

THE CONTRIBUTION OF FOREIGN DIRECT INVESTMENT TO THE DEVELOPMENT OF ROMANIA'S TRADE IN SERVICES¹

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Abstract: During the last three decades, foreign direct investment (FDI) inflows have made an important contribution to the Romanian economic transformation. The recognition of their positive impact on the economic development has been sustained by favourable national investment policies, while the investing companies have been attracted by the Romanian market advantages. The paper highlights that the service sector in Romania experienced the most important growth, one of its determinant factors being the FDI it benefited from, so that this sector came to have a considerable support to the added value in GDP, employment and total foreign trade. The main objective of the paper is to emphasize the contribution of FDI to supporting Romania's trade in services, developed in a quantitative analysis focused on the evolution of indicators regarding FDI in services and service exports of foreign companies investing in Romania. This investigation is doubled by a qualitative search of the factors that have attracted FDI in the service industries and also the FDI effects particularly on the information and communication technology, professional, financial, telecommunications and trade services. The final remarks in the last part of this paper underline the dependence of the service sector of Romania on FDI, this relationship continuing to bring many benefits to the Romanian trade in services and thus sustaining GDP and employment and also enabling access to new technologies in services, but at the same time exposing the service sector to some potential vulnerabilities.

Key-Words: foreign direct investment, services, trade in services, Romania, economic development.
JEL Classification: E22, F23, F43, F63, L8.

1. Introduction

During the last decades, an important contribution to the economic development of many developing and emerging countries have been played by the foreign direct investment (FDI) inflows, mainly due to their role in facilitating the transfer of capital, technology, know-how, modern management processes and access to foreign markets. FDI inflows have been essential for service sector development of many countries, due to their role in providing financial support for enhancing infrastructure, technology transfer and employment opportunities. In recent decades, the service sector has seen a number of important transformations in all countries, many of which being influenced by increased FDI flows. The most relevant ones are related to the market liberalization for service businesses, as well as to the development of new technologies and their intensive use in international trading of services.

However, the effectiveness of FDI in service sector growth has been deeply related to national influencing factors, such as (i) the national policies and institutional governance, favourable to attract, maintain and multiply FDI inflows in all industries and boost long-term economic growth (Akyüz, 2017; Adalakun and Ogujiuba, 2023; Bertrand et al., 2024); (ii) the characteristics of national markets, mainly related to endowments with competitive resources, especially human capital, and the market size (Joo et al., 2022). Due to their quality in bridging the gap between domestic savings and investment needs, particularly in developing and emerging economies, FDI inflows have helped in developing the industries and infrastructure and thereby boosting overall economic growth (Alfaro and Chauvin, 2017; Adalakun and Ogujiuba, 2023).

For many years, most of the FDI has been made by multinational companies (MNC), whose global investment strategies have integrated the transfer of advanced technologies, processes and knowledge. All these

¹ This article further capitalizes on the field of the author's doctoral thesis entitled "The role of foreign investments in the economic recovery of Romania".

have helped local industries, especially in the services field, in improving their productivity and efficiency, and also in leading to innovations that stimulate their competitiveness on the global market. FDI has been widely recognized for its significant contribution to the host country employment market by creating direct jobs within foreign companies and stimulating indirect employment through the local supply chains. Moreover, FDI has often led to the establishment of new businesses and the expansion of existing ones, which create employment opportunities, the service industries being a preferred destination in this respect. It has also contributed directly to offering training programs, raising income levels and enhancing overall living standards in the host country, all these making FDI a valuable tool for service sector development (Saurav et al., 2020).

By investing in local industries, particularly in those related to service ones, FDI can enhance the host country's export capacity. The creation of export-oriented industries helps countries diversify their economies, reduce dependence on a limited category of exports, and generate foreign exchange earnings, the service sector being one of the most targeted in this regard in recent years. Overall, FDI is a key driver of economic development, particularly in developing and emerging markets. By fostering growth, creating jobs and enhancing skills and technology, FDI has the potential to significantly improve a country's economic landscape. However, for sustainable growth, countries need to ensure that FDI aligns with their broader development goals and is managed effectively.

The overall picture presented above also characterizes the Romanian economy, during the last three decades, FDI inflows playing a significant role in economic growth, technological development and integration into global markets. Among the sectors that have benefited significantly from FDI is the service sector, which is currently dominant in the Romanian economy and in its trade relations. At present, the Romanian trade in services shows an upward trend, with an important contribution in sustaining the entire economy, in accordance with its level of development and economic policies, considering its international connectivity through FDI and MNC.

2. Research methodology

This paper combines a quantitative analysis with a qualitative approach focused on the contribution of FDI inflows to the development of the service sector and trade in services of Romania, covering the last three decades. The data examined are provided by the statistical divisions of international organizations, such as the World Bank (World Bank Data), the World Trade Organization (Global Services Trade Data Hub), the European Commission (Eurostat), as well as the National Bank of Romania (Annual report on foreign direct investment in Romania).

This research is structured around the following sections: (i) the contribution of FDI in supporting the development of the service sector in Romania, emphasised by the evolution of relevant indicators, such as: the FDI inward flows and stock in Romania; the FDI net flows in the main service activities; the service development indicators of Romania (such as the percentage of services value added of GDP, the percentage of trade in services of GDP, the share of service employment of total employment, the value of total services and digitally services exports), covering the period between 1990-2023 (depending on the data availability); (ii) the role of FDI in trade in services of Romania, highlighted by the recent evolution of FDI enterprises' exports and imports of services by group of services, during 2019-2023 and the correlation between FDI inflows in services and service exports of Romania, during 2013-2023 (using the simple linear regression function); (iii) concluding remarks regarding the role of FDI in sustaining the service industries and trade in services of Romania, underlining also some potential vulnerabilities related to the dependency of service sector on FDI.

3. Literature review

During the last decades, the determinant factors and effects of FDI capital inflows were amply analysed in specialised literature and reports related to economic development. Some relevant contributions in this field are brought by Ahlquist (2006) and Ghazalian (2024), whose works are focused on the role of capital inflows in economic development of host countries, finding the positive influence of national economic policies, democratic political institutions, stability and economic growth on FDI capital inflows to developing countries. Adelakun and Ogujiuba (2023) find that FDI is viewed as a critical driver of growth in developing economies, considering the capital inflows and the knowledge transfer and productivity spillovers generated by FDI inflows.

Enhancing export capacity through FDI in different industries has been extensively studied across specialised articles and international reports. Considering that FDI plays a crucial role in bolstering the competitiveness of firms by providing access to technology, expertise and capital, for many developing and emerging countries, many studies have shown that FDI fosters the growth of export-oriented sectors, particularly

by improving firms' productivity and enabling them to compete globally (Lakshani et al., 2023; Albiman et al., 2022). FDI spillovers can increase the export potential of domestic companies by transferring knowledge and technology from foreign investors, particularly where foreign companies establish linkages with local companies (Sahoo and Dash, 2022). Moreover, the relationship between FDI and exports depends on factors such as regional policies, market conditions and the level of trade openness (Lakshani et al., 2023).

The connection between FDI and trade in services is very close, with FDI representing one of the four modes of trade in services defined by the World Trade Organization (WTO) under the General Agreement on Trade in Services (GATS) (WTO, 1995). According to Echandi & Sauvé (2020), the FDI, specifically named by GATS “commercial presence”, is by far the most important mode of trading services abroad, the WTO estimating that service transactions by this mode account for over 60% of aggregate services trade.

The service sector is found to receive considerably larger amounts of FDI, Kirkegaard (2012) identifying that today the developed, emerging and many developing economies are overwhelmingly “service economies,” in terms of economic output, employment, or even increasingly as regards international trade and investments. Banga (2005) explores the growing relevance of the service sector in the economy and the shifting of global FDI from manufacturing towards the service sector, emphasising the rise of its role in integrating the world economy.

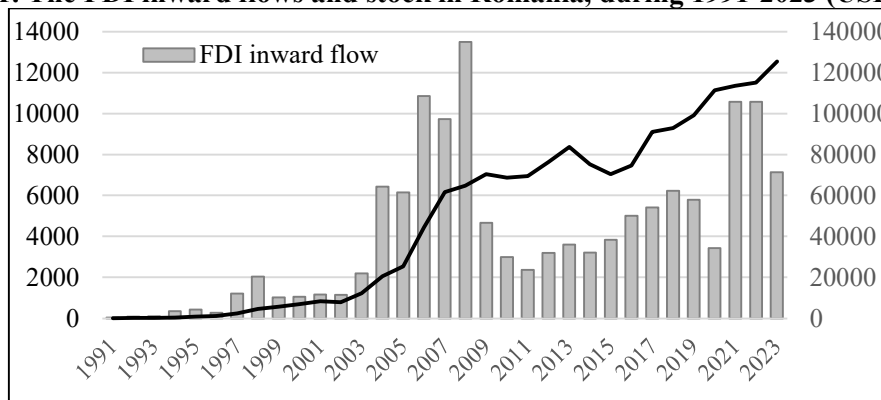
In their paper, Shah and Raza (2022) find that FDI inflows in services are a good tool to connect local service suppliers to the global value chain and boost service exports, in newly industrialised countries. Equally, Sen (2011) found the propagator role of FDI in the service sector and economic growth in a country, revealing also an important vulnerability of host countries related to the over-dependence on FDI in the service-led growth. This is the case of India, where the service sector growth is largely led by high-tech labour and outsourcing, with the main demand coming from abroad.

Central and Eastern European countries have been the subject of numerous studies analysing the role of FDI in the development of their economies. Particularly, the role of FDI in supporting the development of Romanian economy has been investigated in many studies (FIC, 2024; EY, 2024), reports (NBR, 2024) and scientific articles (Andrei, 2011; Zaman & Vasile, 2012; Russu, 2016; Danciu & Strat, 2014). This paper joins all these valuable studies by addressing the contribution of FDI in the service sector and trade in services of Romania, based on statistical data until 2023 and particular aspects of each representative service industry.

4. The contribution of FDI in supporting the development of service sector in Romania

During the last three decades, the Romanian economy has gone through major transformations generated by the adoption of free market mechanisms, the opening of its business environment to the foreign capital and its integration in the European Union (EU), all of them with positive effects on its development. FDI inflows have played a crucial role in shaping the economic landscape of Romania, contributing to its most important changes in the national development model, where services have a significant weight. As it is illustrated in Figure 1, after a modest start during the first years of transition to the market economy following the fall of the communist regime, the FDI in the Romanian economy had registered a sinuous evolution, marked by fluctuations from the maximum reached in 2008 (around USD 13.4 billion) to the minimum in 2011 (approximately USD 2.4 billion) and 2020 (USD 3.4 billion) (UNCTAD, 2024), in accordance with the various internal and external influence factors (the most significant being the global financial crisis and pandemic crisis).

Figure 1: The FDI inward flows and stock in Romania, during 1991-2023 (USD million)



Source: Author’s representation based on UNCTAD (2024).

The growth of Romania's service sector through FDI has been a key component of the country's economic transformation, playing an all-important role in modernizing and expanding the service industries, particularly in areas not sufficiently represented by national companies such as telecommunications, financial services, business services and also information technology and communication (ITC) services. FDI has acted as a catalyst for information technology (IT) growth, Romania becoming a significant player in the global ITC market, thanks largely to FDI from multinational tech companies, major corporations like Microsoft, IBM, Oracle and HP establishing here development and support centres (InvestRomania, 2023).

These investments have not only expanded the sector but have also helped to improve technical skills and drive innovation in service industries. As a consequence, Romania has become a hub for IT services and software exports, with the sector accounting for a growing share of the country's service exports (according to NBR, in 2023, the group of telecommunication, computer and information services achieved 38.3% of the service exports) (NBR, 2024). Companies established through FDI provide, among others, software solutions, cybersecurity services, and outsourcing services to global clients.

Foreign companies, particularly in the IT sector, have been increasingly attracted to Romania due to its highly specialized labour force, which is bolstered by strong university programs in science, technology, engineering and mathematics. Romania is recognized as having a robust educational system that produces a large number of skilled IT professionals, with a strong focus on computer science and engineering university programs. Many Romanian universities, such as the Politehnica University of Bucharest, the Babes-Bolyai University in Cluj-Napoca or Alexandru Ioan Cuza University in Iasi, have established strong computer science and engineering programs that provide specialized competences in software development, data science and cybersecurity. These programs create a steady pipeline of highly qualified graduates in the latest technologies and in foreign languages (essential for collaborating with global teams and partners), making Romania an attractive destination for MNC. This makes Romania an ideal location for outsourcing and nearshoring operations in Europe. Cities like Bucharest, Cluj-Napoca, Timisoara and Iasi have become key IT hubs, attracting major tech companies, including global top companies in this field. Overall, these cities provide a favourable environment for IT companies due to their growing ecosystems, strong academic presence and government support for the tech industry (InvestRomania, 2023).

Besides the high level of professional skills, labour costs in Romania remain competitive compared to other EU countries, making it a cost-effective destination for foreign investment, particularly for companies seeking to establish IT development centres (RAIFT, 2024). Moreover, Romania has also benefited from EU funding and government incentives aimed at promoting the IT sector, further making the country attractive to foreign investors. All these factors combined have helped Romania become one of the fastest-growing IT markets in Europe, with foreign companies choosing to invest heavily in IT services and development operations. First introduced in 2001 for employees with an eligible bachelor's degree working directly on software development, then expanded in 2013 to include a wider range of degrees, IT workers are exempt from income tax (the current rate is 10%) (Emerging Europe, 2023). This measure has supported FDI in IT, the foreign investors finding it as a good attracting FDI measure for high-value services in this field.

FDI has driven the growth of Romania's business process outsourcing (BPO) sector, where foreign companies subcontract non-core business functions like customer service, finance, human resources and IT support. The major cities in Romania have become BPO hubs due to their skilled workforce and competitive labour costs. Main global outsourcing companies, including Accenture, Genpact and Deloitte, have set up operations in Romania, serving both European and global markets, FDI in this sector having a contribution in job creation and the development of local expertise in service-related functions.

Similarly, FDI has supported the national telecommunications sector growth, significant FDI projects in Romania's telecom sector contributing to the fast development and expansion of its infrastructure. International telecom companies, including Vodafone, Orange and Telekom, have invested heavily in Romania, improving connectivity, increasing access to high-speed internet and providing advanced digital services. These investments have also driven the digital transformation of Romania's economy, facilitating the growth of e-commerce, digital services and other technology-based industries that rely on telecommunications infrastructure.

Another major sector is represented by financial services, FDI serving as the entry path of some representative foreign banks mainly from Europe. Romania's financial services sector has grown significantly due to FDI, with many foreign banks and financial institutions establishing a presence in the country. Banks from the Netherlands, France or Austria have expanded their operations in Romania, introducing modern financial products and technologies. FDI has led to improvements in Romania's banking infrastructure, including better

credit systems, digital banking platforms and more sophisticated risk management tools. This has enhanced the overall financial ecosystem and supported economic growth by providing better access to capital for businesses.

Due to the characteristics of the Romanian consumer market, the retail sector, and recently e-commerce, have represented an attractive destination for distribution companies, mainly from Western Europe, which have developed large-scale projects on the Romanian market. FDI has contributed to the rapid expansion of the retail sector, with international retail giants, particularly from France and Germany, investing in the Romanian market. These investments have helped modernize retail distribution channels, improve supply chain efficiency and provide consumers with a wider range of goods and services. With improved digital infrastructure, foreign investment in online retail platforms has spurred the growth of e-commerce. FDI in logistics and delivery services has further facilitated the positive evolution of online shopping in Romania, making the sector a significant contributor to the service industries.

The FDI in the tourism and hospitality sector has had an important contribution in the expansion of international hotel chains in Romania. FDI in the tourism sector has led to the establishment of well-known international hotel brands in Romania, such as Marriott, Hilton or Radisson. These investments have improved the quality of Romania's tourism infrastructure, attracting more international visitors. The influx of FDI has supported the development of Romania's tourism services, from hotel management to travel agencies, which in turn has boosted the country's tourism revenue and global reputation as a trustworthy travel destination.

Summarising, FDI has been a driving force behind the robust growth of Romania's service industries, mainly those of intensive in capital, technologies and skills, global companies entering Romania through FDI sustaining the employment, introducing modern technologies and business practices, and also fostering exports. By providing capital, technology and expertise, foreign investors have helped Romania become a competitive player in international markets, particularly in IT, BPO, telecommunications, financial services and retail. Romania has become a key player in outsourcing, with MNC setting up service centres in the major cities, benefiting from the country's skilled labour force, due to many factors, among them its high potential related to the largest university centres and also relatively low operating costs compared to Western European countries (InvestRomania, 2023). The continued flow of FDI, supported by a favourable business environment, is essential for further expanding and modernizing Romania's service sector. In order to keep its competitive position and further increase the attractiveness of FDI in the service sector, the Romanian business environment must continue the infrastructure development, investment in the workforce training and accelerated efforts for both digitalization and sustainability (EY, 2024).

All these performances described above can be confirmed in the statistical evolution of FDI in service industries. According to data published by the National Bank of Romania (NBR, 2012-2024), during the last years, service activities have been the most important destination of FDI net flows in Romania. The data presented in Table 1 reveals that in 2023, 63.7% of FDI net flows were in the service sector (EUR 4,297 million), a significant progress from 13.38% in 2011 (EUR 243 million). The recovery of economic activity, after the COVID-19 pandemic crisis, the latest devastating disrupting factor of international FDI flows, led to the resumption of the mobility of capital at the global level, this being directed primarily towards sectors with significant expansion potential, such as those of services. Therefore, after their decline in 2020, the FDI net inflows in Romania have increased, most of them being registered in the service sector (Table 1).

Table 1: FDI net flows in Romania, by main service activity, during 2011-2023 (EUR million)

Sectors	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Services, of which:	243	394	760	724	2,625	1,167	2,103	2,906	3,601	2,012	5,601	4,621	4,297
Trade	-29	391	70	225	1,000	609	897	1580	1,804	675	1,732	2,003	1,650
Financial intermediation and insurance	291	-295	210	22	926	800	960	896	1,102	1,454	3,065	1,613	1,740
Information and communication technology	-57	84	400	253	129	-58	-65	-20	447	-40	628	445	449
Professional, scientific, technical and administrative activities and support services	31	180	61	24	416	-158	274	379	73	-161	141	345	280
Transportation	63	65	34	92	117	65	55	37	147	115	20	110	151

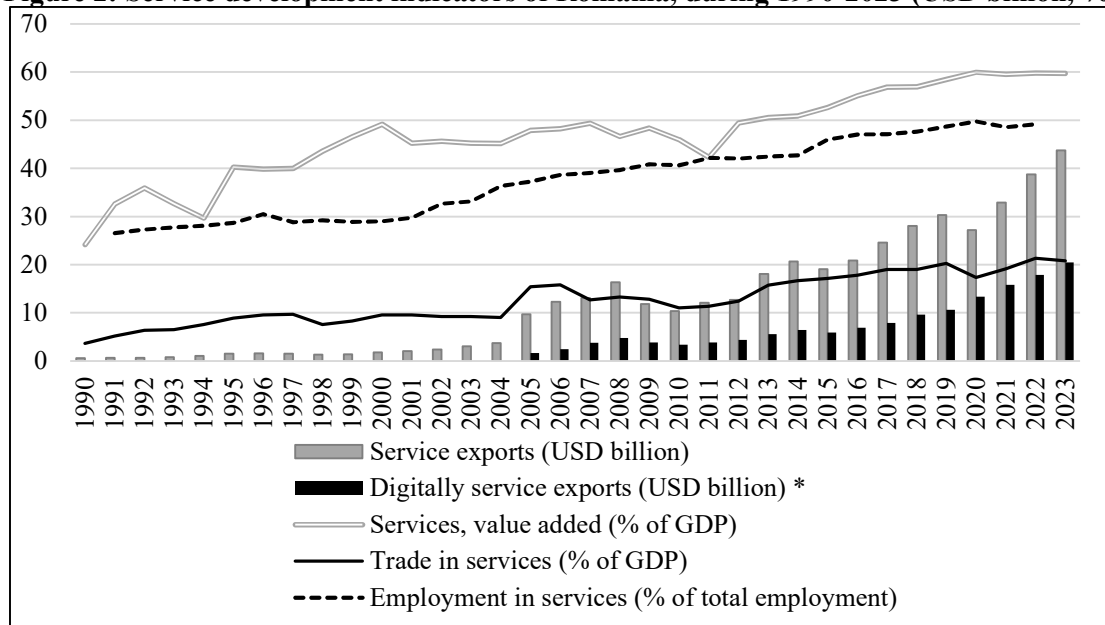
Sectors	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Accommodation and food service activities	-56	-31	-15	108	37	-91	-18	34	28	-31	15	105	27
Other sectors	1,572	1,744	1,952	1,697	836	3,350	2,694	2,360	1,573	904	3,340	5,418	2,445
Total net FDI flow	1,815	2,138	2,712	2,421	3,461	4,517	4,797	5,266	5,174	2,916	8,941	10,039	6,742

Source: Author based on NBR (2012-2024).

In 2023, the FDI in service industries was driven primarily by MNC focusing on areas like finance, IT and green energy. A notable contributor was the International Finance Corporation (IFC), which invested USD 546 million, among the targeted sectors being financial services, particularly green finance. The investments supported climate-smart initiatives, capital market growth and sustainability efforts. For instance, major financial institutions like Erste Bank and Raiffeisen Bank issued green and sustainability bonds with IFC's backing, funding renewable energy projects and supporting smaller enterprises. In addition to financial services, sectors like software, IT services, and telecommunications are increasingly attractive for foreign investors, contributing to Romania's digital transformation and economic competitiveness (IFC, 2023). These developments reflect how FDI is increasingly directed towards service-oriented industries, incorporating high-tech and targeting sustainable objectives.

Due to the intensive structural economic reforms and FDI in service industries presented above, the Romanian service sector has registered a remarkable growth, currently making an important contribution to the main macroeconomic indicators. The data presented in Figure 2 highlights the evolution of the service sector contribution to Romania's GDP (from 24.2% in 1990 to 59.8% in 2023), employment (from 26.6% in 1991 to 49.2% in 2022) and foreign trade (trade in services of GDP, from 3.7% in 1990 to 20.8% in 2023) (WBG, 2024; WTO, 2024a; WTO, 2024b). During this period, service exports, considerably supported by the activities of MNC developed as a result of FDI, have a spectacular evolution (from USD 61 million in 1990 to USD 43.73 billion in 2023), having an important contribution to improving the total trade balance (the surplus of the balance of services diminishing the very large deficit of the balance of goods). Similar to the service exports, the exports of digitally delivered services have seen a remarkable evolution, in 2023 hitting a new record of USD 20.44 billion, this evolution being mainly due to FDI.

Figure 2: Service development indicators of Romania, during 1990-2023 (USD billion, %)

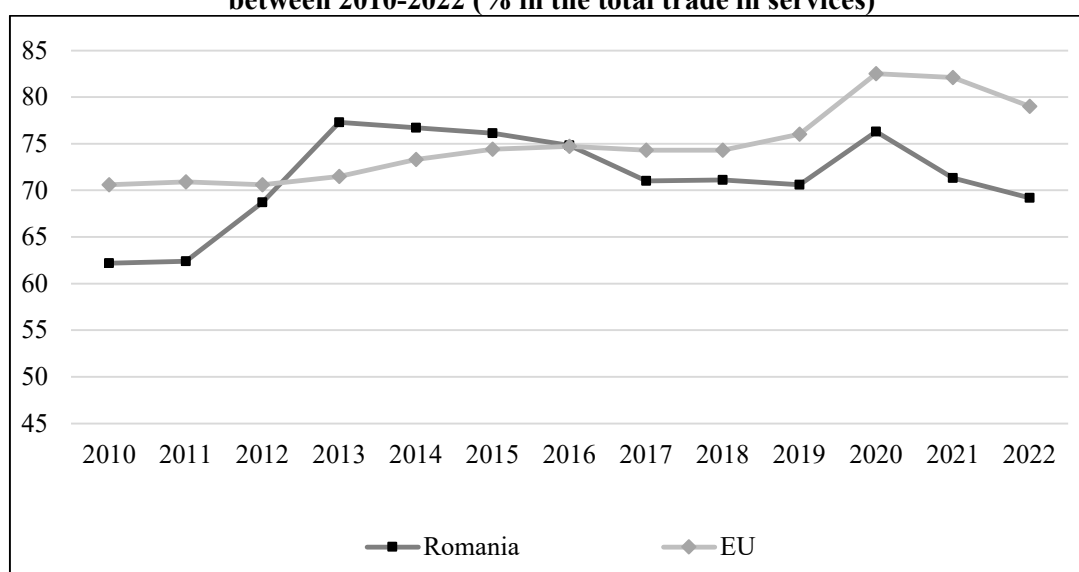


Note: *No data available on exports of digital services before 2005.

Source: Author's representation based on WTO (2024a, 2024b) and WBG (2024).

The role of FDI in supporting Romania's service sector is also demonstrated by its degree of integration in the global value chains of services. As revealed in Figure 3, the Romanian trade in intermediate services has recorded a good contribution to the total trade volume, compared to EU countries, with a slight fluctuation over the last years (in 2022, the percentage of the intermediate services in the total trade was 69.2%) (Eurostat, 2024).

Figure 3: The trade in intermediate services of Romania, compared to the EU, between 2010-2022 (% in the total trade in services)



Source: Author's representation based on Eurostat data (2024).

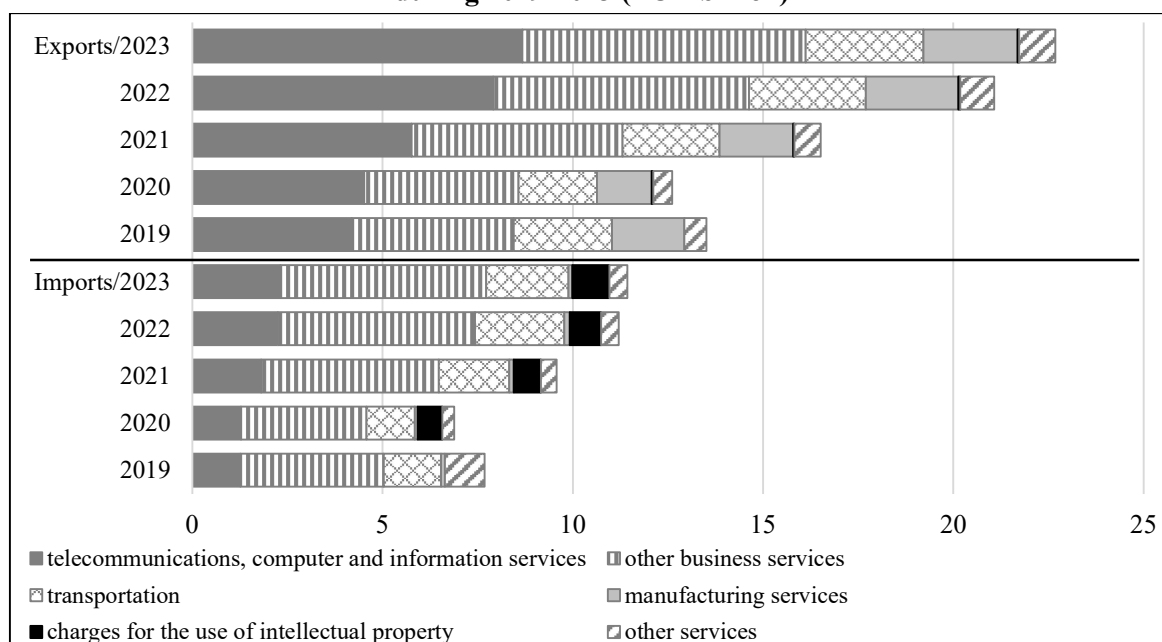
However, maintaining competitive advantages, such as skilled labour and favourable costs, will continue to be crucial in sustaining the Romanian service sector growth, especially of the IT and professional services. Their development enhanced by FDI in this field in recent years, particularly in high-skill services like IT, finance and telecommunications, has also attracted Romanian professionals to return from abroad, contributing to “brain gain” in sectors driven by FDI (Boncea, 2015). Currently, the service sector offers high-value jobs focused on digital transformation, customer experience and advanced financial services. Although Romania has made significant progress, there is still a need to improve its physical and digital infrastructure, as well as regulatory frameworks, to continue attracting FDI and sustaining growth in the service sector.

5. The role of FDI in supporting Romania's trade in services

FDI has played a decisive role in shaping Romania's export of services, particularly in high-value industries such as IT and software development, telecommunications, financial services, logistics and BPO. Major international companies have used Romania as a hub for providing services to other European countries and globally. For instance, Romania is known for its IT services exports, with companies providing software solutions, data processing and cybersecurity services to clients around the world. Similarly, outsourcing service centres established through FDI have become important sources of service exports for Romania. The inflows of FDI have led to an increased presence of MNC, technological advancements and improved competitiveness in the global market for services (InvestRomania, 2023).

During the last years, the exports and imports of services generated by the investing companies (FDI enterprises) in Romania have followed the positive trend (Figure 4), in 2023, their growths achieving new records (FDI enterprises' service exports were EUR 22.68 billion, up by 7.6% compared to previous year, and imports EUR 11.44 billion, up by 2.3% compared to previous year). Comparing the data presented in Figure 4, it can be observed the continuous surplus of foreign trade in services balance of FDI companies (in 2023, the surplus was EUR 11.24 billion, up by 13.9% compared to 2022). The analysis by the main categories of services shows that surpluses were recorded by FDI enterprises operating in almost all groups of services, except for charges for the use of intellectual property.

Figure 4: Romania - FDI enterprises' exports and imports of services, by group of services, during 2019-2023 (EUR billion)



Source: Author's representation based on NBR (2020-2024).

Analysing how FDI has impacted the export of services in Romania, we identify the following relevant aspects. First, the key sectors driving service exports are represented by: IT and software development; BPO and shared service centres; telecommunications; and financial services.

(i) Romania has emerged as a hub for IT services, with exports of this sector growing rapidly due to significant FDI. International tech companies, such as Amazon, IBM, HP, Microsoft and Oracle, have established research and development centres, outsourcing hubs and support offices in Romania (InvestRomania, 2023; Cojocaru & Moga, 2020). IT service exports include software development, data analytics, cybersecurity and other technology-based services provided to global clients. These exports have expanded due to inward FDI, which brought capital, technical expertise and access to international markets. According to NBR (2024), in 2023, the balance of computer and information services recorded a surplus of EUR 6.09 billion. The main destinations for Romania's IT service exports include the EU countries, North America and emerging markets (Figure 5).

(ii) Romania has become an attractive location for BPO activities due to its skilled labour force, favourable costs, and also strategic location within Europe. Many MNC have set up BPO and shared service centres through FDI, offering services such as customer support, finance, human resources and IT management to clients globally. The BPO sector contributes significantly to Romania's service exports, with foreign companies using Romania as a base to deliver services to clients across Europe and beyond. Factors such as multilingual capabilities, cost advantages and proximity to Western Europe make Romania an attractive location for BPO, increasing its export capacity (Conectys, 2024).

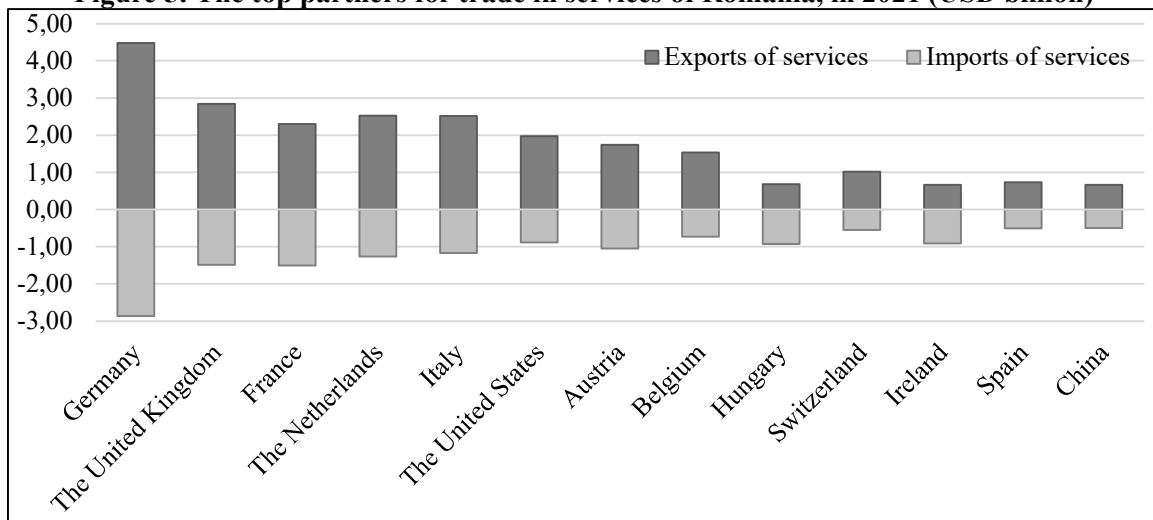
(iii) The telecommunications sector in Romania has grown rapidly due to FDI from major global telecom operators such as Orange, Vodafone and Telekom (Busu, 2023). These investments have enhanced the country's digital infrastructure, supporting the export of telecom-related services like network management, data processing and cloud services. Telecommunications services are often provided across borders, enabling businesses and consumers in other countries to benefit from Romania's digital infrastructure and technological expertise.

(iv) Foreign banks and financial institutions have expanded Romania's financial services sector, with companies mainly from Western European countries (e.g. the Netherlands, France, Austria or Italy) introducing innovative financial products and digital banking services. These services are exported to other countries, especially within the EU, as multinational banks and insurance companies serve clients across borders using Romania as an operational hub for processing financial transactions, risk management and customer service.

Second, FDI has been a driver for export competitiveness, by improving productivity and technological transfer, enabling access to international markets and receiving brand recognition and confidence. FDI has been

a tool in modernizing Romania’s service industries by transferring advanced technologies, management practices and international standards. This has made Romanian service providers more competitive in the global market. For instance, the IT and software development sectors have benefited from the latest software platforms and technologies introduced by foreign investors, boosting the quality and efficiency of services offered to international clients. Through FDI, Romanian companies have gained access to the global networks and client bases of MNC. This integration has enabled them to expand their services beyond domestic borders, particularly in sectors like IT, BPO and finance. Foreign investors often facilitate global relationships, allowing Romania-based companies to serve clients in Europe, North America and other regions more effectively. The main partners of trade in services of Romania are European countries (EU, United Kingdom and Switzerland) and the United States (Figure 5). The presence of global companies in Romania has enhanced the credibility and reputation of the country's service exports. International clients are more likely to trust Romanian service providers due to their association with recognized MNC, leading to increased exports.

Figure 5: The top partners for trade in services of Romania, in 2021 (USD billion)



Source: Author’s representation based on WTO data (2024c).

Third, FDI has led to the creation of numerous jobs in service sectors like IT, telecommunications and financial services, which require high levels of technical expertise. This has contributed to the development of a skilled labour force, further enhancing Romania’s capacity to export knowledge-intensive services. The training programs introduced by foreign companies have improved the qualifications and competencies of local workers, making Romania a competitive exporter of skilled services. Many jobs created through FDI are directly linked to export activities. For instance, employees in IT and BPO firms primarily serve international clients, while workers in financial services and telecoms often support global operations.

Fourth, Romania’s service exports have shown steady growth over the past decade, with significant contributions from sectors heavily influenced by FDI. According to NBR data, the services sector accounts for a growing share of the country’s total exports (in 2023, the share of services of Romania’s total exports was 31.9%), with IT and BPO leading the ranking (as presented in Figure 4). Romania’s membership in the EU has facilitated greater trade in services, particularly with other EU member states. FDI from EU-based companies has supported the growth of Romania’s export of services, which aligns with the single market’s free movement of services, capital, and people.

The influence of FDI inflows in service industries on service exports of Romania can be also demonstrated by the correlation between two variables, where the independent variable (x_i) is FDI inflows in service industries and the dependent variable (y_i) is service exports of Romania. According to Biji et al. (2017), the correlation between the two variables (y_{x_i}) can be determined using the simple linear regression function based on the following parameters (a and b):

$$y_{x_i} = a + bx_i \quad (1)$$

$$a = \frac{(\sum y_i \times \sum x_i^2) - (\sum x_i y_i \times \sum x_i)}{n \sum x_i^2 - (\sum x_i)^2} \quad (2)$$

$$b = \frac{(n \times \sum x_i y_i) - (\sum x_i \times \sum y_i)}{(n \sum x_i^2) - (\sum x_i)^2} \quad (3)$$

where: y_{x_i} – the simple linear regression function; a – the intercept of the true regression line; b – the slope of the true regression line.

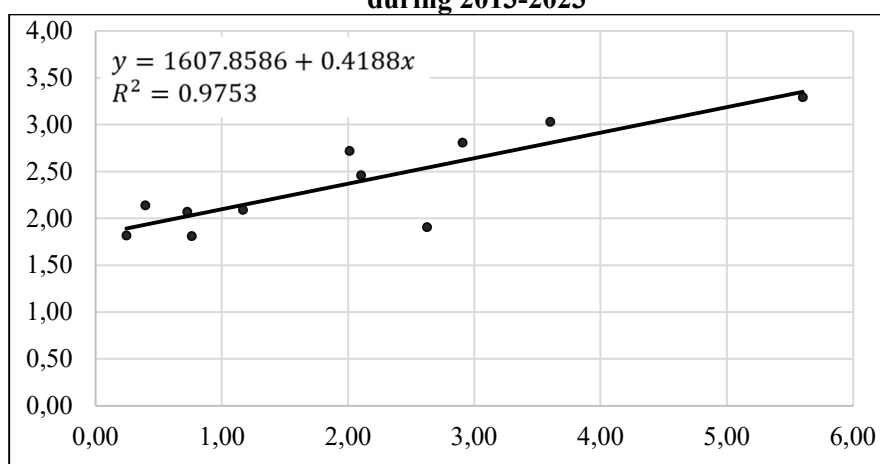
The simple linear correlation (R) between the two variables is determined using the following formula:

$$R = \sqrt{1 - \frac{\sum(y_i - y_{x_i})^2}{\sum(y_i - \bar{y})^2}} \quad (4)$$

where: \bar{y} – the average of the y_i .

Based on the NBR and WTO data, during 2013-2023, and the methodology developed by Biji et al. (2017), the graphical representation in Figure 6 confirms the strong direct relationship between both variables, where the influence of FDI inflows in service sector on total service exports is about 97.53%. Therefore, this method also demonstrates the hypothesis of our analysis, namely the positive impact of FDI in services on Romania's service exports.

Figure 6: The correlation between FDI inflows in services and service exports of Romania, during 2013-2023



Note: Independent variable x_i is represented by FDI inflows in Romania (in EUR billion) and dependent variable y_i is represented by service exports of Romania (in USD billion).

Source: Author calculations based on data published by NBR (2014-2024) and WTO (2024a) and on the method of determining the indicators presented in Biji et al. (2017).

Despite the service sector development helped by FDI, Romania faces several challenges in expanding its service exports. The increased competition from other Central and Eastern European countries, such as Poland or Hungary, which also attract significant FDI in services, can be a possible external risk factor. As a consequence, the continuous improvement in Romania's infrastructure, education and regulatory environment is needed in order to ensure significant FDI inflows and consequently sustained growth in service exports. Romania's relatively low labour and life costs, combined with its increasing expertise in IT and BPO remain ongoing opportunities for service industries growth (InvestRomania, 2023). The country's ability to provide high-quality services at competitive rates makes it an attractive destination for outsourcing, especially in areas like software development, fintech and customer support. Emerging areas such as artificial intelligence, cloud computing, and digital transformation offer new opportunities for service exports, particularly if Romania continues to attract FDI in innovative service sectors.

Summarising, FDI has played a pivotal role in transforming Romania into a significant exporter of services, particularly in IT, telecommunications, BPO and financial services. The influx of foreign capital has not only improved technological capabilities and workforce skills but has also given Romanian companies access to international markets and enhanced the country's global competitiveness. While challenges remain, Romania's ability to attract FDI will be key to sustaining and growing its export of services in the future.

6. Concluding remarks

Enhancing service exports through FDI can be seen as a strategy for boosting economic growth and competitiveness, foreign investments playing an important role in improving the export capacity of service industries by exploiting the favourable advantages of the Romanian economy, introducing new technologies, improving management practices and fostering external linkages. Our analysis emphasizes that FDI enables the Romanian service market to have access to cutting-edge technology and expertise, in sectors like IT or business

services, the FDI inflows leveraging service sectors to export globally and having a positive influence on local service providers to become competitive global players. By increased expertise through training and skill development programs, FDI has improved the quality of services offered, enhancing their competitiveness in international markets. Romania's financial services and software development industries are among the fields where FDI has significantly boosted skill levels and service exports. At the same time, MNC have provided local service firms access to international networks, facilitating their entry into foreign markets. Through these networks, local companies can offer services to global clients, increasing the national export potential. In Romania, FDI has helped the country's IT sector integrate into the global value chains, enabling it to export services more efficiently to international markets. FDI has led to infrastructure development in sectors like telecommunications, logistics or banking, better infrastructure and improved service standards attracting more international companies and further enhancing export growth. Romania's growing reputation as an outsourcing hub has benefited from the improved infrastructure and professional standards brought in by foreign investors. Regulatory measures adopted by the Romanian authorities have played a crucial role in facilitating FDI in the services sector by offering incentives (particularly in the IT field) and improving regulations. Supportive policies create a favourable environment for foreign investments, which can directly enhance service export capabilities.

Considering all these developments, a dependence relationship of the Romania's service industries on FDI can be observed, which in addition to the many benefits brought by FDI to trade in services and implicitly to GDP, employment and also gaining access to new technologies in services, may create some future vulnerabilities. The excessive reliance of Romanian service industries on FDI can pose potential challenges, the key exposures associated with this dependence being related to: economic volatility when global market conditions change (e.g. during periods of global financial instability, foreign investors often withdraw their investments, which can lead to capital flight, disruptions in service operations and significant job losses); profit repatriation (e.g. MNC often send a significant portion of their earnings back to their home countries, limiting the long-term benefits of FDI to the host economy); high reliance on foreign companies for job creation and especially highly specialized jobs (in case of a FDI withdrawal, many workers may face unemployment, especially if local firms services have not attained a critical mass); large dependence on foreign expertise and technology (this can hinder the positive evolution of domestic service industries and reduce the country's ability to compete in the global market without foreign inputs, influencing the trade in services).

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