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Abstract. Due to the extent of markets globalization and of cross-border fragmentation of world production, the international value-added chains development brought about new challenges for emerging countries, many from SEE area, including Romania. The benefits for host countries arising from global production relocating on their territory could be significant in terms of employment, but maintaining active and even enriching the local work skills and cultural heritage. At the same time, these international transactions (through processing trade and/or FDI inflows) create vulnerabilities at the local level. The risks for host countries associated to other areas relocation of production could be mitigated by developing innovative and entrepreneurship heritage as drivers of sustainable growth and post-crisis economic recovery.

Keywords: international fragmentation of production; processing trade; FDI; entrepreneurship heritage; innovative heritage

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1. Introduction

Under the circumstances of increasing competition on the world markets, the liberalization of trade and capital flows has favored the international fragmentation of production through the cross-border delocalization of different stages of processing operations, horizontal and vertical globally integrated.

In the economic literature this complex process is defined as *global production sharing* or *outsourcing/off-shoring* (Mankiw and Swagel, 2006) and in international organizations framework as *international value-added chains* (WTO, 2011). In foreign trade terms, according to custom procedures, most of the related operations are submitted to *inward/outward processing trade* rules under temporary export /import regime(Georgescu, 2003, 2006).

Starting from the volatility of the international fragmentation of production in time and space, more pronounced during post-crisis years, the idea of this study is to provide arguments for host countries, most of them transition countries as Romania, in order to benefit more from the local supply chain experience, especially when processing operations are relocated out of that country.

On one side, the choice of a country as being part of the international value-added chain is considering undoubtfully its cultural heritage, at least in terms of local traditions and work abilities. On the other side, the cultural heritage has the opportunity to help the improvement of living standard in local communities and to acquire aditional values which could be capitalized in the future, including by the development of creative industries.

2. International fragmentation of global production: benefits and threats for host countries

The main economic reason of the international fragmentation of production resides in costs decrease, searching competitivity gains on the world markets. The delocating of production (or of a business function) targeted countries with comparative advantages, particularly from the viewpoint of labor costs and skills.

The multinational companies were the main vectors of expanding the production on international value-added chains, their decisions being founded primarly on the availability of skilled and cheap labor force in the host country and secondly on its political and economical stability, including the fiscal framework and tax regime, the transport infrastructure, the foreign investments regime, the foreign trade openess.

Depending both on production specific and companies' internationalization strategies, the delocalization took different forms, starting from direct orders to local firms and ending with setting up own companies or joint ventures in the host countries along with investments, technology and know-how transfer ("trade-investment-supply-chain", Blanchard, 2014, p. 17).

In terms of international trade it is worth mentioning the impact of international value-added chains development on the increase in intermediate goods exchanges by crossborder transfers from one country to another for the purpose of their processing/assembly. The share of intermediate goods in the global foreign trade stands currently around 50% while the average of import content of exports increased to 40%, double as compared with 1980 (WTO, 2013).

Even if transfers from developed-to-developed countries are significant (increasing the intra-industry trade between them) the critical mass of goods and services flows following the international fragmentation of production went from advanced countries toward the emerging ones.

As a result of valorizing comparative advantages due to their integration in international value-added chains, many emerging or transition countries have witnessed improvements in growth rates, employment and job creation, economic restructuring and export specialization, increasing the confidence in the local economy. Other benefits for host countries arise from the transfer of technology and know-how, raising skill levels of workers and implementing effective management systems. In many cases there were spillover effects of production delocalizing, advancing to higher levels of processing stages for example from labor-intensive sectors (textile-apparel) to capital-intensive (home appliances, automotive, auto spare parts), or high-end industries (electronics, IT&C), involving also local horizontal industries and contributing to the increase of the overall value-added. Usually, new supply chains setting up by the foreign companies are accompanied by training programs for employees in host countries.

On the other hand, the international fragmentation of production has given rise to certain threats in host countries because of the competing effect which made local companies to go bankrupt, creating export sectors/activities enclaved, leading to wage disparities at local and national levels, causing dramatic shifts in employment and labor skills structures.

Using data from World Input Output Database (compiled recently under the joint initiative of OECD and WTO), Foster and al. (2013) examined the link between international fragmentation of production and the skill structure of labour demand for 40 countries finding that off-shoring impacted negatively all skill levels within industries, the medium-skilled workers suffering the major impact.

Trying to explain the lack of convergence at region level of unemployment rates and using regional data (NUTS-3) from several European transition countries, Jurajda and Terrell (2007, p. 6) find that regional skill endowment disparities are increasing over time and are wider than in advanced European economies. They find also that the persistence of regional unemployment over time in transition countries is especially strong among the low-skilled also because the foreign direct investments and processing operations tend to flow to regions with higher skill levels.

The volatility of intermediate goods flows related to processing trade operations is due mainly to changes in comparative advantages in the host country (among which, as previously mentioned, the labor costs are crucial) but also in international environment. Under the pressure of global competition and prolonged crisis, the shift in their international strategy may lead companies to decisios of sudden relocating the processing operations to other geographic areas, leaving in a very short time the former host country, damaging the situation of the local economy and arising social tensions.

Benefits for host countries could prove sustainable only if their development policies are completed, as the erosion in time of comparative advantages, with local and national strategies in order to promote own brands on international market segments "inherited" after withdrawal of foreign investors or processing operations.

3. Romania's position on global value chains

A measure of the involvement of countries in the international value-added chains was introduced by Koopman et al. (2011) based on the share of foreign inputs (backward participation) and of domestically produced inputs used in third countries' exports (forward participation) in a country's gross exports. Further, OECD set an inter-country input-output matrix (OECD ICIO Model) for the computing of the value-added that returns to the domestic economy embodied in foreign inputs (Backer and Miroudot, 2013).

The global value chains participation index (Table 1) shows a significant increase for all selected countries in the period 1995-2008, in 2009 registering a decline caused by the global crisis triggering. At the world level the most integrated in the international value-added chains networks are the East-Asian countries as Singapore, South Korea, Malaysia, Philippine mainly due to the development of processing operations in high value/added sectors as electrical and computing machinery, communication and telecommunication equipments.

Czech Republic recorded the highest GVC participation index among selected European countries in 2009, sustained by the trade-investment-supply-chain related to Germany, mostly in sectors of motor vehicles and other transport equipments.

In the case of Romania the lower level of GVC participation index as compared with other EU countries and with many Asian countries can be explained not only by a weaker connection to the global value chains, but also by country positioning at the beginning of the value chains and on processing operations with lower value added (mainly in textile, textile products, leather and footwear).

Table 1

Global Value Chains participation index

- % -

Country / Year	**1995**	**2000**	**2005**	**2008**	**2009**
Belgium	57.3	62.5	65.5	62.8	57.6
Bulgaria	51.7	58.3	54.1	55.3	47.8
Czech Republic	51.5	61.3	65.0	63.0	62.4
Germany	41.3	48.8	50.7	51.9	49.5
Hungary	41.8	63.4	68.9	62.8	56.6
Netherlands	52.8	58.8	58.6	59.6	56.8
Poland	32.9	47.4	55.3	52.2	48.3
Romania	**39.3**	**48.2**	**51.7**	**49.8**	**46.1**
Slovak Republic	56.4	69.5	70.6	67.5	62.2
South Korea	37.9	52.1	63.9	68.4	65.0
Malaysia	55.4	62.6	68.7	67.7	65.6
Philippines	47.5	63.2	74.3	72.8	66.6
Singapore	60.5	69.4	74.8	74.3	70.7

Source: Dataset OECD Global Value Chains Indicators May 2013.

An indicator for indirect assessing of the extent to which a country is advanced on international value-added chains available in the joint OECD-WTO TiVA database is the domestic value added embodied in foreign final demand (Table 2). According to this indicator, among the selected European countries Hungary has recorded the highest share, more than 40% in 2008 and 2009, which reflects the best position of upstream industries in value chains, clearly improved due to the accession into the EU.

Table 2

Domestic value added embodied in foreign final demand*

(% of GDP)

Country / Year	1995	2000	2005	2008	2009
Belgium	30,3	33,3	32,6	35,8	34,5
Bulgaria	33,9	29,7	25,6	32,8	30,6
Czech Republic	30,8	35,1	36,3	36,8	34,4
Germany	16,7	20,9	25,0	27,8	24,7
Hungary	29,9	35,7	29,8	40,1	42,0
Netherlands	29,8	31,3	30,7	31,3	29,0
Poland	18,7	19,6	24,4	26,1	27,0
Romania	**18,8**	**22,6**	**22,2**	**20,6**	**21,9**
Slovak Republic	36,4	35,8	38,8	42,1	38,6
South Korea	20,8	24,8	23,3	28,4	28,1
Malaysia	51,2	64,9	65,3	61,0	57,2
Philippines	20,3	26,2	23,7	20,4	18,9
Singapore	48,8	47,4	60,5	59,6	57,5

* The indicator shows how industries export value both through direct final exports and via indirect exports of intermediates through other countries to foreign final consumers. It reflects how industries (upstream in a value-chain) are connected to consumers in other countries, even where no direct trade relationship exists.

Source: OECD-WTO Database Trade in Value Added TiVA.

The last available data of OECD-WTO databases ends in 2009, the first year of the worldwide crisis. In the period following this year, the effects of the crisis continued to impact on global flows (intermediate goods, services and capital) the actual picture of countries positioning on international value-added chains certainly changed as compared cu 2009.

During the post-crisis period we think Romania should have won positions due to development processing operations in higher value-added sectors, mainly in automotive sector (spare parts and electric cables assembly for German automakers) and in communication sector (mobile devices assembly for Nokia between 2009-2011) which was foreseeable under the circumstance of continuing the trend started in 2008 as observed in Table 2.

The globalization impact on accelerating the international fragmentation of global production and the effects of the global crisis have been felt by Romania, also in terms of its cultural heritage, in a positive manner but adversely too.

4. Capitalization of heritage values in Romania

The cultural heritage has a double nature i.e. as tangible capital with standard characteristics of ordinary physical capital and as intangible capital including ideas, traditions, beliefs and customs shared by a group of people, and also intellectual capital existing as language, literature, music (Throsby, 2000, p. 102). The impact of local supply chains development, more in cases of joining with foreign investments is affecting both sides of cultural heritage.

Returning to the idea that founded this study, we can assert that Romania's integration into international value-added chains in some sectors witnessed benefits of enrichment the tangible and intangible cultural capital through direct and indirect contact with global markets competition. On the other hand, beside the risk of diverting the cultural heritage in a manner that may prove irreversible, relocating the processsing operations in other countries may create economic, financial and social vulnerabilities at the macroeconomic level and even the dissolution of cultural heritage at local levels. The question then become what can be done to turn the extraknowledge brought by foreign companies while operated in our country in Romania's favour.

The growth potential of cultural industry in Romania has been highlighted by Zaman and Vasile (2009, p. 12) by estimating a productivity per employee higher by more than 50% as compared with national average. Nevertheless, in the case of Romania, the export to import ratio of cultural industry goods (1 / 2.5) remain unfavourable with a negative contribution to trade and current account balances (idem, p. 12).

An example of the underutilized potential of industrial culture in Romania is represented by the textile and clothing sector, having a history of more than 100 years. During the transition period, the past experience and long traditions in the manufacture of garments along with the low level of wages compared to the labour skills attracted Romania on the international supply chains. Romania became the largest exporter of garments in Central and Eastern Europe, the greatest part under processing regime, including for the most famous European fashion houses, capitalizing the cultural heritage in this field in many areas of the country. Following the abolition of quotas under the WTO in 2005, the Asian competition and increase in labour costs after joining the EU in 2007, the garment industry, losing from comparative advantages, went into decline after 2008 on the international supply chains in this industry, exacerbated by the global economic crisis effects. The reduction in external orders for inward processing in Romania has not been compensated by launching own brands on international markets. While before 1990 in this sector worked about 1 million employees, now only about 170 000 remained, which led to increasing unemployment, loosing much of export capabilities and affecting the local tangible and intangible cultural capital.

More than that, paradoxically, in the context of garment industry recent recovery that led to the increase of external demand for processing, many Romanian companies had to reject new external orders because of the lack of skilled staff. An European Commission study (2012, p. 45) showed that in the sector of textiles and textile products, among all UE Member states, Romania had in 2011 the highest unused export potential, i.e. 15% of the total EU unused export potential.

As argues a specialized international platform (EFF, 2014) the culture and traditional dress represents a source of inspiration for the fashion industry, recognizing the value of preserving and building upon the local skills considered an important part of culture and a way of adding value. Despite this, the manufacture off-shored to developing or transition countries did little to develop the local traditional culture and skills focusing mainly on the mass production garments at lower labor costs.

A typical cultural product in this case would be the fashion industry and global brands. Although producers in Romania have worked in processing regime for the most famous fashion houses in Europe (among others Giorgio Armani, Hugo Boss, Versace, Boggi, Patrizia Pepe, YSL, Cavalli, Zara, Ted Baker, Stefanel, Benetton, Moncler, H&M), they have failed to learn this lesson and to launch their own brands on global markets. It is true that this market is difficult to access being apposite a financial support from the state budget for promoting Romanian brands, but the effort is worthy because it creates extremely high levels of value added. The success through innovative entrepreneurship has been demonstrated by Jolidon, a Romanian lingerie and swim suit manufacturer, founded in 1993 which has become a global brand in this field among the top 12 companies in the world.

A significant example of developing innovative and entrepreneurship heritage is represented by a recent initiative focusing the reborn of silk weaver handcraft, rooted in Romanian garb history. The Architecture Triennale East - Centric Architecture (October 20, 2013, Bucharest) under the project BORANGIC have the motto: “Romanian natural silk, a concept of life!”. The unique activity of Cristina Niculescu (Stoenesti, Arges

District) the only person which still produces handmade fabric from natural silk (borangic) has been presented there. Also, there was a particular weaving machine, reconstructed by her from spare parts collected from old scrapped and even from museums. She became well known in all the country and abroad, exclusivist customers from USA, France, Germany highly appreciating the value of these artworks.

High expectations in Romania to develop innovative and entrepreneurship heritage in the textiles and garments industry are coming from the recent setting up of several clusters (Romanian Textile Concept in Bucharest-Ilfov Region, ASTRICO in the North-East Region, Traditions Manufacture Future in South-East Region, Transylvania Textile and Fashion in Centre Region) and a pole of competitiveness in this sector (NOATEX).

5. Conclusions

The cultural heritage is seen as a pillar of sustainable development due to its double faced consistence, i.e. economically creative, by creating more cost-effective jobs and socially creative by providing activities that elevate the well-being of population (Dümcke and Gnedovsky, 2013, p. 22).

Cultural heritage and the related policies are seen also as investments in human capital focusing on the development of reactive and creative capacities based on the logic of competitiveness and using new tools, more appropriate to redesign the European economy according to the priorities of smart, sustainable and inclusive growth on 2020 horizon (Brunet, 2011, p. 5)

Under the circumstances of the Romanian government budget constraints on long term, European structural and cohesion funds allocated for the new programming period 2014-2020 could compensate, at least partially, the financial needs for cultural values capitalizing. As shown by Suteu (2012, p. 46), conditioned by a significant increase in absorption capacity of European funds and based on the potential of cultural heritage assessment in different areas, Romania should promote projects focusing on enhancing the access to cultural content and creative potential, disseminating innovative thinking at local and regional level, including knowledge transfer, developing culture related clusters and networks, supporting culture and creative sectors start-up companies, capitalizing more the innovative and entrepreneurship heritage.

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