# Romania's position in the global value chains in comparison with European countries

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#### Abstract

The theoretical backgrounds of external fragmentation of production are resumed in the work paint main attention at the European countries and OECD experimental studies. In this paper, a contribution is made to better understand the insertion of Romania in the external fragmentation of production by using the wide range of WEB simulation tools of International Institutes. Several important findings emerge from this research. The economy of Romania has obtained significant advantages from participation in Global Value Chains. A list of indicates demonstrates grow in values in comparison with the pre-accession in EU period. The research shows that industries of Romania with the highest foreign value-added share in gross export are classified mainly in high R&D intensity industries (computer, electronic and optical products; publishing software), medium-high R&D intensity industries (IT & other information services; motor vehicles, trailers and semi-trailers). It was established that upgrading in industries took place when foreign value-added content increases as a result of the innovational activity. Another important observation was that the computer and optical equipment sector, IT and other informational services, as well as motor vehicles, are between sectors in which the employment, driven by foreign final demand, has essentially extended during the decade. At the same time, some less favorable tendencies can be observed. The study reveals that foreign value-added share of Romania's gross export is lower than average EU countries as well as the countries from the next EU enlargement that included in the analysis - Bulgaria, Hungary, Poland, and Estonia. It was revealed that Romania has insufficiently exploited the opportunities offered by the status of the EU member state to integrate into the value chains of European space. The results of the study can be used in the process of elaboration of adequate education, R&D, labour market and industrial and service sectors policies by decision-makers and the private sector of the country.

Keywords: regional value chains, trade fragmentation, value-added terms, Romania.

### **1. Introduction**

Central and Eastern Europe has been connected to the large international networks of production through regional trade and investment agreements.

At present Europe is one of the most important hubs in complex GVC networks activity and main attention in this study will be painted in this region.

A number of empirical studies demonstrate the dynamic integration of the entire region of Central and Eastern Europe with the global economy, especially with the European Union. Grodzicki M.J. (2014) has summered that detailed case-studies demonstrate an ongoing industrial upgrading in the GVC the of Visegrad region [1]. If initially, their exports were based on commodities and natural resources and were focused mainly on assembly operations, in time more and more tasks of higher complexity are being fulfilled in the region [2, 3,4].

Capitalization of the EU member state status for Romania provides it with opportunities to deepen the penetration of their activities into the external fragmentation of production and, above all, the EU through the use of deep trade disciplines within the EU, some of which are beginning to address issues related to the work of the GVCs more directly.

The continuing growth of GVCs will define the global trade landscape of the 21st century. It will require from the countries to revise and adapt economic policy position at the macro and micro level on the one hand and their participation with other players in the net on others. This means closer economic integration of Romania with the EU by developing the ability of the state to be more attractive to cooperate with other members and to respond to their preferences and capabilities. The convergence of Romania with the EU through regional value chains will not only reduce the development gap of the country but also will accelerate the adoption of the principles of Western Europe performance levels by Romania.

A preliminary analysis of the position of Romania in GVC can be found in some recent country's studies [5, 6].

The issues of how Romania intended to benefit from global value chains and the associated benefits of upgrading in them are insufficiently studied. The present study aims to partially fill this gap.

The aims of the paper are to determine of engagement of Romania in GVC in comparison with other European countries based on the list of indicators, expressed in value-added terms; and to estimate the industry specialization of trade fragmentation of the country, as well as its predominant market concentration.

Besides its introductory part, the paper has four parts, including the theoretical and methodological background of research as well as all outlining the aspects external fragmentation of Romania, determining the place of Romania in GVC, and concluding remarks. The theoretical part of the study examines recent GVC features and is constructed in such a manner as to be useful in the explanation of experimental findings of research and formulation concluding remarks.

# 2. Theoretical background of research

Last decades in the economic literature dedicated to trade topics have discussed the importance of trade liberalization for fragmentation of production that consistently led to the appearance of global value chains (GVC).

In the economic literature increasing trade of big parts and components of manufacturing goods between countries has been variously called. Besides mentioned above, for a description of this globalization process has been used the following notions: vertical specialization, processing trade, slicing up the valueadded chain, outsourcing, offshoring.

Although it is a consensus regarding that trade tariff reduction has stimulated trade exchange between countries that in line with the growth of the volume of international trade was expressed in the global fragmentation of production, the appearance of GVC is changing many aspects of economic and trade landscape. There are differences between GVC of the end of twenty century and the twenty-first century.

Recent economic literature focuses on vertical specialization patterns [7, 8, 9] and the ability to move to more value niches of GVC [10, 11], rather than leading of chain that it was at early debates dealing GVC. According to Yi, K. M. [12] vertical trade (between subsidiaries or at arm's length) explains most of the growth in world trade.

Baldwin R. [13] has made suggestion regarding the nature of "vertical specialization" and "horizontal" specialization of countries. If first mentioned one is based on skilled and unskilled labour wages gaps, the second mentioned on company-level excellence, rather than on wage gaps.

Appearance GVC was associated not only with essential and evident global economic and welfare benefits but with wage disparity, especially between developed and developing economies. It was observed by GVC economists that significant wage disparity between countries is not a constant value. The reduction in income dispersion between developing economies and the industrialized ones is named by Baldwin R. [13] one of the key features of the second unbundling. In turn, it justifies the dynamic character of contemporary GVC, their expansion by including new players in net, when wage disparity between existences reduced.

These observations elucidate the followings. The first, it explains the offshoring of labor-intensive stages from developed EU states to their neighboring low-wage countries. The second, why is before the second unbundling, trade in value chains was mainly among neighboring high-wage (on the company-level excellence), such as Western Europe and in present is still very high.

Dynamic character, big variety, as well as complication of the production, are characteristic features of contemporary GVCs. They are accompanied by changes in the location of production in framework GVC that leads to the opening of some new locations, while others appeared less profitable.

According to Ahmad, N. [14] GVC "is driven by technology, costs, access to resources and markets, and by policy reform". Trade and transport tariff reduction as well as IT dissemination allowed further international division of labor and specialization by countries, transferring competition from the firms to their

departments and individual jobs through participation in global value chains. So, global trade can be considerate as one of the major generator of employment. However, its effect varies considerably across regions/sectors and persons with different skill levels. Baldwin R. argued that the globalization opened new opportunities for rising productivity of EU's firms[15]. It has important implications for competitiveness Strategy of EU the same because the study approved that the second wave of globalization is favorable for high skill sectors/workers in Europe and vice versa.

In economic literature is noted on the regional character of contemporary GVC trade that became more concentrated among major regional trading partners [13, 16]. Li, X., Meng, B., & Wang, Z. indicated that they still remain largely regional, despite on penetration the patterns from Asia in main hubs of GVC[17].

Many studies have noted that one of the undeniable features of modern economic development is that services play an important and growing role in present GVC activity. GVC activity in manufacturing reveals that a large fraction of the value-added is created in services. Services often are important inputs (such as research, design) in the production process as well as link the different stages (such as marketing and distribution) of value chains of manufacturing goods [18, 19].

Elms, D.K. & Low, P. summarized that regional value chains and a focus on services can provide more global participation in the future, but government policies are needed to get it inclusive not only for developed but developing countries the same[7].

Besides the works that are explaining trade fragmentation, economic literature pain attention to its measurement. Traditional trading indicators (gross export / import, trade balance and their trends) are limited to explain the external fragmentation of production.

Models of specialization of external fragmentation in different countries are much more visible and clearly expressed when looking through complex valueadded chains. Through them, it can find out with much greater accuracy what influences the creation of value added across countries, in which sectors employment is created, what are the differences between flows expressed in gross and value-added terms, etc. in a wide variety places of developed and developing countries in GVC.

Many studies note that trade in intermediate goods between countries is a suitable indicator for measurement of trade fragmentation because of trends in their trade show the formation GVC [20, 21, 22, 23].

Also in the economic literature is mentioned that analysis of the new global trade landscape is suffering from lacking appropriate models and good data and is difficult to interpret [24].

Recent OECD studies are based on the approach to the measurement of GVC participation, elaborated at the synthesis of the number of experimental research. According to this "value chain participation is defined in terms of the origin of the value added embodied in exports both looking backward and forward from a reference country: backward when it comes to foreign value added embodied in

exports, and forward when it refers to domestic value added which is used as inputs to produce exports in the destination country" (Kowalski, P. et al., 2015, p.13).

Some aspects of applied this approach are explained in the next sections in the determination of insertion of Romania in external fragmentation of production.

# 3.Methodological background and objectives of research

The methodological base of study is a wide range of WEB simulation tools of International institutes that allow estimating the engagement of Romania in external fragmentation of production and the best ways it can be done, among which are: Trade in Value Added (TiVA) instrument (edition 2018) derived through the construction of a global input-output table, and Trade in employment database (edition 2019), developed by OECD for the comparative analysis of GVC integration across countries of different levels of development.

TiVA database incorporates important information regarding the trade in goods by the end-use categories. It offers the information dealing with participation in GVCs via a foreign and domestic value-added share in gross export etc. Trade statistics included in the TiVA database is available for Romania.

For the analysis of information incorporated in the TiVA database will be used the International Standard Industrial Classification of All Economic Activities ISIC Rev. 4.

The classification of activities according to five groups (high, medium-high, medium, medium-low and low R&D intensive activities), elaborated by Galindo-Rueda, F., & Verger, F. [26] will be used **in the study the same**.

# 4. Insertion of Romania in external fragmentation of production

# 4.1. Place of Romania in regional value chains

On the basis of the precedent considerations, the succeeding economical analysis can be derived.

Romania relies on average for 21.6 % on foreign inputs and 78.4% on domestic produced inputs for her exports according to the latest data for 2016, included in TiVA database (Figure 1).

Foreign content of Romania's export was positioned higher than average EU value in 2006, but it reversed in 2016 and has tended to decline, dropping 5.7 percent during the decade.

With exception of Romania, countries of the next EU enlargement from analysis are positioned higher than average EU value in 2016 on the foreign content of export.

Foreign content of Hungary's export has reached the highest records between countries analyzed (44.1%) in 2016 and hasn't drastic fluctuation during the decade.

Bulgaria, Hungary, Poland, and Estonia have profited from vertical specialization in GVC as a result of the adjustment of economic policies in the process of entering and adhering to the EU.



**Fig. 1.** Foreign and Domestic value-added share in gross export, selected EU countries, % *Source: Elaborated by the author at the TiVA database, edition December 2018* 

In the case of Romania, ranking higher on the domestic value-added content is presupposed that country more engaging in the export of upstream primary products, goods, and services than other countries from the next EU enlargement.

The oldest members of the EU have significant shares of domestic value-added content with little fluctuations during decade. This reflects their possibility of obtaining an extensive list of intermediate goods and services from domestic supplies and their offering for export. It is well known that countries with advanced technologies, such as Germany, are increasingly paying attention to sophisticate components that are exported for assembly elsewhere. When it comes to textiles Italy is the heart of 'Factory Europe'.

In plus, it is reflecting their positions at the initial (R&D) and the final stage (end-product sale) in those value chains. These places correspond to the highest share value added to the product.

It should be mentioned that 40.5% of the total Romanian import of intermediate manufacturing goods was used in export in 2016; it is lower with ten points than EU average (50.5%) (Figure 2).

The figure reveals the textiles, wearing apparel, leather (46%) and wood and products of wood cork (34,5%) are close to the EU average regarding shares of intermediate imports embodied in Romanian exports.

It can be observed also that gap between Romania and the EU average level is more significant for transport equipment (about 16 points) and food, beverages and tobacco (more than 13 points).

The analysis above can be complemented by the outsourcing of service activity that is considered as the main part of the manufacturing export in the contemporary world. The contribution made by services activities to exporting activities of manufacturing can be estimated between 25% and 35% (Figure 3).



Fig. 2. Reexported manufacturing intermediate import as % of intermediate import, 2016 Source: Elaborated by the author at the TiVA database, edition December 2018



Fig. 3. Services value-added embodied in gross manufacturing exports, % Source: Elaborated by the author at the TiVA database, edition December 2018

By the countries, the shares ranked from France (35%) and Italy (34.2%) at the upper end to Hungary (28.1%) and Romania (27.6%) at the lower end, according to 2016.

It can be observed that for France, Italy, Germany, Poland, Bulgaria, and Romania the domestic share of services value added is greater than the foreign one. At the same time, the domestic share of services value added is higher for France, Italy, and Germany in comparison with countries of the next EU enlargement mentioned.

Between countries, the foreign share of services value added is larger than the domestic one only for Estonia and Hungary.

In the case of Romania, service value added content contributed to 27.6% of manufacturing in 2016, up from 25.1% a decade earlier. At the same time, the domestic share of service content has extended to 4.2 percent points in 2016 in comparison until the accession period in the EU.

Important domestic outcomes of the countries were reached thanks to foreign final demand.

Industry 'export orientation' has increased for all EU countries from analysis during the decade and exceeds an average EU value reached (Figure 4).



Fig. 4. Share of domestic value added embodied in foreign final demand in selected EU countries, as a percent of value added by industry Source: Elaborated by the author at the TiVA database, edition December 2018

In 2016, by the countries, the shares ranged from Hungary (46.4%) and Estonia (44.6%) at the highest end to France (21.2%) and Italy (22.9%) at the lowest end.

In general, 28.3% of Romania's domestic value added in 2016 was driven by foreign final demand in comparison with 21.3% in 2006, until joining to EU.

Employment driven by foreign final demand increased between 2005 and 2015 in all analyzed countries (Figure 5).

In 2015 employment driven demand can be estimated between 20% and 40% regarding countries, and the hugest similar records were achieved in Bulgaria (42.5%), Estonia (42%) and Hungary (41.8%).

In overall, 28.7% of employment in Romania was sustained by consumers in foreign markets in 2015. Between 2005 and 2015 it was significantly raised - at 5.6 percent points.

At the same time, it is one of the lowest records between the countries of the next EU enlargement included in analyzing. In 2015 in comparison 2005, employment driven by foreign final demand has extended in Bulgaria at -13percent points, Poland - 7.3, and Hungary -7.1.



Fig. 5. Share of domestic employment embodied in foreign final demand in selected EU countries, as a percentage of total employment Source: Elaborated by the author at the Trade in employment database, edition 2019

### 4.2. Particularities of industry specialization of trade fragmentation in Romania

Previous analysis indicated that Romania is more engaged in the export of upstream products and services in GVC than other countries of the next EU enlargement.

Country's activities towards the beginning of value chains are presented in Figure 6.

For the following analysis have been selected industries with significant domestic value content of gross export.

To be mentioned that services tend to have higher domestic value-added content in their export (84.6%) in comparison with manufacturing (72.6%) in 2016 (Figure 6).



**Fig. 6.** Industries of Romania with the highest domestic value-added share in gross export, % *Source: Elaborated by the author at the TiVA database, edition December 2018* 

For the following analysis have been selected industries with significant domestic value content of gross export.

To be mentioned that services tend to have higher domestic value-added content in their export (84.6%) in comparison with manufacturing (72.6%) in 2016.

In manufacturing, the textiles, wearing apparel, leather industry expanded significantly, at 19.2 percent points in 2016 in comparison until the accession period in the EU.

It can be observed that Romania mainly specializes in middle-low R&D intensity industries (food beverages and tobacco; wood and products of wood cork; textiles, wearing apparel, leather) and low R&D intensity industries (agriculture, forestry, and fishing; wholesale and retail trade; transportation & storage) in upstream products and service activities in GVC.

It is in contrast with the industries of Romania with the highest foreign valueadded share in gross export (Figure 7).

It should be mentioned that industries of Romania with the highest foreign value-added share are classified in high R&D intensity industries (computer, electronic and optical products; publishing software), medium-high R&D intensity industries (IT & other information services; motor vehicles, trailers and semi-trailers) and medium R&D intensity industries (rubber and plastic products etc).

It can be observed the same that share of manufacturing with foreign valueadded about in twice more that services ones. In turn, foreign value-added of services is presented by ICT, which developed with the significant fluctuations during analyzed period.



Fig. 7. Industries of Romania with the highest foreign value-added share in gross export, % *Source: Elaborated by the author at the TiVA database, edition December 2018* 

It can be observed the same that share of manufacturing with foreign valueadded about in twice more that services ones. In turn, foreign value-added of services is presented by ICT, which developed with the significant fluctuations during analyzed period. In this context, an upgrading strategy of Romania in GVC should presuppose investment in ICT and other high R&D intensity industries and activities with the scope of fostering a higher foreign content of export and replacing the lower domestic margin of value content by the higher one.

Participation of Romania in GVC has had an important influence on the employment at the country's labor market in general. It can be observed that engagement of Romania in GVC was more significant for employment in manufacturing than the service sector. So, in overall, 52.3% of employment in manufacturing and 33.8% in business sector services of the country were sustained by consumers in foreign markets in 2015(Figure 8, Figure 9).

At the same time, employment driven by foreign final demand decreased between 2005 and 2015 at 2.2 percent points in manufacturing, in contrast to the service sector.

Figure 8 also reveals that the decrease in 2015 in manufacturing driven by foreign final demand was determined by its the essential reduction in textiles, wearing apparel, leather – at more than 20 percent points; and electrical equipment- 12.5

A decade earlier in both mentioned sectors were reached the highest levels of employment sustained by consumers in foreign markets - more than 75% of the total industry employment.

Also, it can be observed that employment driven by foreign final demand has extended between 2005 and 2015 in motor vehicles – at 19.8 percent points, rubber and plastic products sector - at 12.2, other transport equipment -10.7 and computer and optical equipment -9.7.



**Fig. 8.** Share of domestic employment embodied in foreign final demand by manufacturing, as a percentage of total industry employment *Source: Elaborated by the author at the Trade in employment database, edition 2019* 

There weren't the business sector services, in which employment embodied in foreign final demand was reduced for a decade (Figure 9).



**Fig. 9.** Share of domestic employment embodied in foreign final demand by services, as a percentage of total industry employment *Source: Elaborated by the author at the Trade in employment database, edition 2019* 

If employment in the total service sector, sustained by consumers in foreign markets, has reached in 2015 at 22.7%, in business sector services -33.8%, but in social and personal services only -3.1%. There weren't the public administration and social security services that could be embodied in foreign final demand as well as almost educational services during the decade.

From chart 9 follows that in the service sector the employment, driven by foreign final demand, has essentially extended during the decade in other business sector services - at 17.7 percent points, IT and other informational services - at 16.6 and transport and storage – 14.7.

### 4.3. Particularities of market concentration for trade fragmentation of Romania

In 2015, Romania's largest trading partner in both value of export and valueadded content was Germany, Italy, and France (Figure 10).

The share of Germany in value in Romania's gross exports was 19.8% followed by Italy (12.5%), France (6.8%) and Hungary (5.4%). In value-added content, again Germany (11.9%) is the main market of final demand of Romania's value-added exports, followed by France (9.4%), Italy (8.5%) and United States (6.7%).

In value-added terms, Romanian trade with Germany is driven by its manufacturing industries (electrical equipment, motor vehicles; rubber and plastic products) as well as with Italy (textiles, wearing apparel, and related products), but by the business sector services with France (transport and storage).



**Fig. 10.** Main export partners of Romania,as a % of gross export and domestic value added embodied in foreign final demand, 2015 Source: Elaborated by the author at the Market Analysis Tools ITC and TiVA database, edition December 2018

Regarding the imports, Germany tops the list of supplying markets for products imported by Romania with the share 19.8% in value of gross imports, followed by Italy (10.9%), Hungary (7.9%) and France (5.6%)(Figure 11).



**Fig. 11.** Main import partners of Romania, as a % of gross import and foreign value added embodied in domestic final demand, 2015 Source: Elaborated by the author at the Market Analysis Tools ITC and TiVA database, edition December 2018

In value added content, among the top importers from Romania, are Germany (15.6%), Italy (8.9%), France (7.6%), and USA (4.6%).

It can be observed that the list of five main partners in the gross value is not matching with a list of principal countries of value-added content, in both export and import. Figure 10 and Figure 11 also revealed that the USA is one of an important destination of value-added exports and source of value-added imports of Romania. At the same time, the USA is not between the largest trading partners of Romania in gross values.

By the domestic value-added, that comes back to Romania with manufacturing import can be measured the extent of bilateral production relations in regional value chains(Figure12).



Fig. 12. Domestic value-added content of manufactured imports into Romania, main partners, as a share of Romania's total value added embodied in imports

In 2015, Bulgaria with 19.5 percent points was in the top partner's shares of total domestic value-added content of manufactured imports that return into Romania, followed by Germany - 13.1 and Italy -10 (Figure 12).

It can be observed, that this indicator was in increasing in 2015 in comparison 2010 in all top partners with exception of Italy.

### **5.** Conclusions

Several important findings emerge from this research.

The economy of Romania has obtained significant advantages from participation in GVC. The list of indicators demonstrates growth in values in 2016 in comparison with the pre-accession in the EU period. In this context, it should be mentioned that 28.3% of Romania's domestic value added in 2016 was driven by foreign final demand in contrast with 21.3% in 2006, until joining to EU. The service value added content contributed to 27.6% of manufacturing in 2016, up from 25.1% a decade earlier. Between 2005 and 2015 employment sustained by consumers in foreign markets was raised significantly - at 5.6 percent points.

At the same time, some less favorable tendencies can be observed.

The study reveals that foreign value-added share of Romania's gross export is lower than average EU countries as well as the countries from the next EU enlargement that included in the analysis - Bulgaria, Hungary, Poland, and Estonia. Because of foreign value-added content of gross export is one of the main indicators of GVC integration, it can be concluded than Romania is worse than EU countries on average inserted in these value chains. In plus, Bulgaria, Hungary, Poland, and Estonia are more vertically specialized in GVC, as a result of adjustment of economic policies in the process of entering and adhering in the EU, than Romania.

Taking into attention that between 2006 and 2016 foreign content of Romania's export has tended to decline, the country did not deepen in external fragmentation of production for a decade.

It was revealed that industries of Romania with the highest foreign valueadded share are classified mainly in high R&D intensity industries (computer, electronic and optical products; publishing software), medium-high R&D intensity industries (IT & other information services; motor vehicles, trailers and semitrailers). It was established that an upgrading in industries took place when foreign value-added content increases as result of innovational activity.

In addition to this, another important observation should be mentioned. The computer and optical equipment sector, IT and other informational ervices, as well as motor vehicles, are between sectors in which the employment.

services, as well as motor vehicles, are between sectors in which the employment, driven by foreign final demand, has essentially extended during the decade.

At the same time Romania relies on average at 78.4% on domestic produced inputs for her exports (2016). The analysis shows that in upstream oriented activities in GVC, Romania mainly specializes in middle-low R&D intensity industries (food beverages and tobacco; wood and products of wood cork; textiles, wearing apparel, leather) and low R&D intensity industries (agriculture, forestry, and fishing; wholesale and retail trade; transportation & storage). Also, it was observed that in employment in textiles, wearing apparel and leather, sustained by consumers in foreign markets was dramatically reduced for a decade – at 20.8 percent points. The last is explained by the fact that one of the globally integrated sectors of GVC - the apparel industry has undergone a major restructuring in recent years, primarily as a result of the phasing out of the WTO quota regime in 2005 and also due to the economic downturn in major markets that affected the reduction in the number of players (suppliers) of the chain.

All mentioned above are in contrast with the industries of Romania with the highest foreign value-added share in gross export.

In this context, the upgrading strategy of Romania in GVC should be implemented that presupposes adequate education, R&D, labour market and industrial and service sectors policies as well as investment in ICT and other high R&D intensity industries and activities.

It is also necessary to identify strategic segments for the modernization of industries, as well as to determine the necessary actions to improve the position of relevant products and services in regional value chains.

Market concentration of trade fragmentation of Romania is predetermined by long-standing historical and commercial relations.

Germany is Romania's largest export partner, followed by Italy and France. In value-added content, again Germany is the main market of final demand of Romania's value-added exports, followed by France, Italy and the USA. It is attracted attention that, the shares of Germany and Italy in value in Romania's gross exports are larger, but France and Italy are fewer than in value-added flows. It suggests that

Romania's value- added is entering in the France and USA through exports to neighboring countries (Bulgaria, Germany, and Italy), with which Romania has the highest degree of integration into regional value chains.

Similarly, regarding the imports, value-added content is arriving in Romania from France and the USA indirectly through third countries.

Based on the findings available from the database can be established that Romania's market is not the same important for three of its main partners (Germany, Italy, and France) in both gross and value-added content of export/import as for Romania. The last observation regarding the profile of Romania in GVC is although the economy of country undoubtedly won from integration in GVC, the gains obtained are not so significant as in the cases of other EU countries. The study reveals that countries from the next EU enlargement (Bulgaria, Hungary, Estonia, and Poland) have reached more significant outcomes thanks to foreign final demand in the indicators of domestic value added and employment, as well as the contribution of service value added to manufacturing than Romania. Reexported intermediate manufacturing imports of Romania are at 10 points less competitive than the EU average, by 13 points than in Bulgaria, and by 26 points than in Hungary.

For a decade, Romania is not sufficiently used the advantages offered by EU membership to be closely connected to Europe, one of the main manufacturing hubs around which GVC's activities are organized.

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