PLUSES AND MINUSES OF BEING IN A GLOBAL VALUE CHAIN – THE CASE OF ROMANIAN APPAREL SMEs

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ABSTRACT. In order to survive in the face of continuing global competition, in the long run, developing countries SMEs will have to be inserted into global value chains (GVCs). For the Romanian apparel SMEs, the insertion in a GVC is having far-reaching effects on competitiveness, cross-national transfer of new technology, innovation, skills, knowledge and learning, and potentially offers greater opportunities for reaching welfare gains. But it also brings the challenge of being locked into a race to the bottom, “the low road” of competitiveness, based on cutting wages, disregarding labour and environment regulations and avoiding taxation. In this paper we examine the pluses and the minuses of being in the GVC for the Romanian apparel SMEs in order to point up several strategies needed for the “high road” of competitiveness, based on the use of new technologies, efficiency in production and trade, diversified products of better quality. Thus SMEs from the Romanian apparel industry will be able to support higher wages and enhance the national income.

Key words: SMEs, GVC, competitiveness, apparel industry

JEL classification: L25, F23

I. Introduction

Nowadays, the technological advancements and trade and investment liberalization increasingly make fragmenting of activities in all stages of a production value chain possible. Some of these segmented activities can be performed in various locations across the globe and reintegrated again through production systems of global value chains (GVCs) and global production networks (GPNs).

The clothing industry is a traditional sector of the Romanian manufacturing industry, which played a key role in our country’s industrialization and development. According to Romanian Statistical Yearbook, over 95% of Romanian apparel producers are SMEs.

It is very difficult, even for larger enterprises, let alone SMEs, to stay competitive over time, as domestic economic and global product-market conditions change. Therefore, these companies are likely to suffer to a greater extent the economic

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recession shock and will have to put in more efforts to stand its ground after 2009. In this context, Romanian apparel SMEs need, more than ever, to insert successfully into global value chains.

II. Material and methods

To realize this paper we used information from the literature on global value chains. In order to a closely identification for some problems and the specific ways to solve those it is been used exploratory research. To obtain information about situation already existing on the market it is been used descriptive research.

III. Results and Discussion

III.1. The global value chain framework of analysis

The value chain describes the full range of value added activities which are required to bring a product or service from its conception, to its end use and beyond. The activities comprised in a value chain are: design, sourcing raw materials and intermediate inputs, production, marketing, distribution, and support to the final consumer. These activities can be contained within a single enterprise (within a single geographical location or spread over wider areas) or can be divided among multiple firms and spread across wide swaths of geographical space. As can be seen in Figure 1, the value chain is characterized by ranges of activities within each link of the chain and intra-chain linkages (most often of a two-way nature):

![Figure 1 - A simple value chain](image)

Kaplinski, R., Morris, M. – *A handbook for value chain research*, IDRC, 2002
A more comprehensive and complex picture of a generic value chain in Figure 2 illustrates the links between the value chains for all products and services in an economy and the supporting activities and institutions (such as educational institutions for training and infrastructure services for logistics):

Figure 2 – Generic value chain and supporting inputs

The global value chain (GVC) consists into the entire range of activities associated with a given product or service geographically dispersed across borders in multiple countries. Nowadays the proportion of goods and services produced and consumed entirely within one country is rapidly shrinking. In the global economy, value chains can span enterprises of a local economy, a sub-national regional economy, the entire domestic economy, a supra-national regional economy, and the global economy, their component activities being geographically dispersed across borders to multiple country locations.

There are two prevalent types of GVCs: buyer-driven and producer-driven value chains. In the buyer-driven value chains, key actors are the large buyers with core competencies in branding and marketing are the driving actors in setting up these value chains. They increasingly organize, coordinate and control the research, design, production, sales, marketing activities and financial services, acting as strategic brokers in linking overseas factories and traders with product niches in their main consumer markets. These chains are typical for labor-intensive industries and are highly relevant to developing countries (for instance, agro-food industries, textiles, garments, footwear, toys, furniture, and the like). In the producer-driven value chains, key actors are producers in the chain that control vital technologies, which are of crucial importance for positioning in the final product market. They coordinate these value chains and take responsibility for helping the efficiency efforts of their suppliers and their customers. These chains are typical for medium- and high-tech industries, like automobiles, electronics, telecommunications, and the like. The third type of GVCs, less prevalent that the above mentioned two types, is the multi-polar chain characterized by multiple power centers in different parts of the value chain. The key characteristic of this type of GVCs is that there is no overall dominant "lead firm" with power to determine the ultimate shape of final products and therefore exert control over key activities throughout the chain.

A production network consist into the entire range of linkages within or among a group of firms in a particular global value chain for producing specific products, with an emphasize on the organizational particularities of the networks of subsidiaries, affiliates and suppliers that lead firms use to produce a given product. The lead firms of a production network control access to key resources and activities such as product design, international brands and access to final consumers - that generally gives them leverage over the other enterprises - suppliers - in the production network.

Global production networks (GPNs) consist into the distribution and coordination of geographically dispersed activities within and/or among firms takes place across borders in multiple countries). Production networks become "global" when the distribution and coordination of geographically dispersed activities within and/or among enterprises takes place across borders in multiple countries. There are two types of global production networks: intra-firm and inter-firm. Intra-firm global production network is the classic multinational, vertically integrated enterprise, where production and related activities are relocated "offshore", but remains essentially within the coordination and control of the firm. Inter-firm production network involve non-equity linkages, in which formally independent enterprises - suppliers, producers and retailers - linked through a variety of relationships such as subcontracting, licensing, common technical standards, marketing contracts and shared network product - and process-related standards. This involves both the relocation and reorganization of production activities offshore and outside the boundaries of the firm. In an increasing number of industries, producers sell into final markets through
such non-equity-based production networks; usually coordinated by lead firms which set the standards for supplier participation\(^6\).

There are several *key characteristics of GVCs and GPNs*, as follows:

**A. Governance - strategies of the lead firms concerning the suppliers that determine how financial, material, and human resources are allocated and flow within a chain**

Generally, lead firms are making the "rules of the game" in a chain/ network that govern regarding the potential suppliers, the outputs of suppliers in the network, the methods of production, how much is to be produced by each supplier and when, which activities or functions will the suppliers be allowed to undertake in the network and in which of these areas will suppliers be allowed to upgrade. The lead firms try to retain and guard value chain activities with the highest returns and value added. The operational control of the lead firms is exerted through increasingly ICT/e-commerce-based management and logistics systems that integrate supplier activities within the network.

The GVC framework specifies three types of network governance (modular, relational, and captive) along with the two traditional modes of economic governance (markets and hierarchies). There are five different GVC governance patterns that tend to vary in specific industries and places: markets, modular value chains, relational value chains, captive value chains and hierarchy.

The GVCs literature emphasizes three important variables to look for when studying GVCs in a particular firm, industry, or place. Furthermore, if one of these three variables changes, then value chain governance patterns tend to change in predictable ways. These variables are:

1. **The complexity of transactions** - complex transactions will likely to be associated with one of the three network governance patterns (modular, relational, or captive) or integrated within a single firm (hierarchy).

2. **The codifiability of transactions** - if suppliers have the competence to receive and act upon codified information, and if the codification schemes are widely known and widely used, then we would expect to see modular value chains emerge; if not, then lead firms might either keep the function in-house, leading to more vertical integration (hierarchy) or outsource it to a supplier that they tightly control and monitor (the captive network type) or have a dense, idiosyncratic relationship with suppliers (the relational governance type).

3. **The competence of suppliers** - needed for the transfer of complex but codified information to be achieved (as in modular networks) or intense interaction be worthwhile (as in relational networks). In case competent suppliers do not exist, lead firms either must internalize the function (hierarchy) or outsource it to suppliers that they tightly monitor and control (captive suppliers).

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B. Upgrading improving a firm's competitive position within a given network or value chain and creating additional value through innovation

According to GVC literature, upgrading is decisively related to innovation defined not only as a breakthrough into a product or a process that is new to the world but rather as a matter of marginal, evolutionary improvements of products and processes, that are new to the firm, and that allow it to keep up with an international (moving) standard. This involves a shifting to activities, products, sectors which sustain higher value added and enforce higher entry barriers. For enterprises working within a value chain, four types of upgrading are singled out: (i) Process upgrading is transforming inputs into outputs more efficiently by re-organizing the production system or introducing superior technology; (ii) Product upgrading is moving into more sophisticated product lines in terms of increased unit values; (iii) Functional upgrading is acquiring new, superior functions in the chain, such as design or marketing or abandoning existing low-value added functions to focus on higher value added activities; (iv) Chain upgrading is applying the competence acquired in a particular function to move into a new sector. Thus, upgrading within a value chain implies going up on the value ladder, moving away from activities in which competition is of the “low road” type and entry barriers are low.

C. Role of global buyers - setting up standard requirements internationally agreed

Nowadays, global buyers increasingly want more information and control with respect to their suppliers, increasingly further back in the value chain. Therefore, in industries as diverse as electronics, computers, apparel and fresh vegetables the trend is away from “arms length” market-based transactions to some form of linkages or alliance among firms along the value chain: thus production networks are established.

D. Role of global suppliers - global investors, influencing on the fortunes and export competitiveness of their host countries enterprises

Aiming to spread the risks and lowers the costs of doing business, leading firms are becoming increasingly reliant on global suppliers, often based close to home, but supported by subcontractors globally. In turn, global suppliers are reorganizing networks within value chains, redefining the role and relationships of lower-level suppliers/ producers, further back in the chain, looking for firms that already have the requisite production capabilities. This reorganization of networks is becoming a factor in an increasingly wider range of industries, enhancing the influence of global suppliers on the export competitiveness of host countries and on the fortunes of their enterprises.

I.2. The apparel GVC

The apparel industry is one of the most global ones, apparel manufacturing being a classic starter industry for export oriented industrialization. Traditionally, apparel manufacturers are located in developing countries, often under outward processing
agreements with major importers. Production of apparel is a low value-added labour-intensive industry, often using unskilled workforce and sewing techniques basically similar to those that were used a century ago.

The value chain in the apparel industry embraces several different sets of activity, roles and occupations presented in Figure 3:

![Figure 3 – Steps in the value chain in the apparel industry](image)

1. Development and planning of the entire collection involves several skilled activities including knowledge of market trends (in apparel demand is growing relatively slow and is unpredictable and the share of apparel in household budgets is in decline) and of fabric availability, the integration of both into development of product lines (the range of products is limited and products are subject to rapid obsolescence and to strong fashion related influences), and the costing of the planned collection.

2. Design and prototyping of new models requires both creativity and technical aptitude in addition to understanding market demand and cost structures.

3. Production design and sample-making concerns the most cost-efficient means of producing the item, bearing in mind quality standards and fit. Decisions on manufacturing location are also brought into consideration.

4. The actual manufacture and assembly of garments, or CMT (cut-make-trim), involves mainly semi-skilled sewing and assembly operations, using simple machines and requiring elementary skills.

5. Marketing seeks to match retail outlets to the quality and character of the clothes, and to achieve the broadest possible market access in a given segment.

6. Distribution entails an increasingly sophisticated logistics operation often based on computerized order tracking and inventory control systems.

7. Finally, the garments reach consumers through various retail channels.

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7 Faust, M. – *Reorganization and relocation in the German fashion industry*, Gottingen, 2005
8 Dunford, M. – *The changing profile and map of the EU textile and clothing industry*, in Faust, Michael, Voskamp, Ulrich and Wittke, Volker (eds) *European industrial restructuring in a global economy: fragmentation and relocation of value chains*, Goettingen
The higher value added segments of the value chain are all in the services category: gathering of market data, product design and fashion, marketing, retailing and logistics.

In principle these seven steps can be separated from each other and performed in different locations, since they involve clearly identified costs as well as different sets of capabilities and occupations. The apparel GVC includes the entire range of production related activities from raw material inputs to sales, independent and particular firms involved, as it can be seen in Figure 4. The apparel GVC is organized around five main components (Figure 4): raw material supply, including natural and synthetic fibers; provision of components, such as the yarns and fabrics manufactured by textile companies; production networks made up of garment factories, including their domestic and overseas subcontractors; export channels established by trade intermediaries; and marketing networks at the retail level. Entry barriers are low for most apparel factories, and they increase with movement up the GVC.

As far as apparel production networks are concerned, lead firms (diverse global "buyer channels", including cost-driven discount chains, upscale brand marketers, apparel specialty stores and private labels of mass merchandisers) control access to

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key resources and activities (such as product design, international brands and access to final customer), activities that often generate the most profitable returns. This generally gives them leverage over the other enterprises (suppliers) in the production network through their ability to shape mass consumer markets via strong brand names and local sourcing strategies. The apparel industry comprises both intra-firm GPNs (for example Inditex and H&M) and inter-firm GPNs, usually coordinated by lead firms, the last mentioned being the most prevalent ones.

The apparel GVCs and GPNs are typical buyer-driven value chains/networks, with highly competitive and dispersed global industry structure, including regional and local competitors, large retailers and brands playing the lead role in sourcing from decentralized networks of independent suppliers, defining products, specifications and standards.

As the intensity of global competition is growing the products life cycles shortens and the entry barriers are lowering. As a consequence, enterprises need to upgrade and they may achieve this in various ways, as for example by entering higher unit value market niches, by entering new sectors, or by undertaking new productive (or service) functions, and always deepening technological capabilities. There is a hierarchy of upgrading which suggests that firms engaging on an upgrading path are advised to proceed along a well-trodden path (Figure 5). The literature suggests also a pattern of process upgrading in the apparel industry, (as the enterprises from buyer-driven GVCs have room to upgrade their processes) presented in Figure 6.

<table>
<thead>
<tr>
<th>Trajectory</th>
<th>Process</th>
<th>Product</th>
<th>Functional</th>
<th>Chain</th>
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<td>Examples</td>
<td>Original equipment assembly (OEA)</td>
<td>Original design manufacture</td>
<td>Original brand manufacture</td>
<td>Moving chains – e.g. from black and white TV tubes to computer monitors</td>
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<tr>
<td></td>
<td>Original equipment manufacture OEM</td>
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Degree of disembodied activities: Disembodied content of value added increases progressively

Figure 5 – The hierarchy of upgrading

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10 Pietrobelli, C., Saliola, F. - Power relationships along the value chain: multinational firms, global buyers, and local suppliers’ performance, CREI working paper no. 2/2007
11 Kaplinski, R., Morris, M. – op.cit.
The apparel GVC is dominated by three types of buyers: retailers, branded marketers and branded manufacturers, all of which source globally. Producers wishing to participate into apparel GVC have to meet stringent requirements of a growing multiplicity of standards imposed by the global buyers internationally agreed on quality, environment, labour, etc. Frequently, large apparel retailers shift from being primarily buyers from garment manufacturers to developing strong linkages with global suppliers. Through active engagement at different points in GVC, e.g., product design, fabric selection and procurement and overseeing production of manufacturers dispersed around the globe these retailers transform themselves from passive buyers into private-label or store-brand lines producers.

Global retailers are supported by increasingly powerful and smaller number of preferred first-tier global suppliers that organize production-related activities on their behalf, as seen in Figure 7. Using their logistics capabilities and management coordination, these independent companies match domestic manufacturers and foreign/ global buyers.

The apparel GVC is also characterized by the presence of prominent marketers with well-known brands, manufacturers without factories focusing on design, branding and marketing. Their role is to provide information/knowledge and market access to allow suppliers to upgrade, as they increasingly devolve functions and key parts of the value chain to their suppliers. For example, they increasingly outsource support functions (e.g., pattern grading and sample making), and are “devolving” external

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12 Yoruk, D. E. – Patterns of industrial upgrading in the clothing industry in Poland and Romania, Centre for the study of economic & social change in Europe, London, 2001
sourcing of many activities and inputs to selected first-tier global suppliers. Also they are shrinking their supply chains, using fewer preferred manufacturers and are adopting increasingly stringent standards.

**Branded manufacturers** are the third key group of buyers dominating the apparel GVC. Leading apparel manufacturers in developed countries have been under increasing pressure from lower priced off-shore producers providing products of similar quality, quantity and service. As a consequence, they have been shifting from production to marketing, building on their retail outlets and brand names.

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III.3. Requirements for apparel SMEs successful insertion into global value chains

Nowadays, the ideal is for an enterprise to access international markets directly by selling final products with pricing power and brand presence to customers globally. Significant capabilities are needed, such as:

- the capability to design, produce, market, distribute and service the product on global markets;
- the capacity to respond effectively to changing market conditions, including evolving tastes and new competitors.

The global competition in products markets is forcing prices down, while driving up the requirements for production, technological and management capabilities. Because of their size and isolation, individual SMEs are constraint from:

- achieving economies of scale in the purchase of such inputs as equipment, raw materials, finance, consulting services;
- their inability to identify potential markets;
- their incapacity to take advantage of market opportunities that require large volumes, high quality, stringent standards and regular supply;
- accessing business services such as training, market intelligence, logistics;
- achieving key inputs that require specialized knowledge such as technology.

These constraints make it difficult for the apparel SMEs to access global markets and also limit their performances in a more and more competitive and open domestic market.

Unfortunately, the constraints mentioned above are common to Romanian apparel SMEs. As the specialized studies and research projects show, Romanian apparel SMEs act individually, clusters being insufficiently represented (there are only a few potential apparel clusters, often spatial agglomerations of companies as such, not quite the “research system networks” - the most advanced form of clustering employing strong institutional and informal linkages between companies, universities, vocational schools and research centers, and public institutions).

III.4. Pluses and minuses of being in a global value chain

As can be seen in Figure 8, through GVCs and GPNs, SMEs can link up to global buyers. It is essential that a SME should enter the chain as a higher tier supplier or as a lower-tier supplier but with the opportunity to upgrade. By linking to the leaders, SMEs have the opportunity to use all the resources they can acquire from the advanced world (such as knowledge) in return for providing such services as low cost manufacturing.

14 Pislaru D., Aristide O., “To cluster, or not to cluster? The potential for competitive economic growth through cluster development in Romania”, 2004
SMEs that interact with buyers looking for large volumes of standardized products and insert themselves into GVCs have several advantages presented below:

- The considerable investment and risk in entering export markets is reduced by the buyers that are responsible for product definition (study of the market, development of the models, work out of the product specifications, the choice of technology, the organization of production, inspection of quality on site) and logistics (set up of transport and payment arrangements);

The processes standards and product quality raises, as the SMEs concentrate on production and the organization of their own local supply chains; thus, they are able to:

- raise quality;
- reduce batch size and increase speed;
- increase the sophistication of their products.

Therefore, the size of the factory increases rapidly and SMEs can switch to a new way of producing.

However, there are some disadvantages for the SMEs that enter into global value chains:

- moving further up the chain can lead to conflicts with existing customers;
- some enterprises even had their capabilities downgraded as a result of their integration in global value chain;
- the activities performed by SMEs under outward processing arrangements (e.g. mere assembly of imported inputs) have low value added;
- the rivalry among apparel producers from developing countries to offer transnational companies the lowest production costs leads to:
  - a race for the lowest wages (because the apparel industry is labour-intensive, with labour accounting for 60% of production costs), which also lowers the local standards of living while doing nothing to improve productivity;
  - a perverse “competitive devaluation”, where currency depreciations are seen to increase international competitiveness; enterprises that rely only on devaluing exchange rates cannot survive;
  - illegal practices such as: disregarding labour and environment regulations, avoiding taxation.

IV. Conclusions

In their struggle to compete, Romanian apparel SMEs can use the “second best” opportunities provided by global value chains and associated production networks. Within the global value chain framework, these enterprises can specialize in a limited set of activities and outputs and reach larger (regional and global) and more stable markets. In order to do that, these enterprises are required to work in a more formal manner and upgrade not only their production methods but also their management practices.

It is important for managers to better understand how GVCs function and to explore how Romanian clothing SMEs may participate in global markets in a way that provides for sustainable growth avoiding the peril of competing by lowering wages and profit margins rather than by improving productivity, wages and profits.

The key difference between the high and the low road to competitiveness is often explained by the different capabilities of firms to “upgrade”.

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Also, managers and entrepreneurs must understand that, although it is easier to enter into a chain as a lower-tier supplier this is likely to be an unstable position – therefore a SME needs to enter the chain as a higher tier supplier or as a lower-tier supplier but with the opportunity to upgrade.

REFERENCES

2. Dunford, M. – The changing profile and map of the EU textile and clothing industry, in Faust, Michael, Voskamp, Ulrich and Wittke, Volker (eds) European industrial restructuring in a global economy: fragmentation and relocation of value chains, Goettingen
5. Giuliani, E., Pietrobelli, C., Rabellotti, R. - Upgrading in global value chains: lessons from Latin American clusters, Dipartimento di Scienze Economiche e Metodi Quantitativi Università del Piemonte Orientale Quaderno n°72, Novara, 2004
6. Kaplinski, R., Morris, M. – A handbook for value chain research, IDRC, 2002
9. Pislaru D., Aristide O. - To cluster, or not to cluster? The potential for competitive economic growth through cluster development in Romania, 2004