Romania, such as IBM, Cognizant, Oracle and Microsoft (Table 37).

Table 37. TOP 5 companies from the IT&C sector

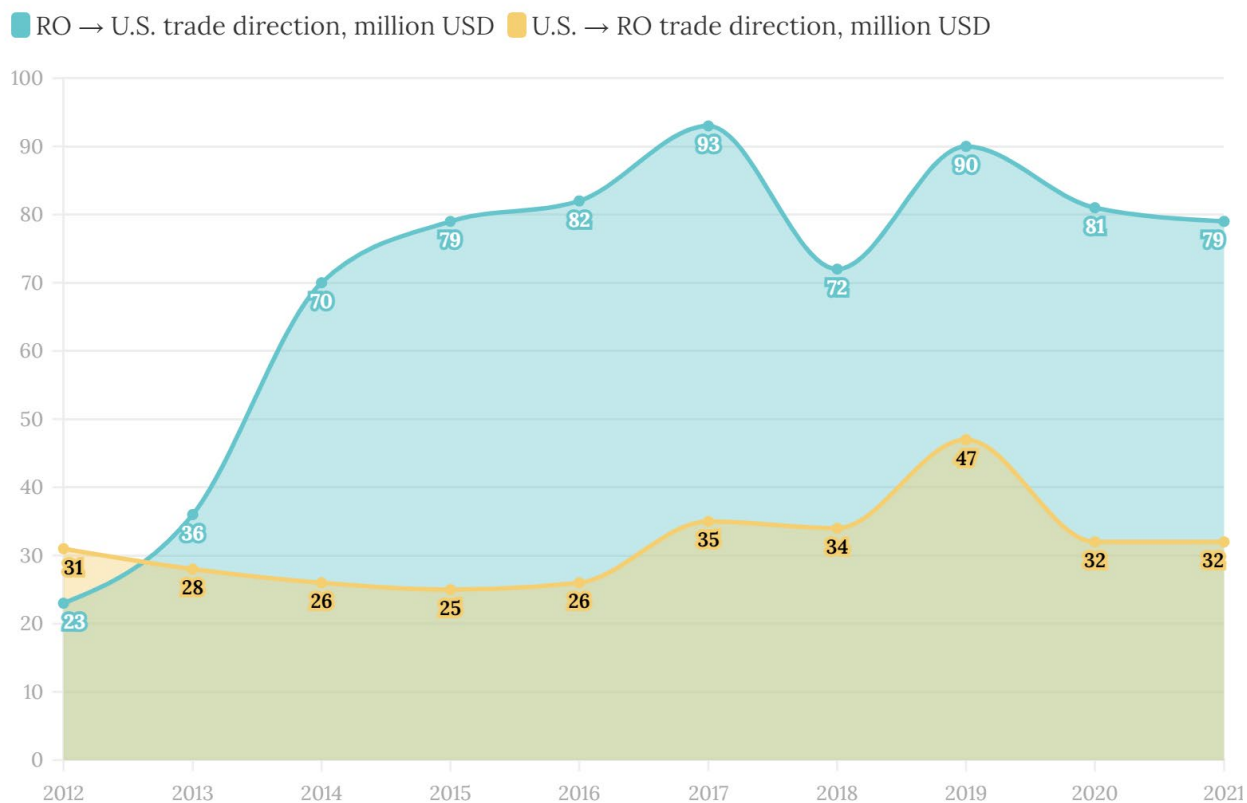
Company	Turnover (USD, 2021 or latest)
IBM ROMANIA SRL	\$233,461,735
COGNIZANT TECHNOLOGY SOLUTIONS ROMANIA SRL	\$138,382,641
ORACLE GLOBAL SERVICES ROMANIA SRL	\$113,844,237
MICROSOFT ROMANIA SRL	\$109,092,130
ADOBE SYSTEMS ROMANIA SRL	\$66,130,725

Data source: own editing

One specificity of this industry is that it is a growth-oriented sector with a relatively large workforce compared to its present revenue-generating potential. This explains the fact that the IT&C industry ranks only fourth in terms of revenue (5.72%), even though it has a much larger contribution to the workforce employed by U.S.-origin companies in Romania (16.54%). The same can be said in terms of the number of companies where the IT&C industry occupies the third position with 21.5% of the total (Table 33).

Romania is the leader in the EU, and sixth in the world, in terms of the number of certified IT specialists, with density rates higher than in the US. The nearly 212,000 employees (4,2% of total full-time employees) in the Romanian IT&C sector contributed by 6.7% to GDP formation in Romania in the third quarter of 2021 (National Institute of Statistics). In only four years, the contribution of the star sector of the economy to the formation of the GDP has increased by two percentage points and is rapidly moving towards a share of 7% of the GDP. As argued in Chapter 3, a significant number of these employees are employed by American companies. While IT has been a key sector in the U.S. for a long time, in Romania it has just started to grow, representing thereby a promising area of cooperation between the two countries. The U.S. IT&C service export to Romania has been stable in the last decade, in absolute terms amounting to 32 million USD in 2021. Romania's IT&C service export to the U.S. is much larger, amounting to 79 million USD in 2021 (Figure 32). The future development potential of this sector is also shown by the fact that the most significant outbound FDI from Romania to the U.S. is also provided by an IT company.

## U.S.-Romanian trade in the IT&C sector



Data source: U.S. Bureau of Economic Analysis

Figure 32. The evolution of U.S.-Romanian imports and exports in the IT&C industry

In conclusion, the IT&C industry hosts a high number of U.S. companies in Romania, employing a considerable amount of workforce, achieving in the same time a much lower aggregate revenue than U.S. companies in other Romanian industries. While still below 80 million USD, Romanian IT&C export started to increase sharply since 2012, with an important future development potential.

#### 5.4. Defense sector

The largest players in the defense industry in terms of U.S. equity are General Dynamics and Lockheed Martin. Raytheon reported zero revenue, however it has already signed an important partnership agreement with Romanian arms manufacturer Romarm for the joint manufacturing of Skyceptor missiles (Table 38).

Table 38. TOP 5 companies from the defense sector

Company	Turnover (USD) (2021 or latest)
GENERAL DYNAMICS EUROPEAN LAND SYSTEMS ROMANIA SRL	\$16,170,373
LOCKHEED MARTIN GLOBAL INC	\$2,031,641
TEXTRON SRL	\$496,086
NORTHROP GRUMAN	\$0
RAYTHEON	\$0

Data source: own editing

Specific to the defense sector of relatively small countries like Romania, it represents the smallest industry from the ones involved in this study. It ranks last as revenue (0.09%), number of companies (2.5%), and workforce (0.01%), including only five companies (Table 33) with a very small number of employees.

Romania has committed to the NATO guideline of spending at least 2.0% of GDP on defense until 2027. Due in part to a one-year budget cycle, however, the country has not yet met this spending level. Nevertheless, this commitment represents a great opportunity for U.S. defense equipment and service providers because Romania is constantly renewing its military equipment. In the next paragraphs we exemplify this process by illustrating the import of weaponry from the U.S. to Romania.

According to the Stockholm International Peace Research Institute, the U.S. is the world's largest arms exporter, responsible for almost 40% of international arms sales between 2010 and 2021. During the most recent years, the country supplied arms to more than 100 countries.

Due to the Russia-Ukraine war, it is expected that Romania will increase its military expenditures, thereby buying more weapons from the U.S. (In the past, Romania primarily bought weapons from the U.S. and France.) Combat equipment purchased from the U.S. is listed in Table 39.

Table 39. Combat equipment purchased by Romania from the U.S.

Name	Weapon description	Type	Ordered	Year ordered	Delivered	Year delivered	Comments
<b>C-130H Hercules</b>	transport aircraft	Aircraft	1	2019	1	2021	Second-hand; aid
<b>Patriot Configuration-3</b>	SAM/ABM system	Air defense system	7	2017	1	2020	\$4.6 b 'HISAM' program; Patriot Configuration-3+ version; delivery planned 2020-2026
<b>M-142 HIMARS</b>	self-propelled MRL	Artillery	18	2018	18	2021	\$218 m deal
<b>MaxxPro</b>	APC	Armored vehicles	60	2010	60	2010	Incl 40 Second-hand (but maximum 2 years old); MaxxPro Dash version; for use in Afghanistan
<b>Cougar</b>	APC	Armored vehicles	2	2014	2	2014	Probably second-hand; aid
<b>6V-53</b>	diesel engine	Engines	31	2006	31	2008-2015	For 31 Piranha-3 APC from Switzerland
<b>AE-2100</b>	turboprop	Engines	14	2006	14	2010-2015	For 7 C-27J transport aircraft from Italy
<b>6V-53</b>	diesel engine	Engines	12	2016	12	2018	For 12 Piranha-3 APC from Switzerland
<b>T56</b>	turboprop	Engines	16	2017	16	2018	Second-hand; aid; spares for C-130 transport aircraft
<b>TPS-79 MMSR</b>	air search radar	Sensors	17	2008	17	2009-2011	TPS-79(R) version; assembled in Romania
<b>AAQ-33 Sniper</b>	aircraft EO system	Sensors	5	2014	5	2016	-
<b>TPS-77</b>	air search radar	Sensors	2	2016	2	2017-2018	-
<b>AIM-120C AMRAAM</b>	BVRAAM	Missiles	30	2013	30	2019-2020	For F-16 combat aircraft
<b>AIM-9X Sidewinder</b>	BVRAAM	Missiles	22	2015	22	2017-2018	-
<b>JDAM</b>	guided bomb	Missiles	180	2017	180	2019	-
<b>MIM-104C PAC-2</b>	SAM	Missiles	56	2017	10	2020	GEM-T version
<b>MIM-104F PAC-3</b>	ABM	Missiles	168	2017	20	2020	-
<b>ATACMS Block-1</b>	SSM	Missiles	54	2018	27	2021	-
<b>GMLRS</b>	guided rocket	Missiles	89	2018	89	2021	For use with HIMARS MLR

Source: Stockholm International Peace Institute



Comparing Romania to the benchmark CEE countries in terms of weaponry purchased and delivered from the U.S., Poland and Romania clearly stand out as having made the most transactions with the U.S. since 2010 (Table 40 and Table 41).

Table 40. Weapon purchases since 2010 by main categories

Country	Total	Aircraft	Air defense system	Artillery	Armored vehicles	Engines	Sensors	Missiles
Bulgaria	7	1	0	0	1	1	1	3
Czechia	8	4	0	0	0	2	0	2
Hungary	6	0	0	0	3	1	0	2
Poland	31	8	1	1	6	5	0	10
<b>Romania</b>	19	1	1	1	2	4	3	7
Slovakia	5	2	0	0	0	1	0	2

Source: Stockholm International Peace Institute

Table 41. The distribution of yearly orders of weapons from the U.S.

Country	Bulgaria	Czechia	Hungary	Poland	Romania	Slovakia
Before 2010	1	1	1	2	3	0
2010	0	0	2	3	1	0
2011	0	0	0	0	0	0
2012	0	0	0	0	0	0
2013	0	0	1	0	1	0
2014	1	1	0	2	2	1
2015	0	0	0	1	1	1
2016	0	1	0	3	2	0
2017	0	2	0	1	5	0
2018	0	0	0	5	3	3
2019	5	2	0	5	1	0
2020	0	0	2	2	0	0
2021	0	1	0	7	0	0
<b>Total</b>	7	8	6	31	19	5

Source: Stockholm International Peace Institute

Furthermore, it is easy to see that Romania is dominant in the region not only in terms of the number of weaponry transactions from the U.S., but also in terms of value, since Romania has signed several contracts

in which it commits itself to the purchase of more complex military equipment. This is explained, on the one hand, by the relative size of the country in the region, and on the other hand, by the fact that Romania is an important strategic military base due to its location (having non-NATO member countries at its borders) and owing a Black Sea port.

*In conclusion, in the defense sector a few important U.S. companies are present on the Romanian market with signed partnerships to extend manufacturing activities. In terms of weapon trade, Romania clearly stands out in the region, together with Poland, as the largest buyers of combat equipment from the U.S. throughout the last decade.*

## 5.5. Manufacturing

From a statistical perspective, the manufacturing industry is composed of the following main categories: “machinery and transport equipment”, “miscellaneous manufactured articles” (e.g. musical instruments or parts or accessories thereof; arms and parts thereof; furniture, lamps and lighting fittings; toys, games, sports requisites, etc.), “chemicals and related products” and “manufactured goods classified chiefly by material” (e.g. manufactures of leather; materials of rubber; wood manufactures, etc.) subcategories.

As pointed out in Chapter 1:, the manufacturing industry is responsible for the largest share of the revenue generated by U.S. FDI companies in Romania (58.40%). The largest manufacturers are Ford Motor, Autoliv and BorgWarner from the automotive industry and the largest chemical (pharmaceutical) trader is Alliance Healthcare (Table 42).

Table 42. TOP 5 companies from the manufacturing sector

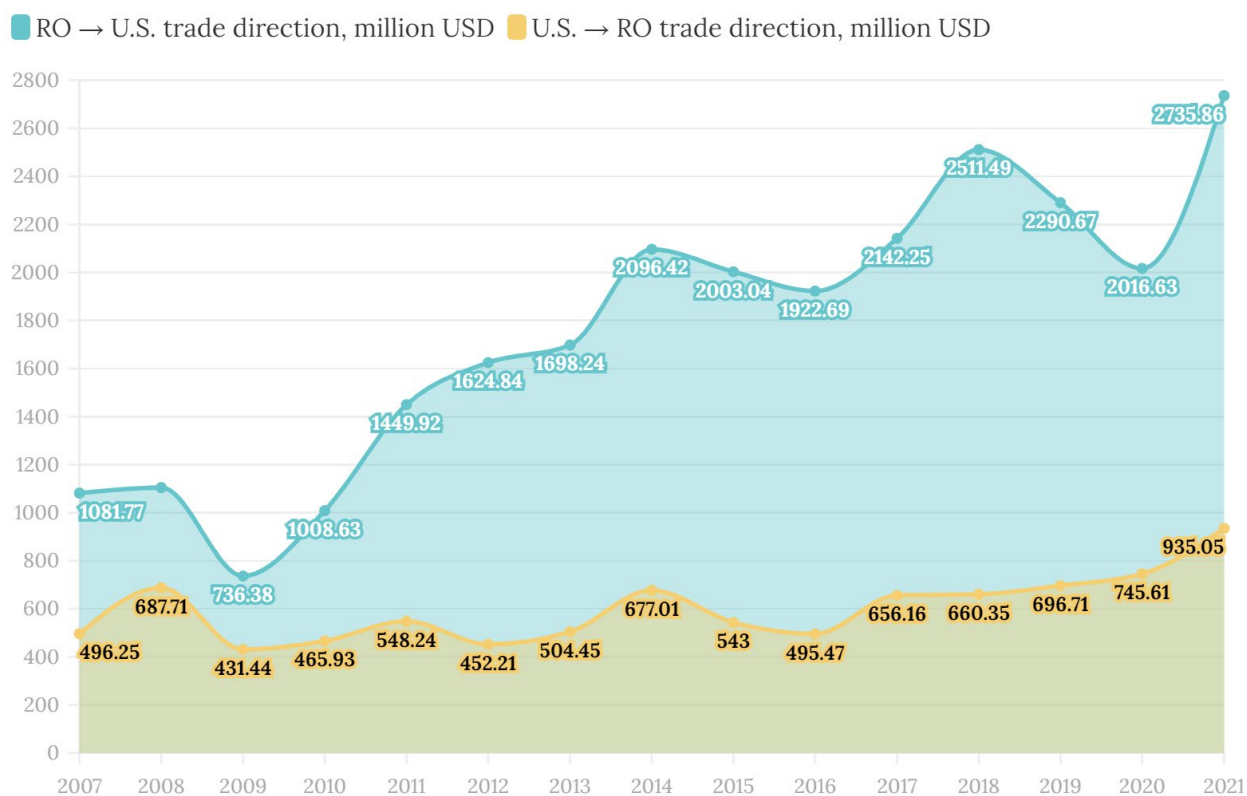
Company	Turnover (USD, 2021 or latest)
<b>FORD ROMANIA SRL</b>	\$2,732,802,351
<b>ALLIANCE HEALTHCARE ROMANIA SRL</b>	\$917,567,610
<b>AUTOLIV ROMANIA SRL</b>	\$889,950,519
<b>BORGWARNER ROMANIA SRL</b>	\$444,307,205
<b>EATON *</b>	\$343,120,282

Data source: own editing, \*combination of multiple legal entities belonging to the same company

Manufacturing is also the most important industry in terms of the share of the workforce (45%) and number of companies (31%) with U.S. origins (Table 33). Comparing these figures with those of the IT&C industry, it is important to highlight that while traditional manufacturing such as the automotive or the chemical industry is still the main driver of U.S. investments in Romania, oriented towards the relatively cheap but well-trained workforce, there is definitely an emergence of higher value-added, highly skilled workforce in IT&C industries.

In the manufacturing sector Romanian exports to the U.S. are higher than U.S. exports to Romania (2.7 billion USD v. 0.9 billion USD in 2021) and have more than doubled since 2010. In the same period, U.S. exports to Romania have increased to a much lower extent (Figure 33). The reasons for this are complex, but they can primarily be explained by the fact that while U.S.-origin companies are present in Romania, i.e., they manufacture their products here, Romanian companies are not present on the U.S. market, so they only have the option to export their domestically produced products, in case they seek presence on the U.S. market.

## U.S.-Romanian trade in the manufacturing sector



Data source: United Nations COMTRADE Database

Figure 33. The evolution of U.S.-Romanian imports and exports in the manufacturing sector, 2010-2021 (USD)

Looking at the foreign trade between the U.S. and Romania in the manufacturing industry, the composition of trade in both directions is very similar. In the case of both imports and exports, Romania imports and exports nearly 50% in the "Machinery and transport equipment" category. These figures are a clear illustration of an intensive machinery and vehicles industry, Romania importing and exporting machines and vehicles of various types and complexity and being embedded in global value chains. The breakdown of these categories of foreign trade is illustrated in Figure 34.

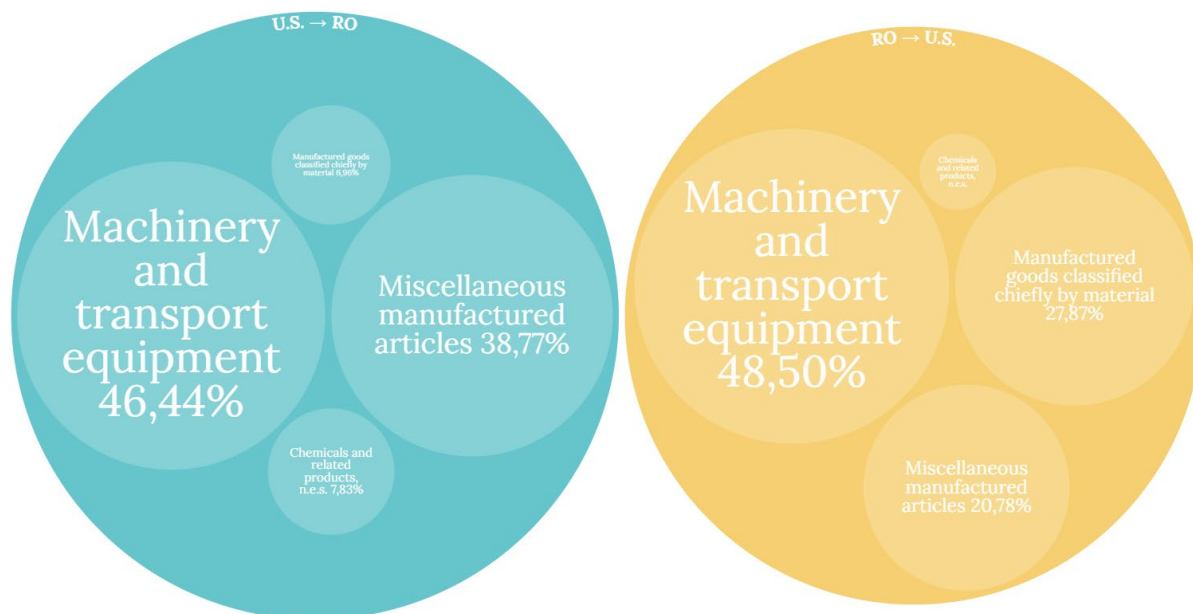


Figure 34. U.S.-Romanian import and export structure in the manufacturing sector in 2021 (%)

The manufacturing industry in Romania is largest from the perspective of U.S. FDI, generating a little less than 60% of the aggregate turnover reached by all U.S.-origin companies present on the Romanian market. Trade in this sector is also fundamental for the U.S.-Romanian economic relations. Sectoral trade is dominated by machinery and transport equipment, with Romanian exports in 2021 clearly exceeding imports from the U.S. (2.7 billion USD versus 0.9 billion USD).

## 5.6. Services sector

Services industries are dominated in terms of U.S. FDI by the shared service centers (SSC) like the offices opened by Accenture and Amazon. The third and the fourth places in the industry top are filled by two of the Big Four accountancy and consulting companies, namely Deloitte and Ernst and Young (Table 43).

Table 43. TOP 5 companies from the services sector (excluding IT&C)

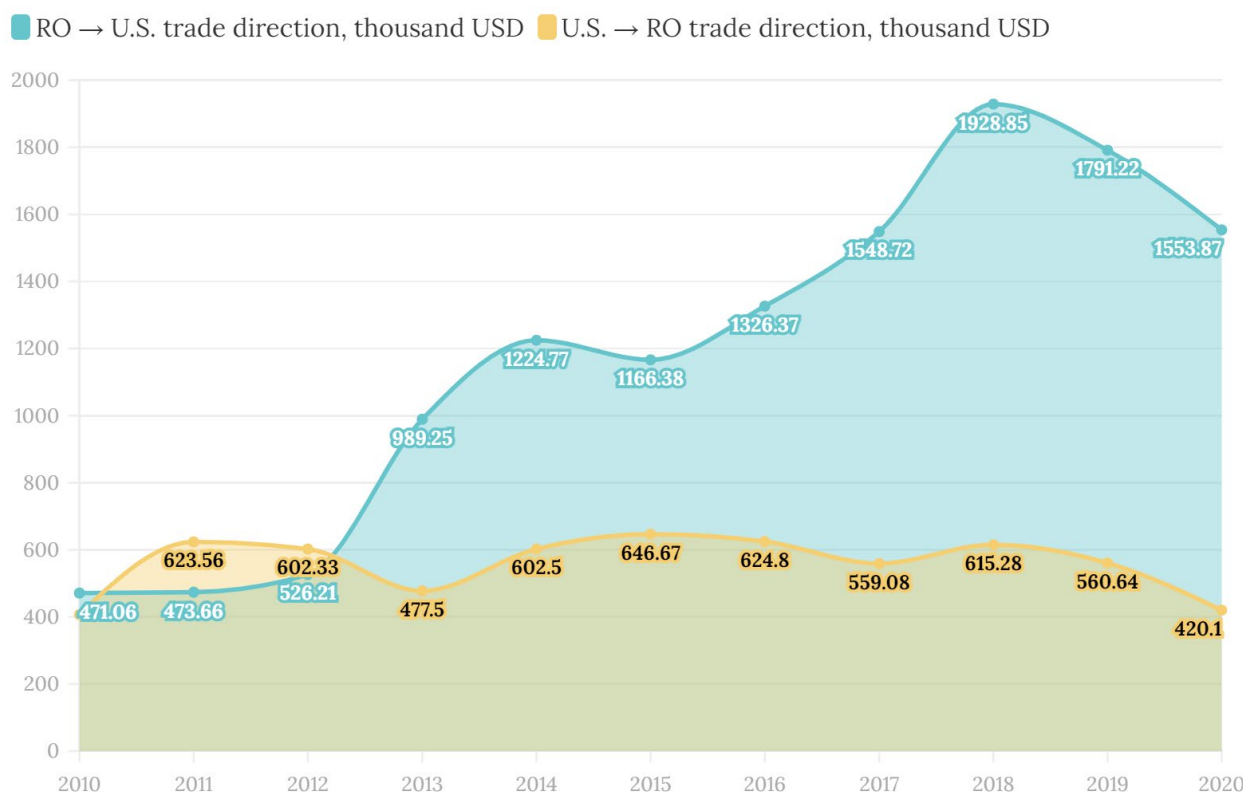
Company	Turnover (USD, 2021 or latest)
ACCENTURE	\$175,561,400
AMAZON DEVELOPMENT CENTER SRL	\$131,745,505
DELOITTE	\$130,410,513
ERNST & YOUNG	\$94,526,208
FEDEX	\$74,472,113

Services (excluding IT&C) have a fairly large share of the workforce (18.52%), and of the number of companies (25.5%), while in terms of revenue contribution, their share is much smaller (6.37%) among U.S.-origin companies present on the Romanian market (Table 33).

U.S. investments in the services sector of Romania have the following composition: business services such as accounting, consultancy, outsourced internal services represent the largest share (45.99% of the total services revenue), followed by cultural (3.85%) and financial services (2.86%). It is worthwhile to emphasize that the combined size of the services sector (excluding IT&C) is roughly equal to the size of the IT&C sector alone, highlighting again the importance of this sector in U.S.-Romanian economic relations.

As highlighted in Chapter 4, compared to goods, the value of services exported and imported between the U.S. and Romania consists of 20% of total trade between the two countries, even if IT&C is included in the figures. To be more precise, trade statistics in this chapter do not exclude IT&C, as the service sector is relatively small. In 2021, the U.S. exported services worth almost 0.62 billion USD to Romania, while Romania exported 0.49 billion USD in value (values include IT&C services as well). In 2021 the trade volume of services was 20% of total trade value between the two countries. A stable trend can be observed in the Romanian service trade with the U.S. (Figure 35).

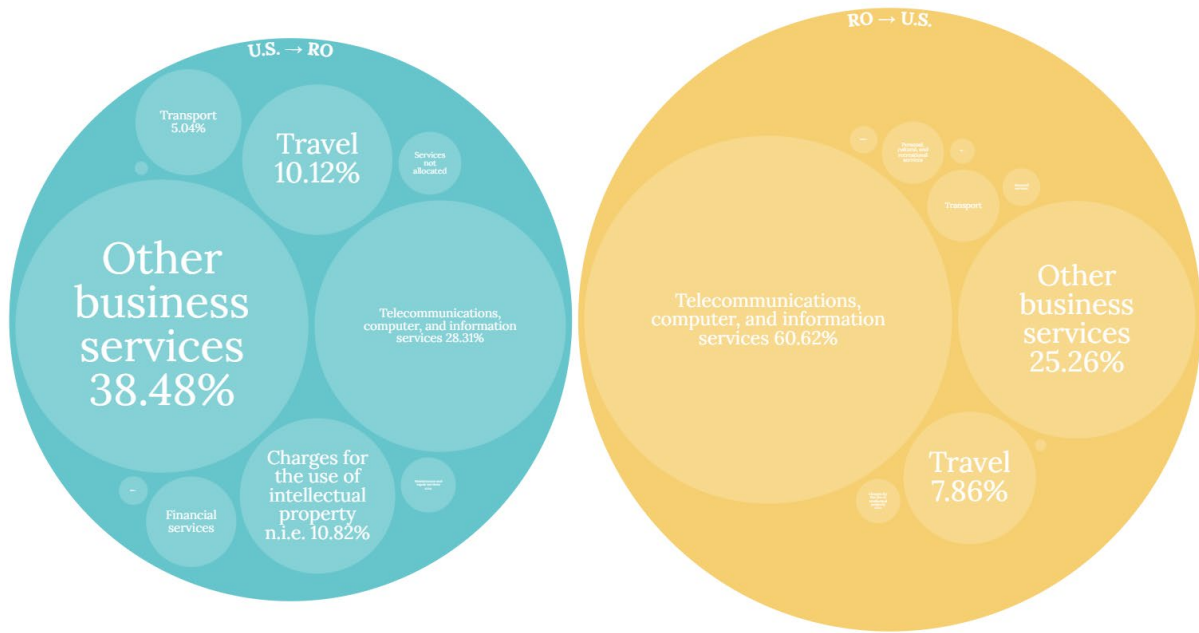
## U.S.-Romanian trade in the services sector



Data source: International Trade Centre

Figure 35. The evolution of U.S.-Romanian imports and exports in the services sector (including IT&C), 2010-2020 (USD)

Romania mainly imports financial services (177 million USD in 2021) and travel services (113 million USD in 2021), the two categories representing around 50% of total services imports from the U.S. to Romania. Romanian export structure to the U.S. is somewhat different, the country exporting mainly business services (202 million USD in 2021) and travel services (94 million USD in 2021), the two categories representing around 60% of total Romanian exports to the United States. IT&C service exports to the U.S. are also significant, representing more than 15% of total service exports to the U.S. Transportation, financial services or intellectual property charges are also present in trade relations of the services sector, but show far smaller trade values (Figure 36).



Data source: U.S. Bureau of Economic Analysis

Figure 36. U.S.-Romanian import and export structure in the services sector (including IT&C) in 2021 (%)

*In summary, the services sector (excluding IT&C) is dominated by the presence of large U.S. business service companies, such as accounting, consulting, and outsourced business processes enterprises. In terms of revenues achieved by companies of U.S. origin in Romania, the combined size of the services sector (excluding IT&C) is roughly equal to the IT&C industry alone. Romania imports more services than it exports to the U.S., with business services accounting for most of the exports.*



## Part II

### Chapter 6: Opportunities and challenges on the Romanian and U.S. markets

With respect to the general climate and sentiment of American-Romanian business relations, we can safely state the following (according to a recent study by Ernst and Young): there has been a constant and significant improvement in this business climate for the past 30 years. While at the beginning of the economic transition, in the 1990's Romania was considered mostly an "exotic" (in other words very risky) business partner, especially as a destination for foreign investments, in later decades this has changed considerably, with Romania being considered a serious target for FDI and a reliable trade partner. The major landmark events that paved the way for this development include but are not limited to: the accession of Romania to NATO in 2004 and to the EU in 2007, the establishment of "big U.S. names" in the country, such as BorgWarner (2007), Emerson (2006) or Ford (2009). On equal footing, the promotion of the Romanian stock market from frontier market to emerging market by FTSE Russell in 2020 and the inclusion of the country in the investment grade country rating category (BBB-) by the most important rating agencies such as Moody's and Standard and Poor's (2014) all had their share in improving the business and investment climate. Moreover, there are several important expected events in the near future that would most probably lead to a further expansion of the economic relation between the U.S. and Romania, namely Romania joining the Schengen Area and the OECD. Starting from these developments, the next two sections present the most important challenges and opportunities for companies on the Romanian and on the U.S. markets, respectively.

#### 6.1. Opportunities and challenges on the Romanian market

In this section, based on the first part of our study regarding the U.S. FDI in Romania and the trade relation between the two countries, we identify several opportunities and challenges that the future may hold in these areas. These opportunities and challenges are also complemented by several interviews carried out with company representatives of U.S.-origin firms active on the Romanian market. Opportunities and challenges are not necessarily listed in the order of their importance.

General opportunities for U.S. companies in Romania:

- The *human resource base* is an important advantage of Romania that U.S. companies can continue to rely on. Romania has several academic centers that secure a continuous supply of highly skilled and talented workforce, especially in IT&C and engineering, with generally good foreign language skills. At the same time, universities offer good partnership and collaboration opportunities not only for hiring new talents, but also for research and development. Additionally, U.S.-origin companies generally report that there is a good cultural fit between company culture and the attitudes of Romanian employees.
- The *geographic location* of Romania can also offer several opportunities for foreign investors. Romania is located at the crossroads of three important markets (EU, Eurasia, and the Middle East), operating the largest port on the Black Sea coast, being able to offer important logistics advantages, especially in terms of the transport of goods from Asian markets. From the perspective of global supply chain disruptions and future global insecurities, Romania can

provide a suitable relocation option for multinationals striving to improve supply chain resilience and regionalize their supply chains.

- Though the Romanian *market size* can be considered small from a U.S. perspective, it is still the second largest in the CEE region, and one of the most dynamic in terms of economic growth.
- Romania provides *state aid* schemes and a competitive tax system in the region, as well as tax exemption on reinvested profit. For example, the income tax exemption for software engineers has greatly contributed to the development of a competitive IT&C sector in Romania. Funding programs and subsidies are likely to remain on the agenda of decision makers, providing an attractive climate for foreign investors, including U.S.-origin companies.
- The NextGen *EU funds* translated into the National Recovery and Resiliency Plan (abbreviated as PNRR in Romanian) constitutes a budget of more than 30 billion EUR in non-refundable grants and loans over the period between 2022 and 2026, that can further stimulate new investments in the country, especially in sustainability and digitalization.
- The unsatisfactory quality of *physical and digital infrastructure* is both a challenge and an opportunity because there are ample spaces for potential growth ready to be filled by potential foreign investors in areas such as road, rail, water and energy infrastructure, digitalization of healthcare and of the public administration, financial inclusion and digital literacy, and last but not least the fight against climate change.
- Growing *external competitiveness* due to the strengthening of the U.S. dollar against the national currency, leu (RON) (the U.S. dollar has appreciated by more than 20% in two years between 2020-2022) means that, on the one hand, potential U.S. investors can buy more local production factors denominated in RON, and, on the other hand, their future export revenue in USD could be worth more in RON.

Sector-specific opportunities for U.S.-based companies in Romania:

- *IT&C sector*: as highlighted in Chapter 1, there is already a large number of U.S.-origin companies active on the Romanian market and this number is expected to increase as the national strategy in this field stipulates that the IT&C industry should reach the level of 10% contribution to the country's GDP<sup>8</sup>.
- *Agri-food industry*: because of its size and geographic diversity, Romania can become a crucial player in global food supply chains, further increasing its contribution to global food security in light of the current Russia-Ukraine war.
- *Energy sector*: although currently it represents only a small part of U.S. investments in Romania (1.93% in terms of revenue), this area holds significant growth potential since the contribution of this sector to Romania's GDP is more than 10%<sup>9</sup>. The new energy priorities of the EU in the context of the Russia-Ukraine war can help transform Romania into a regional energy hub, as it

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<sup>8</sup> <https://www.agerpres.ro/economic-intern/2020/12/03/anis-sectorul-itc-din-romania-trebuie-sa-ajunga-la-10-din-pib-in-2025--620690>

<sup>9</sup> <https://www.edu.ro/sites/default/files/Strategia-nationala-pentru-dezvoltarea-durabila-a-Rom%C3%A2niei-2030.pdf>

has a significant amount of natural gas reserves which had only begun to be exploited, offering further space for U.S. investments. At the same time, as Romania strives to strengthen its energy independence and self-sufficiency, the acquisition program of small modular nuclear reactors from NuScale, a U.S. energy company, represents a further area where cooperation is expected to be strengthened in the upcoming years. Other natural resources, which are abundant in Romania, such as oil or coal, can offer further opportunities.

- *High-end technology (such as Agritech and Fintech)*: although the contribution of agriculture to the GDP has been steadily declining in the last decades, barely reaching 4% in 2020, Romania has the highest share of the active population employed in agriculture among EU members. This sector needs further industrialization and automation, which represent important investment opportunities for U.S.-origin companies. While access to digital finance, such as contactless payments, online banking and so on, has had an exponential growth during the pandemic (online payments increased by 80% between 2019 and 2021<sup>10</sup>), there are still segments of the population who are digitally less active, and there is a lot of room for investments in financial inclusion.
- *Defense industry*: although this is among the smallest industry in terms of revenue (2.5%) and employment (0.01%) reached by U.S.-origin companies, the presence of several key U.S. companies such as Lockheed Martin, Raytheon or General Dynamics in Romania's defense sector showcases how efficiently such companies can leverage their expertise and competitive advantage in this area. Defense expenditure of the Romanian Government is confirmed to increase significantly, from 2% to 2.5% of the GDP from 2023 mainly because of the new geostrategic importance of being near the Russia-Ukraine war.

Challenges for U.S. companies in Romania:

- *Compliance costs*: companies entering the Romanian market must be compliant with both local and EU legislation, which can be very different from the standards and regulations in the U.S. In addition to compliance, U.S.-origin companies face stiff competition from companies already established in the EU, whose access to the Romanian market could be easier from a compliance perspective.
- Though Romania offers a highly *skilled workforce*, two related challenges tend to become more important: the low-cost advantage of labor is slowly disappearing, particularly in high value-added jobs (e.g., business functions, research and development, management, IT development), while a shortage of highly qualified personnel (e.g., engineers, managers) already exists in several industries in the most competitive areas of the country.
- The low level of *digitalization* is an important barrier both in the public and private sectors, coupled with relatively lower digital skills and competencies than in other EU countries. While

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<sup>10</sup> <https://www.visa.ro/visa-everywhere/blog/bdp/2022/04/14/tendinte-in-plati-1649940014051.html>

the digital infrastructure is quite developed, the digitalization of public services and businesses, and human upskilling progress at a very slow pace<sup>11</sup>.

- The relatively high level of *perceived corruption* (the situation is slightly improving nevertheless): at present, Romania stands at 45 points out of 100 on the 2021 Corruption Perceptions Index reported by Transparency International (see later Table 44), which induces important uncertainties for the investment profile of Romania.
- The *political and legal-regulatory lack of predictability*: Romania has changed 8 governments between 2016-2022, changing at the same time strategic and economic priorities, which goes against investors' preferences seeking stability and predictability in a host country. Legislative initiatives are more governed by short-term political stances than by a longer-term economic strategy approach.
- The persisting high levels of *bureaucracy* in the public sector and the low transparency in administration further add to the political and legal lack of predictability in Romania.
- Lack of a clearly defined *fiscal policy* with long-term predictability.
- The *development of infrastructure* is taking place at a slow pace. For instance, Romania will barely reach the milestone of 1000 km of motorway by the end of 2022.
- The current *inflation* is relatively high (14.96% as of July 2022, National Institute of Statistics), but it is in the course of stabilization, and the National Bank of Romania expects that it will start a slow decreasing tendency by the end of 2022.

*In conclusion, general opportunities for U.S. companies seeking a presence on the Romanian market include the highly skilled and talented workforce, strong university partnerships for R&D, the favorable geographic location of Romania as a potential relocation option, relatively large market size in the CEE region, but also the strengthening US dollar against the national currency, the Romanian leu.*

*Government related opportunities include the state aid schemes, competitive tax rates and subsidies. Expected infrastructural development funds are another domain where further foreign investors can be attracted. The NextGen EU funds will certainly stimulate further investments in the country in the 2022-2026 period, particularly in sustainability and digitalization.*

*Main challenges on the Romanian market include the shortage and increasing costs of skilled workforce, low level of digitalization, perceived corruption, underdeveloped infrastructure, and high inflation. Regulatory challenges are related to the costs of compliance with local and EU legislation for U.S. companies in Romania, the general political and legal lack of predictability, and high bureaucracy.*

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<sup>11</sup> <https://economedia.ro/grafic-digitalizarea-in-romania-sub-nivelul-marii-tara-noastra-are-cel-mai-redus-ritm-de-crestere-al-indicelui-desi-din-ultimii-sapte-ani-economisti-convergenta-la-nivelul-european-al.html#.Yx3lXnZBxPY>

## 6.2. Opportunities and challenges in the U.S. market

Opportunities for Romanian companies in the U.S.:

- As highlighted in Chapter 2, there is already a growing presence of Romanian *IT&C companies* in the U.S. (16 out of the 22 analyzed Romanian companies present on the U.S. market). IT&C is definitely an area of competitive advantage for Romania because of the highly skilled, English-speaking and relatively low-cost workforce (although the average salary in the sector has increased three-fold over the last ten years in Romania<sup>12</sup>).
- Another opportunity for Romanian companies on U.S. market is represented by the vastly larger spectrum of *financing opportunities*: while in Romania, much like everywhere else in continental Europe, the financing of startups and larger companies is mainly done through the banking sector, in the U.S. there are many venture capital and private equity funds that can enable an efficient and accelerated access to capital. However, one has to bear in mind that during the bearish market of 2022, venture capital and in general growth investing has reduced somewhat in the U.S.
- As the *global supply chains* of multinationals have come under strain in the post-Covid era and as trade tensions between the U.S. and China deepen, coupled with a weakening of China's economic prospects, many companies are starting to pursue a China +1 or China +2 strategy, meaning that there is a growing need for alternative, cost efficient suppliers, coming from other emerging economies than China. With a tenacious foreign policy, Romanian companies could be one of the beneficiaries of this transformation, becoming potential alternative suppliers for U.S. companies.
- While entering a highly *competitive market* can represent an important challenge for Romanian companies (see below), it can also offer access to a large market with good reputation that can represent a key step for companies to become truly global.

Challenges for Romanian companies in the U.S.

- The *cost of compliance* works as a two-way challenge, with Romanian companies having to shift to U.S. standards and regulations.
- The saturation and maturity of many economic industries in the U.S., a highly *competitive economy*: there is simply not a lot of room to compete in most of the markets, dominated by large multinational companies, but also by the frequent emergence of small, innovative startups.
- The high *barriers to entry* of many US markets: the cost of most factors of production such as land, capital and labor is prohibitively high in the U.S. for many Romanian companies.
- While previously we argued that Romanian employees show a good fit to the *culture* of U.S. companies, entering the U.S. market can still represent an important challenge, because of the need of a better understanding of the local market and culture.

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<sup>12</sup> <https://www.zf.ro/eveniment/salariile-programatorilor-s-au-triplat-ultimii-zece-ani-apropie-21041704>

*In conclusion, main opportunities for Romanian companies on the U.S. market are related to the IT&C sector, where entry barriers are lower. There is already a growing tendency in the sector which could attract further Romanian companies active in this industry to enter the U.S. market. General opportunities on the U.S. market include the much larger spectrum of financing opportunities, the reputational consequences of being present in a highly competitive market, and the reorientation of U.S. companies towards alternative suppliers and business partners in light of the U.S.-China trade rivalry. General challenges related to the U.S. market include the very low experience of Romanian companies on the U.S. market, the cost of compliance with U.S. standards and regulations, generally high competitiveness and barriers of entry.*

## Chapter 7: Barriers to trade between the U.S. and Romania

The United States Trade Representative classifies trade barriers in the National Trade Report (NTR) in 14 categories. It is worth mentioning that in their 2022 report, 59 countries and regions were analyzed in detail, but Romania is not among them. In this chapter, we highlight those categories that are significant from the perspective of trade between the U.S. and Romania.

1. Import policies (e.g., tariffs and other import charges, quantitative restrictions, import licensing, pre-shipment inspection, customs barriers and shortcomings in trade facilitation or in valuation practices, and other market access barriers);

Romania's import policies comply with EU regulations, so importing to Romania should not be more difficult (from a taxation point of view) than any other country in the EU. In some cases, the complexity of the regulation can also be a problem, as there are EU regulations and there are regulations that fall under the jurisdiction of the countries (local regulations). In principle, they are harmonized on a certain level, but in practice it is often difficult to navigate between them, making Romania potentially a less favorable destination for the export of certain products (e.g., pharmaceutical products). Of course, this is also true the other way around: Romania, as an EU member state, can export to the U.S. under the same conditions as any other EU member state. The EU's average Most-Favored-Nation (MFN) applied tariff rate was 5.1 percent in 2021. The EU's average MFN applied tariff rate was 11.2 percent for agricultural products and 4.1 percent for non-agricultural products in 2020. The EU has bound 100 percent of its tariff lines in the World Trade Organization (WTO), with an average WTO bound tariff rate of 4.9%. Although EU tariffs are relatively low for non-agricultural goods, some EU tariffs are higher, such as rates of up to 26% for fish and seafood, 22% for trucks, 14% for bicycles, 10% for passenger vehicles, 10% for processed wood products, and 6.5% for fertilizers and plastics.

2. Technical barriers to trade (e.g., unnecessarily trade restrictive or discriminatory standards, conformity assessment procedures, labeling, or technical regulations, including unnecessary or discriminatory technical regulations or standards for telecommunications products);

U.S. exporters face an increase in the technical barriers to trade (TBT) imposed by the EU. This is partly due to various aspects of the EU regulatory process, including that for preparing and adopting post-legislation "implementing and delegated acts". These processes lack the clarity and effectiveness to ensure that technical regulations, guidance, or recommendations under the WTO TBT Agreement are properly communicated to the public for meaningful comment. In bilateral engagements and in the WTO Committee on Technical Barriers to Trade (TBT Committee), the U.S. has frequently expressed concern about the failure to notify in a timely manner certain measures that could have a significant impact on trade, or not at all. As Romania is part of the EU, the same concerns can be formulated towards importing products to Romania. The conformity assessment procedures are generally simpler and easier to follow for EU (and as part of it, Romanian) exporters.

3. Sanitary and phytosanitary measures (e.g., measures applied to protect food safety, or animal and plant life or health that are unnecessarily trade restrictive, discriminatory, or not based on scientific evidence);

According to the 2022 NTR report, the U.S. exporters are concerned about several measures the EU maintains “ostensibly for the purposes of food safety and protecting human, animal, or plant life or health”. Specifically, the U.S. is concerned that some measures unnecessarily restrict trade without furthering safety objectives (as they are not based on science - the report says), are maintained without enough scientific evidence, or are applied beyond the extent necessary. Moreover, as part of the European Green Deal, the EU Commission published its Strategy in 2020 that included targets and policy proposals for enhancing food and agricultural sustainability by 2030. Among other things, these regulations target the reduction of pesticide and fertilizer use, and other antimicrobial substances, and marks the path to an organic agriculture, which could be an exaggeration, and unsustainable from an economic perspective, experts say. In this category, the U.S. regulation is also easier to follow and to comply with.

4. Government procurement (e.g., closed bidding and bidding processes that lack transparency);

The lack of transparency in the government procurement process in some EU member states remains an almost universally mentioned obstacle to U.S. company participation. U.S. companies looking to participate in procurement in the CEE area (and not only) have all expressed concerns about the lack of transparency, including overly narrow definitions of transparent tenders, language and documentation barriers, and implicit bias in favor of local suppliers and state-owned enterprises. The EU Commission's 2014 Anti-Corruption Report concluded that public procurement in EU member states is one of the most vulnerable areas to corruption, where Romania stands out in a negative sense. Nevertheless, there are no major differences in the CEE region in this regard (see Table 44). Companies exporting from Romania to the U.S. also face a similar situation, but the corruption index is lower there and the transparency of public procurement is higher.

5. Intellectual property protection (e.g., inadequate patent, copyright, and trademark regimes; trade secret theft; and inadequate enforcement of intellectual property rights);

Romania adopted a law in 2020 implementing the EU Trademark Directive and the corresponding changes to national trademark laws are positive steps. However, online piracy remains a serious problem. Some notorious online piracy sites are reportedly hosted or registered in Romania. Criminal enforcement of intellectual property (IP) rights remains generally inadequate, raising questions about Romania’s commitment to vigorous enforcement, which is reflected in the lack of meaningful sanctions. Low penalties for IP infringement make investigations more difficult and do not provide a meaningful deterrent to further IP crime. Romania lacks an effective and timely mechanism for rights holders to submit requests to remove online marketplaces and hosting platforms for infringing material. Adequate resources are also needed to improve the quality of law enforcement, including additional training for law enforcement officers and funding for prosecutors. In this regard, U.S. regulation and its enforcement are much more advanced.

6. Digital trade and electronic commerce (e.g., barriers to cross-border data flows, including data localization requirements, discriminatory practices affecting trade in digital products, restrictions on the provision of Internet-enabled services, and other restrictive technology requirements);

EU’s General Data Protection Regulation (GDPR) took effect in 2018. The GDPR restricts the transfer of the personal data of EU “data subjects” outside of the EU, except to specific countries that the EU has determined they provide adequate data protection under EU law or when other specific requirements are met, such as



the use of standard contractual clauses (SCCs) or binding corporate rules. Data flow restrictions have significant implications for the conditions under which many services are provided across borders and the enabling of functions embedded in smart goods (i.e., smart devices). Due to the EU's assertion of the GDPR's extraterritorial jurisdiction, and the far-reaching effects of the GDPR on many sectors of the economy, U.S. companies have expressed concern that clear and consistent guidance on the implementation and enforcement of the GDPR is still needed. Privacy regulations in the U.S. are less restrictive.

7. Investment barriers (e.g., limitations on foreign equity participation and on access to foreign government-funded research and development programs, local content requirements, technology transfer requirements, export performance requirements, and restrictions on repatriation of earnings, capital, fees and royalties);

Investment barriers are primarily related to FDI but can make trade relations between the two countries more difficult as well, given that foreign trade often takes place through foreign-owned companies (e.g. sales agencies, trade offices). In terms of investments, the uncertainty and unpredictability of the legal, tax and regulatory system has always been an obstacle for foreign investors in Romania. Perceptions of corruption, expected tax policy changes, lack of infrastructure and unpredictability of political priorities remain the main obstacles for foreign investment in Romania. Changing political priorities and lack of capacity have resulted in persistent underinvestment in infrastructure, well below EU standards. Many businesses report long delays in the VAT refunds they are legally entitled to, claiming that statutory deadlines for processing and paying their refunds are often missed. As the U.S. is economically a more developed country than Romania, these issues are less frequent in the U.S., so Romanian FDI flows to the U.S. are less frequently faced with such barriers.

For Romanian companies, however, there are some other, more micro-level barriers that further pose a challenge to international trade with the U.S.:

- Visa requirements for Romanian entrepreneurs and the long administrative processes of visa application in the country make it difficult for Romanian entities to do business with the U.S.
- In several cases, Romanian companies report that the level of economic value created through their products and services are less attractive on the U.S. market, undermining their commercial viability. Software and service companies, however, represent a good example of how these barriers can be dealt with.
- The long and excessive bureaucracy detailed in the previous section is also a barrier to trade, lengthening processes especially in relation with public authorities (e.g., customs duties, VAT reimbursement).
- The lack of a free trade agreement between the EU and the U.S. which would automatically improve the trade position of Romania as well.

*In conclusion, from 14 trade barrier categories identified by the United States Trade Representative, 7 also apply to Romania. These obstacles include (1) Romania's compliance with EU import policies, (2) differences in technical regulations, (3) stricter sanitary and phytosanitary measures in the EU, (4) lack of transparency in the governmental procurement processes in Romania, (5) insufficiency of intellectual property protection, (6) non-*

*permissive digital and e-commerce regulations, and (7) difficulties of investing into entities to facilitate trade between the two countries. Furthermore, Romanian businesspersons are subject to visa restrictions, their products are frequently less appealing to U.S consumers, and the absence of a free trade agreement between the U.S. and the EU adds to the already burdensome trade bureaucracy.*

## Chapter 8: Policy recommendations to strengthen U.S.-Romanian economic relations

Our policy recommendations mainly concern the elimination of trade barriers (which are not due to EU regulations) and easing the market-related challenges, while including several issues identified during company interviews. This chapter begins with a general summary of Romania's economic situation in terms of foreign trade and investments to understand where Romania stands now, after which we formulate our specific recommendations. These proposals focus primarily on Romania, because in most cases the trade and investment barriers are much higher (except from fiscal barriers) on the Romanian side than on the side of the U.S.

### *Romania's economic status in 2022 from a U.S. perspective*

Romania has managed to recover quickly after the negative effects of the pandemic, recovering entirely the covid-related GDP losses by the second quarter of 2021 (National Institute of Statistics). Thus, Romania's GDP reached a record level of 284 billion USD in 2021, 34 billion USD more than in 2020, when the peak of the economic crisis caused by the COVID-19 pandemic was reached. However, it seems that the impact that the pandemic had on the economy will have longer lasting effects at least until the last quarter of 2022 and could potentially be felt even during 2023, magnified by the economic consequences of the Russia-Ukraine war. Specialists claim that between 2022 and 2023, Romania will face three major challenges: budget deficit, current account deficit and inflation:

- *Budget deficit:* Romania's budget deficit in the past 10 years has typically been around 3% of the GDP (with 7 years under 3%, and 5 years above 3%). The pandemic and the related crisis management efforts have significantly increased the deficit to 9,61% in 2020 and 6,72% in 2021. Moreover, in 2022 Romania is expected to see one of the largest budget deficits in the EU, which could be around 7% of GDP.
- *Trade account deficit:* Romania's trade balance deficit increased by 4.3 billion USD (+29%) in 2021, compared to 2020. More precisely, it amounted to 26.77 billion USD (10% of Romania's GDP). In this regard, U.S. trends are similar, with growing external trade and growing deficits. At the level of the current account deficit, Romania registered a deficit of 17.29 billion USD in 2021, 54.4% higher than in 2020. The current account deficit highlights a structural imbalance at the level of savings and investments. The current account includes, in addition to the trade balance, production income and net unilateral transfers from abroad.
- *Inflation:* inflationary pressures are present essentially in all global economies in 2022, and Romania is no exception. In 2021, the inflation rate was 8.2%, while in 2022 it will certainly exceed 10% (July 2022 statistical figures are already close to 15%).

Even though none of the three challenges are local effects (the U.S. also having to deal with them), they still limit the Government's scope for reforms, which inevitably cost money. At the same time, the most important reforms can and must be made precisely during recessions, so that the country can recover from these periods faster, supported by the necessary reforms and measures.

As already mentioned, the Russia-Ukraine war induces further uncertainties for the short-term evolution of the Romanian economy. However, after the first half of 2022, it is still too early to estimate the impact that

the war will have on the economies of Eastern Europe. These consequences, such as the energy crisis, will be felt in Romania, even if imports and exports between Romania and the two countries at war are at the bottom of the top of Romania's international trading partners. Therefore, we primarily base our recommendations on the analysis of data concerning the period prior to the start of the war.

The latest data published by the National Institute of Statistics show that Romania is on the right track and it recovered (from an economic point of view) from the stress caused by the COVID-19 pandemic. Nevertheless, the country might face an economic recession in the near future, or in a better case scenario, a considerable slowdown of economic growth.

In 2021, total exports in Romania amounted to 84,405 million USD, 11% more than the value of exports in 2020. 72.4% of the value of these exports (60,772 million USD) were intra-EU exchanges. Regarding imports, a similar increase of 12% can be observed in comparison to 2020. 2021 imports amount to a total of 111,184 million USD, out of which 77,688 million USD are related to EU27 countries, and a total of 93,394 million USD to European countries in general.

Germany remained Romania's most important trading partner in 2021, with imports and exports between the two countries amounting to 34 billion USD, with an increase of 12.3% compared to 2020. In comparison, the U.S. had a total trade with Romania of 4,3 billion USD in 2021.

#### *Policy recommendations based on statistical and interview data*

Our recommendations can be divided into 4 categories:

##### 1. Political predictability

As mentioned in previous chapters, Romania's lack of political predictability is a major barrier for foreign trade and investments. Romania has changed 8 governments between 2016 and 2022, changing at the same time strategic and economic priorities. With no clear economic strategies, willingness for investment will likely be smaller than its real potential. By way of comparison, Hungary, which has a stable government (but also with a high rate of corruption) but has an economic strategy, manages to attract significant investments. Of course, it is difficult to formulate political stability as a recommendation because it is always a of democratic elections. Nevertheless, the adoption of laws that lay down fundamental long-term economic strategies is imperative. The proper consultation of the business sector and other relevant stakeholders prior to important fiscal and other legislative changes will ensure the long-term viability of legislative initiatives.

##### 2. Providing favorable performance conditions for companies

From the perspective of both foreign trade and investments, it is of particular importance what the entrepreneurial conditions are in the partner / host country. In this respect, Romania ranks on an average place in the CEE region, but lags both Western Europe (for example, Germany, which is its largest trading partner) and the U.S. To assess entrepreneurial conditions, three widely used indicators are analyzed for Romania and the benchmark countries: the corruption index, the ease of doing business index and the competitiveness index.

a) *Corruption index*

Since 1995, Transparency International has been publishing its annual Corruption Index, which shows the level of corruption in countries based on expert estimates and public opinion polls. Its value usually estimates political corruption as a means of abusing public power for one's own ends. The 2021 corruption index, published in January 2022, currently ranks 180 countries on a scale from 100 (very clean) to 0 (highly corrupt) based on the assessment of the situation between 1 May 2020 and 30 April 2021 (Table 44).

The corruption index in Romania has not changed much in the last 10 years, its value increased from 37 to only 45, which nevertheless shows a positive trend in fighting corruption. All the benchmark CEE countries (except for Hungary) improved their corruption index since 2010, though a slight decline is observable in the last 4-5 years in most of these countries. According to the latest value of the index, among the benchmark CEE countries, only Bulgaria and Hungary are considered more corrupt than Romania. The main causes of corruption in Romania are related to the lack of sufficient staff, physical space and technology to enable the judiciary to act quickly and efficiently, resulting in excessively long trials. The Romanian Government generally respects judicial independence and impartiality. Some prosecutors and judges, however, have complained that the media and politicians' statements have damaged their professional reputation. Despite some positive developments, the report concludes that corruption in Romania is significant, and the fight against it often fails.

Table 44. *The evolution of the Corruption Index in Romania and benchmark countries*

Corruption index	Romania	Bulgaria	Czechia	Hungary	Poland	Slovakia	Germany	United States
2010	37	36	46	47	53	43	79	71
2011	36	33	44	46	55	40	80	71
2012	44	41	49	55	58	46	79	73
2013	43	41	48	54	60	47	78	73
2014	43	43	51	54	61	50	79	74
2015	46	41	56	51	62	51	81	76
2016	48	41	55	48	62	51	81	74
2017	48	43	57	45	60	50	81	75
2018	47	42	59	46	60	50	80	71
2019	44	43	56	44	58	50	80	69
2020	44	44	54	44	56	49	80	67
2021	45	42	54	43	56	52	80	67

Source: Transparency International

b) *Ease of doing business*

The Ease of doing business index is an indicator calculated annually by the World Bank, which examines the laws, decisions and business environment that regulate the business, establishment, and management opportunities of the 185 countries examined, as well as the operating environment for companies and enterprises. Economies with a high rank (1 to 20) have simpler and friendlier regulations for businesses. The Ease of doing business index is clearly the most favorable in the U.S. among the surveyed countries. Romania and the CEE region are not doing very well in this respect, as the high value of the index shows that it is relatively difficult to do business in this region (Table 45). The value of the index in Romania in 2021 was 56, and it has deteriorated in the last 10 years, from a value 32 in 2010. This is also the worst indicator in the CEE region, which does not favor FDI. In Germany, for example, this indicator is 20. There are complex reasons for the poor indicator value, but the high degree of bureaucracy and the stuttering and unpredictable tax system deserves to be highlighted.

Table 45. *The evolution of Ease of Doing Business in Romania and benchmark countries*

<b>Ease of doing business</b>	<b>Romania</b>	<b>Bulgaria</b>	<b>Czechia</b>	<b>Hungary</b>	<b>Poland</b>	<b>Slovakia</b>	<b>Germany</b>	<b>United States</b>
<b>2010</b>	32	57	70	46	59	43	19	4
<b>2011</b>	32	59	64	51	62	48	19	4
<b>2012</b>	33	57	68	52	48	43	19	4
<b>2013</b>	35	58	75	54	45	49	21	7
<b>2014</b>	37	36	33	40	28	29	15	7
<b>2015</b>	35	37	26	40	25	30	14	7
<b>2016</b>	36	39	27	41	24	33	17	8
<b>2017</b>	45	50	30	48	27	39	20	6
<b>2018</b>	52	59	35	53	33	42	24	8
<b>2019</b>	55	61	41	52	40	45	22	6
<b>2020*</b>	56	62	41	52	40	45	21	6
<b>2021*</b>	56	62	42	52	41	46	20	6

Source: World Bank; \* own estimation

### c) Competitiveness index

The Global Competitiveness Reports assesses 140 world economies. The index is calculated based on 98 variables, from a combination of data from international organizations as well as from the World Economic Forum's Executive Opinion Survey. The variables are organized into twelve pillars such as: institutions; infrastructure; IT&C adoption; macroeconomic stability; health; skills; product market; labor market; financial system; market size; business dynamism; and innovation capability. The competitiveness index varies between 1 and 100, higher average score representing higher degree of competitiveness. In this regard, the gap between Romania and neighboring countries is smaller and has improved significantly over the last 5 years. The main reasons for the improvement are the significant expansion of the IT&C sector and increasing innovation within the country. At the same time, this is the business indicator in which the CEE region lags advanced economies such as the U.S or Germany to the smallest extent (Table 46).

Table 46. The evolution of the Competitiveness index in Romania and benchmark countries

Competitiveness index	Romania	Bulgaria	Czechia	Hungary	Poland	Slovakia	Germany	United States
2017	62,18	62,38	70,9	63,43	67,92	66,28	82.64	84.84
2018	63,46	63,56	71,18	46,31	68,16	66,84	82.84	85.64
2019	64,36	64,9	70,85	65,08	68,89	66,77	81.8	83.67
2020*	65	66	71	65	69	67	82	84
2021*	65	66	71	65	70	68	82	84

Source: World Economic Forum; \* own estimation

Taking the three metrics together, we can understand why a long-term and predictable strategy is necessary to increase Romania's competitiveness and business-friendliness. The predictable and transparent tax system, the predictability of minimum wage increases, the digitalization of the public sector (e.g., full digitalization and simplification of the fiscal system) and effective fight against corruption can all contribute to Romania being able to attract more foreign (including U.S.) investment and trade. Furthermore, a higher emphasis on offering real support to, and investments in, education, research and development activities, an area for which many complaints are formulated by the business sector, could help in counterbalancing the diminishing low-cost of labor and could attract more high value-added economic activity.

#### 3. Predictable and competitive tax system

Significant competition has developed in the region for attracting FDI, as this is precisely one of the keys to the further dynamic development of the CEE economies. This competition between countries often boils down to which CEE country can provide a better tax benefits system.

In recent years, even though Romania was able to attract significant FDI, in most cases it lost this competition to Poland or Hungary. On the one hand, the political will to attract FDI is stronger in these countries, and on the other hand, it is closely related to the shortcomings of the infrastructure in Romania relative to the benchmark CEE countries. Often, the governments of the neighboring countries also give the largest possible concessions to important foreign investors, while the transport and other infrastructure in those countries is significantly better, thus having a clear advantage over Romania. With the further development of the infrastructure and with a thorough economic development strategy, there is plenty of potential for Romania to become more attractive for foreign investors.

#### 4. Infrastructure

Transport infrastructure is the backbone of any national economy, being one of the most important factors in development and in attracting FDI. From a more applied economic perspective, transport infrastructure reduces the total cost of transporting goods and passengers, optimizes distances between economic zones, reduces transport distance and time, supports the production and distribution of goods and services and factors of production (raw materials, workforce, etc.), and significantly increases the accessibility of the territory, removing important regions from economic isolation. Unfortunately, in this respect, Romania is far behind the benchmark CEE countries, being at the same time on the last place in the EU for the quality of its infrastructure. As of April 21, 2022, Romania had approximately 959 kilometers of highways and expressways, and it has a railway network in very poor conditions. For example, Poland has been more active in infrastructural development since the beginning of the transition, and since 2008, it has accelerated the pace of investments in road infrastructure. By 2006, Poland and the Czech Republic were neck and neck in terms of investment in transport infrastructure with investments of around 4% of their GDPs. During this period, Romania invested less than 2% of its GDP in infrastructure. Since 2008, Poland has moved to the top of the countries in terms of infrastructure investments, even during the economic crisis. For example, in 2010, Poland had managed to invest 10.01% of its GDP in road infrastructure, compared to 1.94% in the case of the Czech Republic and 2.46% in the case of Romania. Romania, on the other hand, remained at a constant level throughout the period between 2000 and 2020, with a percentage of GDP invested in road infrastructure between 1.55% in 2000 and a maximum of 5.23% in 2013. In 2021, Romania was investing only 2% of its GDP in road infrastructure. In other words, Romania allocated, between 2000 and 2021, a maximum of 5.23% for investments in road infrastructure, while Poland allocated over 10% of the GDP, almost twice as high than the maximum value in Romania.

It is therefore clear that one of the main challenges to Romania's competitiveness is its poor infrastructure, and, in most cases, this is also the main bottleneck in attracting FDI to Romania. The poor quality of infrastructure can be mostly explained by the fact that the government allocated relatively low financial resources for investments, and on the other hand, by the fact that corruption was dominant in this area. Consequently, the solution would be the allocation of more funding, and special attention to the transparent and justified use of these investments.

*In conclusion, four major types of recommendations are defined related to the Romanian economic situation, based on the existing economic outlook of Romania and the state of economic relations between the U.S. and Romania:*



*(1) Improving political predictability: adoption of laws based on a long-term national economic strategy, developed in consultation with the business sector and other stakeholders.*

*(2) Improving performance conditions for companies: recommendations include the predictability of the tax system, the digitization of the public sector, effective fight against corruption and increased support for education, research and development.*

*(3) Competitive fiscal policies: to keep up with the wider CEE region in attracting FDI to Romania.*

*(4) Development of infrastructure: as one of the most important location factors for multinational companies and as a backbone of any national economy, more governmental funds need to be allocated to its improvement.*

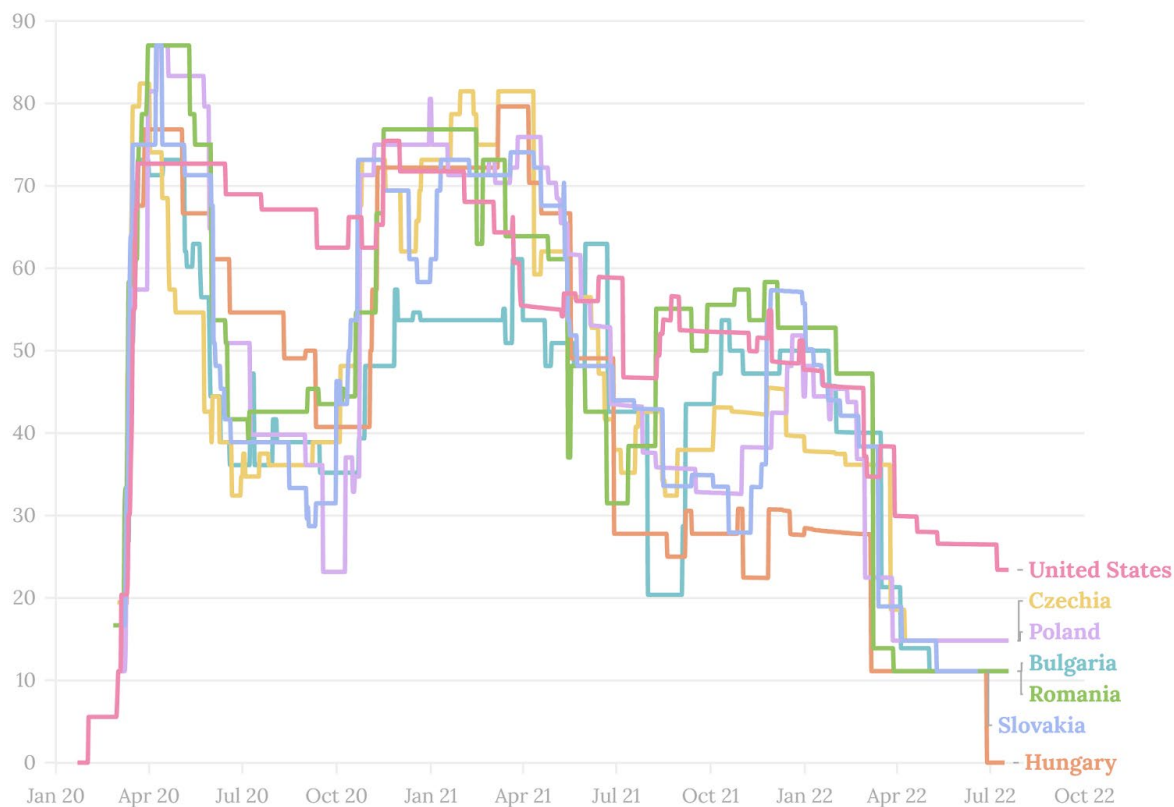
## **Chapter 9: The effect of the Covid-crisis, the U.S. - China trade rivalry, and the Russia-Ukraine war on the economic relations between the U.S. and Romania**

This section is dedicated to the analysis of three global phenomena that have overarching economic consequences globally, but at the same time might influence the economic relations between the U.S. and Romania. Although these crises are unfortunately still ongoing, and therefore our results can only be considered preliminary, obviously Covid-19 and the war in the Romania's vicinity both took a toll on investment activity in general and on the inflow of FDI into Romania in particular. The latest sub-trend showing U.S. FDI figures during 2019-2021 (according to BEA data) seems to confirm this negative trend (Figure 1).

The harshest part of the Covid-19 crisis was undoubtedly the lockdown period of the first few months of the Covid-19 pandemic. The first positive Covid-19 case in Romania was documented on February 26, 2020 and beginning from the middle of March a general lockdown and martial law was put in place until the middle of May, similar to the restrictions put in place in many other parts of the world, including the U.S. (Figure 37). During this period, only essential businesses remained open and the factories of many large manufacturers were temporarily closed. Specifically, the Ford Craiova plant had been closed for 40 working days between March and May 2020, and Emerson Cluj implemented their work-from-home policy right away.

Even though the large car manufacturers like Ford and Dacia were the first to close their production during the lockdown, they were also the first to restart production and implement the corresponding safety measures in their processes. Ford Craiova had even switched over part of their production processes to manufacture the much-needed protective glasses against Covid-19.

## Evolution of government stringency



Data source: University of Oxford

Figure 37. Evolution of government stringency in 2020-2021 in Romania, the U.S., and the benchmark countries of the CEE region

The economic effects of the Russia-Ukraine war seem to be a bit milder, at least up until September 2022. The consensus among economic forecasters is that despite the war, Romania will have a significantly positive economic growth of about 3.5-4% in 2022 which is considerably better than the -3.5% recession that the economy had in 2020 because of the pandemic<sup>13</sup>.

Overall, FDI into Romania has grown by 34% in the first four months of 2022, the flow of FDI reaching a cumulative value of 3.15 billion euros, compared to 2.35 billion euro in the similar period in 2021, according to the National Bank of Romania. This shows that investors were not avoiding Romania, despite its proximity to a war zone.

Contrary to certain heavily energy-intensive businesses such as Azomureş (fertilizer production) or TMK Artrom (steel pipes production), that have a high demand for Russian gas in their production processes (Azomureş), or were hit as a collateral damage of the sanctions against Russia (TMK Artrom), representative U.S.-origin plants (Ford, Emerson, Timken, etc.) were not forced to put their production on hold.

<sup>13</sup> <https://economedia.ro/grafic-criza-din-2008-vs-perioada-pandemie-razboi-inflatie-criza-energetica-in-patru-indicatori-relevanti-pentru-prognoza-economica-ne-pregatim-sau-nu-pentru-recesiune.html#.Yx4AtnZBxPY>

Beside its clearly negative consequences, both in an economic and social sense, the proximity to the war zone constitutes at the same time an opportunity for the reorientation of certain U.S. investments from the war-torn Ukraine into Romania, especially in the IT&C or automotive industry. For example, Aptiv, an Ireland-based automotive technology supplier, has already moved its operations out of Ukraine into their existing facilities in Poland, Romania, and Serbia.

Finally, it cannot be ignored that the U.S. and China are engaged in an ongoing trade dispute that has become increasingly tense. Because of the importance of the two nations in world trade, the dispute affects not only the economies of the two countries involved, but also the entire world.

Historically, the U.S. has long been the main country the EU traded with, but this changed in 2020. A rapid increase of 26.7 billion USD for Chinese imports, on top of which an increase of 5.3 billion USD of EU exports, has officially turned China into EU's largest trading partner. We should also mention that the EU buys more from China than it sells. Exports worth 245 billion USD are just over half (52%) of what the EU imports. Therefore, the EU has a growing trade deficit, and this is also happening in Romania at the level of trade relations with China. In 2020, 5.5% of Romania's imports came from China, while only 0.89% originated from the U.S. (Figure 11). In the case of exports, however, this ratio is reversed, 2.1% of exports are sent to the U.S., while only 1.5% are sent to China (Figure 12).

Economies that have a high domestic demand, a small exposure to China or the U.S, or those that have more restrictions for the access of foreign investors to their markets are more protected from the effects of the trade dispute. So is the case of Romania. Nevertheless, Romania is still affected by this trade rivalry because it entailed a general price increase in certain sectors (e.g., steel), which had a direct impact on the Romanian economy.

*In conclusion the Covid-crisis had a significant impact on U.S.-origin companies active in Romania, especially in the manufacturing sector during the lockdown. These effects were successfully overcome, but certain global trend shifting effects (e.g., new safety measures, work-from-home policies) and decreased FDI flows persist.*

*The Russia-Ukraine war seems to have a less significant economic impact on Romania than the pandemic, and a serious recession still seems avoidable. Nevertheless, the economic uncertainties caused by the war will slow down economic growth in Romania and could potentially harm future perspectives.*

*The U.S.-China trade dispute has primarily global consequences, Romania having small economic exposure to both countries. Nevertheless, global price increases can be felt on the Romanian market as well and can pose a challenge to the further development of economic relations between the U.S. and Romania.*

## Appendix

Table 47. Total trade of Romania in goods and services (million USD)

	Exports of goods	Exports of services	Total exports	Imports of goods	Imports of services	Total imports
2010	49,917	10,845	60,762	62,622	8,775	71,397
2011	58,580	11,423	70,003	71,074	9,247	80,321
2012	59,586	12,915	72,501	72,323	9,677	82,000
2013	68,158	18,367	86,525	76,072	11,922	87,994
2014	63,479	20,170	83,649	70,806	12,345	83,151
2015	59,306	19,715	79,021	68,386	11,886	80,272
2016	60,124	20,141	80,265	70,571	11,733	82,304
2017	75,211	24,429	99,640	90,770	15,225	105,995
2018	77,645	27,922	105,567	94,976	18,111	113,087
2019	77,724	30,749	108,473	97,205	20,919	118,124
2020	75,945	27,901	103,846	98,417	16,822	115,239
2021	84,405	32,782	117,187	111,184	21,706	132,890

Source: National Institute of Statistics, Romania, National Bank of Romania

Table 48. Total trade of the U.S. in goods and services (million USD)

	Exports of goods	Exports of services	Total exports	Imports of goods	Imports of services	Total imports
2010	1,290,278	582,041	1,872,318	1,938,952	436,456	2,375,408
2011	1,498,886	644,665	2,143,551	2,239,885	458,188	2,698,074
2012	1,562,630	684,823	2,247,453	2,303,749	469,610	2,773,359
2013	1,593,708	719,413	2,313,121	2,294,247	465,736	2,759,982
2014	1,635,563	757,051	2,392,615	2,385,480	491,086	2,876,566
2015	1,511,381	769,397	2,280,778	2,273,249	498,305	2,771,554
2016	1,457,392	783,431	2,240,823	2,207,194	513,088	2,720,281
2017	1,557,003	837,474	2,394,477	2,356,346	548,475	2,904,821
2018	1,676,913	865,549	2,542,462	2,555,662	565,395	3,121,057
2019	1,655,098	891,177	2,546,276	2,512,358	593,594	3,105,952
2020	1,432,218	726,433	2,158,651	2,346,103	466,537	2,812,640
2021	1,761,364	795,273	2,556,638	2,851,660	550,025	3,401,685

Source: U.S. Census Bureau, United Nations COMTRADE Database, U.S. Bureau of Economic Analysis

Table 49. Romanian trade in services (million USD)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Manufacturing services on physical inputs owned by others</b>	1,664	1,987	1,938	3,107	3,384	3,050	2,922	3,372	3,446	3,374	2,882	2,922
<b>Maintenance and repair services n.i.e.</b>	0	0	0	351	321	324	336	391	411	459	440	426
<b>Transport</b>	2,699	2,961	3,286	5,195	5,871	6,185	6,148	7,221	8,110	9,053	7,924	8,936
<b>Travel</b>	1,191	1,340	1,495	1,876	1,939	1,906	1,958	3,047	3,376	3,632	1,482	3,273
<b>Construction</b>	709	434	369	570	552	450	449	529	549	592	593	643
<b>Insurance services</b>	42	125	163	131	75	88	68	47	38	97	113	81
<b>Financial services</b>	132	183	316	333	321	272	276	316	394	381	353	384
<b>Charges for the use of intellectual property n.i.e.</b>	482	233	354	121	136	93	69	73	101	111	137	91
<b>Telecommunications, computer, and information services</b>	1,664	1,629	2,013	2,564	2,982	3,140	3,604	4,507	5,630	6,354	7,207	8,219
<b>Other business services</b>	2,128	2,364	2,795	3,985	4,432	4,049	4,159	4,815	5,745	6,543	6,648	7,570
<b>Personal, cultural, and recreational services</b>	101	122	99	49	61	84	81	87	120	125	97	201
<b>Government goods and services n.i.e.</b>	35	43	85	80	93	76	73	24	4	30	25	38
<b>Total export of services</b>	10,845	11,423	12,915	18,367	20,170	19,715	20,141	24,429	27,922	30,749	27,901	32,782
<b>Manufacturing services on physical inputs owned by others</b>	163	156	166	198	222	211	229	218	212	188	158	179
<b>Maintenance and repair services n.i.e.</b>	0	0	0	266	328	354	296	354	366	348	319	297
<b>Transport</b>	1,603	1,772	1,738	1,927	2,130	2,175	2,140	2,741	3,442	4,125	3,132	3,956
<b>Travel</b>	1,714	1,852	1,867	2,032	2,452	2,313	2,480	4,332	5,308	6,091	3,179	5,193
<b>Construction</b>	512	334	483	274	147	139	117	101	101	85	76	83
<b>Insurance services</b>	238	338	382	368	308	253	245	230	257	250	265	353
<b>Financial services</b>	411	571	595	790	447	347	276	194	244	197	290	623
<b>Charges for the use of intellectual property n.i.e.</b>	467	455	459	893	878	864	801	906	955	951	911	1,033

<b>Telecommunications, computer, and information services</b>	1,176	1,007	913	1,226	1,300	1,436	1,510	2,154	2,450	2,854	3,198	3,601
<b>Other business services</b>	2,069	2,318	2,510	3,748	3,910	3,600	3,467	3,834	4,648	5,622	5,162	6,250
<b>Personal, cultural, and recreational services</b>	276	308	437	54	58	60	69	101	110	117	61	62
<b>Government goods and services n.i.e.</b>	144	130	124	147	160	134	103	58	14	93	67	74
<b>Total import of services</b>	8,775	9,247	9,677	11,922	12,345	11,886	11,733	15,225	18,111	20,919	16,822	21,706

Source: National Bank of Romania

Table 50. U.S. trade in services (million USD)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Manufacturing services on physical inputs owned by others</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Maintenance and repair services n.i.e.</b>	13,111	14,739	14,944	15,720	17,978	19,847	21,587	23,239	28,036	27,671	13,196	12,526
<b>Transport</b>	76,357	82,930	88,238	89,999	90,687	84,434	81,779	86,342	93,107	91,058	57,168	65,777
<b>Travel</b>	130,315	142,197	153,921	170,979	180,265	192,602	192,868	196,469	200,724	198,982	72,481	70,214
<b>Construction</b>	2,951	3,187	3,234	2,213	2,070	2,759	1,690	2,053	2,842	3,161	2,395	3,129
<b>Insurance services</b>	14,854	14,673	15,978	15,653	16,624	15,763	16,663	18,976	19,118	18,579	20,277	22,741
<b>Financial services</b>	86,512	101,077	105,419	109,794	119,933	115,688	117,249	131,733	136,273	142,546	151,033	171,740
<b>Charges for the use of intellectual property n.i.e.</b>	94,968	107,053	107,869	113,824	116,380	111,151	112,981	118,147	114,819	122,533	115,558	124,613
<b>Telecommunications, computer, and information services</b>	26,556	29,376	33,522	36,325	38,629	41,427	43,122	47,657	49,245	55,742	56,456	59,797

<b>Other business services</b>	99,5 95	108, 423	118, 451	122, 166	132, 240	141, 421	153, 089	167, 270	176, 540	186, 178	195, 046	217, 426
<b>Personal, cultural, and recreational services</b>	17,6 12	19,5 38	21,0 98	20,8 88	22,5 51	24,2 20	23,6 26	25,6 64	22,7 15	22,1 92	20,8 20	23,9 15
<b>Government goods and services n.i.e.</b>	19,2 10	21,4 70	22,1 48	21,8 52	19,6 93	20,0 87	18,7 77	19,9 24	22,1 31	22,5 35	22,0 03	23,3 94
<b>Total export of services</b>	582, 041	644, 665	684, 823	719, 413	757, 051	769, 397	783, 431	837, 474	865, 549	891, 177	726, 433	795, 273
<b>Manufacturing services on physical inputs owned by others</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Maintenance and repair services n.i.e.</b>	5,85 7	7,16 8	7,07 8	6,67 4	6,73 2	8,08 4	7,59 5	6,79 6	7,35 4	8,71 6	6,20 3	7,98 2
<b>Transport</b>	88,3 94	95,0 27	99,3 23	94,4 34	99,8 10	99,5 57	92,3 91	96,5 15	110, 441	112, 813	72,7 63	105, 255
<b>Travel</b>	85,1 66	86,6 23	90,3 40	91,1 19	96,2 48	102, 664	109, 155	117, 931	125, 717	132, 271	34,1 59	56,8 51
<b>Construction</b>	2,57 8	3,02 5	3,34 0	2,58 3	2,31 4	3,01 2	1,76 8	1,95 0	3,07 7	1,36 1	1,13 1	1,49 5
<b>Insurance services</b>	63,4 52	58,2 77	58,7 47	52,9 09	52,9 15	50,3 00	52,7 90	53,2 67	43,7 97	51,2 19	57,6 73	59,3 77
<b>Financial services</b>	27,2 15	30,3 12	28,7 36	29,2 84	32,7 70	32,6 86	33,1 42	37,9 52	41,3 36	44,3 60	45,3 14	49,5 29
<b>Charges for the use of intellectual property n.i.e.</b>	31,1 16	32,9 11	35,0 61	35,2 95	37,5 62	35,1 78	41,9 74	44,4 05	42,7 36	42,2 73	47,7 08	43,3 42
<b>Telecommunications, computer, and information services</b>	29,4 21	32,8 32	33,2 85	35,8 68	38,4 61	38,8 15	39,7 20	43,0 91	41,7 01	42,7 68	39,7 28	43,1 42
<b>Other business services</b>	65,9 03	74,0 82	78,6 78	84,0 24	90,7 16	95,1 19	100, 505	106, 991	107, 435	112, 496	112, 979	129, 601
<b>Personal, cultural, and</b>	5,39 3	6,63 6	7,16 0	8,20 5	9,32 3	11,3 58	12,5 44	17,5 30	18,8 25	21,3 16	24,3 25	28,3 04



recreational services												
<b>Government goods and services n.i.e.</b>	31,960	31,293	27,861	25,341	24,236	21,531	21,503	22,047	22,975	24,000	24,553	25,147
<b>Total import of services</b>	436,456	458,188	469,610	465,736	491,086	498,305	513,088	548,475	565,395	593,594	466,537	550,025

*n.a.* - Transactions are possible, but data is not available.

Source: U.S. Bureau of Economic Analysis

