Some Aspects Regarding Romanian Exports Competitiveness, in the Period 2001-2014

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Abstract: The paper presents another metrics of Romania’s export competitiveness, based on the evolution of international export rankings (positions) of our country, in the period 2001-2014, according to SITC (2 digits). We consider that increasing or decreasing number of won or lost positions in the world positions rankings by Romanian exports in the world hierarchy can indicate respectively an increase or decrease in competitiveness. The change of Romania’s position in the hierarchy world’s exports by countries in 2006, 2010 and 2014, as compared to 2001, constitutes a sui generis indicator of its export competitiveness, according to the number of positions (ranks) won/lost in the framework of export world ranking. If Romania climbs in the world export hierarchy we consider an improvement of export competitiveness. Conversely, a loss of positions in the hierarchy means a diminishing in the competitive strength of exports. This indicator provides a new means to assess the investment of a country, for a specific category of exported goods in the world market, has improved/worsened its competitive position, surpassing or, on the contrary, remaining behind some other competitors. The main conclusion is that the number of win ranks in the analysed period was much higher than that of lost positions in Romania, respectively 68 positions gained as compared with 28 lost positions. This conclusion is corroborated with the economic, social, environmental, technological importance and share of each SITC export group.

Keywords: exports competitiveness; ranking; SITC; international specialization.

JEL classification: D40; F02; F10; F15.
The post-accession period 2007-2014 has represented for the Romanian exports a new stage and evolution of competitiveness on the international markets. In order to detect the main trends of the Romanian exports’ competitiveness on the SITC two digits categories, we have taken into account the primary UNCTAD data regarding their value in the international comparative context, where at least three important direct factors are interfering quality, quantity and prices of exports.

We came to the conclusion that the change of the Romanian’s position in the international hierarchy of each country’s exports during 2006, 2010 and 2014 compared to 2001 represents a genuine indicator for the exports’ competitiveness, based on the number of positions gained/lost in the international nomenclature. Thus, the more Romania ascends its place or position in the international hierarchy, the more its competitiveness capacity is growing and vice versa. The more Romania loses positions in the respective hierarchy, the more its competitiveness power diminishes for the respective exports group. This competitiveness indicator calculated for the period 2001-2014 offers the possibility to assess the evolution of Romania’s competitiveness in the pre and post-accession periods, as well as the impact of international financial crisis on Romania’s exports competitiveness.

1. Theoretical Approaches of Exports Competitiveness

1.1. The concept of competitiveness

In the current conjuncture of global economy, the competition is a genuine generator of economic performance for economic entities - a key factor for success in the competitiveness race.

The competitiveness represents a complex economic category where are interfering a lot of relevant factors of influence such as: productivity, profitability, the trade balance, economic growth, etc.

One of the definitions considers that competitiveness consists in the ability to sell goods and services on time, place and form appropriate to foreign buyers at prices equal to or lower than those offered by other potential providers earning at least the opportunity cost of the resources used (Sharples et Milham, 1990).

Competitiveness, which often is identified with financial indicators as profitability or productivity, reflects the the real or potential ability characterized by a relative advantage over other competitors in the same market. Some specialists however hold that profitability and productivity are only partial measures of competitiveness (PriceWaterhouseCoopers Développement, 2001), although they are extremely important.

In European Union, competitiveness concept is the ability that an economy has to sustain high growth rates of productivity.

The competitiveness in the EU vision is to excel in terms of research and innovation, information technologies and communication, entrepreneurship, competition, education and training, and depends on the capacity, outlook and "conduct" of economic activities of European countries to achieve structural adjustment towards obtaining performances in these areas.
In the context of free market economy, the competitiveness is defined as the business capacity to maintain or improve its national or international position. At micro-level of individual firms it involves entrepreneurial quality and quality of managers, goods and services level of innovation, connection with the markets, access to the production factors (land, labour and capital, efficiency of production process).

At country level, competitiveness is manifested in more aggregated forms and comprises: the level of enterprises culture; the size of comparative advantages; resource endowments; research and innovation; skills availability; functional financing markets.

Competitiveness is a relative concept, considering an economic entity capacity, compared with other entities.

Competitiveness indicator is not a static concept, but a dynamic one, involving a potential time format. The economic, technological performance, of an entity at a certain time, it is not necessarily related to competitiveness. But, maintaining or increasing the respective performance over time, meaning long-term success in the competitive process, can be a proof of the competitiveness of this unit; which indicates the health of the entity and includes several indicators in compliance or responding to a critical system of a competitive position on the market.

The competitiveness of a country represents "level that a country in the free market produces goods and services that meet the tastes of the international market, which simultaneously maintains and improves population real incomes in the long term" (H.H. Chartrand, 2002) and “competitiveness in the international trade represents the ability or inability measure of a country to sells its products on international markets” (OECD - Glossary of statistical terms).

At micro level competitiveness, is a firm’s ability to produce goods and/or services with higher quality and at a lower price than its internal or external competitors, while international competitiveness is the capacity of a country, in free market conditions and of fair competition, to design, produce and market goods and services that are of higher quality or at a price below the products and services of other countries (L.C. Dragomir, L.L. Vochița - MIBES International Conference, 2007).

The competitiveness of a firm is related to its safety, efficiency, quality, high productivity, adaptability, successful, modern management, superior products, optimal costs which requires a rigorous examination of both that company, and business environment of its activity.

Competitiveness at the macro level is defined as "a set of institutions, policies and factors that determine the country’s level of productivity. Productivity, in turn, sets a sustainable level of prosperity that can be earned by an economy. In other words, more competitive economies may have the capacity to produce a higher level of income for citizens "(The Global Competitiveness Report 2009-2010), and increase the national wealth.

From the literature review we concluded that there are two approaches, nation's competitiveness and companies' competitiveness (Porter, 1990, Krugman and Venables, 1990).
Krugman states that the role of macroeconomic policies must be flexible enough to allow companies to face international competition. The nation is the one that can sustain or not a favourable environment for their activity, and firms, in turn, are the ones that create value and offers the nation the strength to face domestic and international competition.

“The true nature of capitalist competition is not price competition but technological competition, that leads to” new products, new technologies, new sources of supply, new forms of organization (...) competition that determines the decisive advantages of cost or quality and that breaks not only the boundaries of profit and the output of existing firms, but their fundamentals and life itself” (Schumpeter, J.A. 1943).

When talking about the competitiveness of a sector or economy, it deals with the concept in connection to foreign competitors, i.e. considering its performance in foreign trade, or, in other words, the industry’s ability (businesses they represent) to penetrate foreign markets (increasing exports and foreign direct investments) and to face competition. Increasing exports and FDI could have a direct impact on productivity growth. Increasing exports depends on factors related directly to the internal environment of enterprises, which are specific to each entity and also on nationwide factors such as: natural resources, highly skilled workforce, well-developed infrastructure, effective state policies (Global Competitiveness Indicator), national values, culture, history, etc.

The competitiveness of a country does not mean export success in every industry, or even in most industries. Obviously, no country can provide a trade surplus in every sector of the economy. In certain sectors specialisation automatically implies lower performance than in others. Even the most developed countries can’t ensure success on the international market for all industrial sectors. That is why, national authorities targeting an increase in national competitiveness should focus selectively on domains that present a comparative, competitive advantage against competing industries abroad, or have a reliable growth potential. "Trying to explain" competitiveness "at national level, you need to understand the determinants of productivity levels and growth rate. First and foremost we should focus not on the economy as a whole, but on specific industries and segments of industry” (Porter, 1990).

Scientists did not yet reached a consensus on the competitiveness definition. Often when they are talking about insuring country competitiveness, it is envisaged targeting efforts and resources for increasing high real income for the population, the productivity factors and foreign trade performance, focusing on product export with high added value.

1.2. Foreign trade indicator of national competitiveness

Being a complex concept, different studies provide a variety of factors and indicators that determine national competitiveness. It is perceived as an expression indicating the possibility of a country to create added value and an increased real income for its citizens as well as its ability to maintain a high market share in world exports (which reflects the country’s performance on foreign markets), right as measuring indicators of competitiveness in literature review very often is used the analysis total factors productivity or review exports performances.

Porter supports the idea that, despite the globalization of production and trade, competitive advantages are created within a national framework, through their institutional, natural,
cultural, economic characteristics which determine ultimately the development of certain economic activities.

Based on afore mentioned definitions, from both theoretical and practical viewpoints, export competitiveness has a relevant component determined by the country’s positions in the world exports of different groups of goods and services.

This indicator within a static and dynamic analysis reflects a large combination of quantitative and qualitative factors of influence among which level of economic, technological and social development has an outstanding role.

Although this indicator apparently seems to be simple, it expresses through the place or rank in the hierarchy, and reflects in a sui generis synthetic manner the potential of competitiveness increase as a result of quantity and quality of exports and their diversification (specialisation), internal and external prices, efficiency at large of foreign trade of the respective country.

In order to identify the main trends of Romanian’s export competitiveness on the two digits SITC categories, we used UNCTAD data concerning their export value of Romania on international comparative context.

We payed a special attention to the evolution of positions won / lost, especially at Romania's export goods that have significant shares in the total volume of Romanian exports; this doesn’t mean that the other commodities with lower shares must be ignored.

The change of Romania’s position in the hierarchy world’s exports by countries in 2006, 2010 and 2014, as compared to 2001, constitutes a sui generis indicator of export competitiveness, depending on the number of positions (ranks) won/lost in the framework of export world ranking. In other words, if Romania gets a better position in the world hierarchy we consider that export competitiveness improved. Conversely, a loss of positions in the hierarchy means a diminishing in the competitive strength of exports. The indicator regarding the number of positions won/lost by Romania’s exports in the world ranking, in certain periods of time, provides a simple but significant tool to evaluate the country’s export competitiveness for a certain period and group of merchandise.

2. Number of Gained Positions by Romanian Exports in the International Ranking

The pre-association (1990-1995), the association (1995-2000) and pre-accession (2001-2006) periods have been characterized for the Romanian exports by a sensitive reduction of the export list and loss of important traditional external markets caused by negative impact of recession, high transition costs and custom duties diminishing as a result of adoption of EU acquis communautaire and other commercial rules and regulation.

In our analysis we prefer to study especially the pre and post-accession period.
Table 1: Positions won/lost by Romania within world exports hierarchy by SITC groups (two digits) in 2006, 2010 and 2014 as compared to 2001

<table>
<thead>
<tr>
<th>Years</th>
<th>2006</th>
<th>2010</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>won positions</td>
<td>64</td>
<td>65</td>
<td>68</td>
</tr>
<tr>
<td>lost positions</td>
<td>32</td>
<td>31</td>
<td>28</td>
</tr>
</tbody>
</table>

Source: Own estimates based on the International trade in goods - Exports data 2001 - 2014 ITC (www.intracen.org)

From the evaluation for 96 groups of goods exported by Romania during 2006, 2010 and 2014 (table 1) results the following main conclusions:

- the total number of positions won by Romania in the international exports hierarchy by countries and groups of products has more than doubled in comparison with the number of the positions lost (68 positions won against 26 positions lost in 2014 as compared to 2006), meaning a favourable trend in the evolution of the Romanian exports competitiveness according to the used indicator (the number of positions won/lost) during the post-accession period. However this favourable trend registered by Romanian exports in the world competition has to be related to the economic importance of export goods better ranking in 2014 in comparison with 2001.

- the number of positions (places) lost by Romania in the international exports hierarchy during 2014 as compared to 2006, has diminished from 32 to 28 which shows a favourable tendency for the increase of the competitiveness capacity for the Romanian exports in comparison with the previous periods when it has been recorded a decrease of export competitiveness.

In order get a more in-depth analysis of the evolution of the export goods competitiveness degrees in Romania, we have delimited the number of positions won during 2014 compared to 2001 in the categories I-IV in a decreasing order of the positions won number, which reflect different competitiveness degrees (table 2).

The 1st Category of High level of competitiveness (HLC, 68-33 gained positions) for a total number of 8 export groups which generally are referring to exports activity with low level of processing (manufacturing) and show a sensible competitiveness progress with a relative small weight (3.89 % from the total Romanian exports) and refers to the exports for the majority of the raw materials.

The 2nd Category with competitiveness potential (CP) (29-15 positions) there are 28 export groups which are included food products and some industrial manufacturing exports from electrical, electronic equipment, textile industry have a percentage share in Romania’s total export of 45.54%. In fact a good part of these exports represent an important segment of manufacturing industries with potential competitiveness related especially to the medium technological level.

The 3rd Category with a medium competitiveness potential (MCP) (14-8 positions)- the percentage share in Romania’s total export is 17.04% with a number of 12 export groups.
There are several export products from metal, plastics, iron and steel and machinery activities.

The 4th Category includes exports groups with poor competitiveness potential (PCP) with a share of 17.05% and a total number of 20 export groups. This group is represented by Beverages, spirits and vinegar; Ships, boats and other floating structures; Aircraft, spacecraft, and parts thereof; Lead and articles thereof; miscellaneous chemical products; Copper and articles thereof; iron and steel; Articles of leather, animal gut, harness, travel goods. The PCP group of exports shows a reduced competitiveness potential for the time being, their progress in the international competition being relatively modest.

Table 2: The hierarchy of the export products groups, according to the intervals of the number of positions won by Romania on the international market during 2014 compared to 2001

<table>
<thead>
<tr>
<th>Categories of goods exported, by the number of gained positions on the world market</th>
<th>Name of the export goods groups, gaining positions in 2014(figures in brackets are indicating the percentage share in total Romania’s exports and the number of positions won in 2014 compared to 2001)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category I high level of competitiveness (HLC) 68 – 33 positions</strong></td>
<td>Tobacco and manufactured tobacco substitutes (1.36 %, +68); Pharmaceutical products (1.63 %, +44); Cocoa and cocoa preparations (0.09 %, +43); Tin and articles thereof (0.004 %, +40); Miscellaneous edible preparations (0.23 %, +37); Sugars and sugar confectionery (0.17 %, +36); Bird skin, feathers, artificial flowers, human hair (0.01 %, +35); Meat and edible meat offal (0.40 %, +33); Percentage share in Romania’s total export : 3.89%; Total number of export groups: 8</td>
</tr>
<tr>
<td><strong>Category II competitiveness potential (CP) 29 – 15 positions</strong></td>
<td>Cotton (0.09 %, +29); Wool, animal hair, horsehair yarn and fabric thereof (0.24 %, +29); Essential oils, perfumes, cosmetics, toiletries (0.54 %, +28); Rubber and articles thereof (3.59 %, +26); Meat, fish and seafood food preparations nes. (0.22 %, +25); Albuminoids, modified starches, glues, enzymes (0.03 %, +24); Soaps, lubricants, waxes, candles, modelling pastes (0.30 %, +23); Coffee, tea, mate and spices (0.04 %, +23); Explosives, pyrotechnics, matches, pyrotechnics, etc. (0.01 %, +23); Vehicles other than railway, tramway (14.17 %, +22); Impregnated, coated or laminated textile fabric (0.16 %, +22); Milling products, malt, starches, inulin, wheat gluten (0.02 %, +22); Cereals (3.78 %, +21); Oil seed, oleagic fruits, grain, seed, fruit, etc., nes. (1.62 %, +20); Cereal, flour, starch, milk preparations and products (0.23 %, +19); Miscellaneous manufactured articles (0.14 %, +19); Commodities not elsewhere specified (0.90 %, +17); Miscellaneous articles of base metal (0.58 %, +17); Optical, photo, technical, medical, etc. apparatus (1.43 %, +16); Animal, vegetable fats and oils, cleavage products, etc. (0.41 %, +16); Residues, wastes of food industry, animal fodder (0.37 %, +16); Printed books, newspapers, pictures etc. (0.14 %, +16); Knitted or crocheted fabric (0.05 %, +16); Silk (0.15 %, +16); Electrical, electronic equipment (15.53 %, +15); Other made textile articles, sets, worn clothing etc. (0.64 %, +15); Photographic or cinematographic goods (0.01 %, +15); Special woven or tufted fabric, lace, tapestry etc. (0.08 %, +15); Products of animal origin, nes (0.07 %, +15); Percentage share in Romania’s total export: 45.54%; Total number of export groups: 28</td>
</tr>
</tbody>
</table>
For each category of exports competitiveness it is necessary to apply different and appropriate strategic approaches which suppose a complex combined of several factors of influence, besides the percentage share (importance) of the export group, such as value added size, prices, technological level, potential competitors etc.

### 3. Lost Positions by Romanian Export SITC Groups in the Year 2014 against the Year 2001

Concerning the lost positions of the Romanian exports on the international market in 2014, compared to 2001 (Table 3) we have identified four categories in an increasing order, of the number of lost positions:
- category I with a less significant loss (LSL), with 1-3 positions lost;
- category II with a medium loss (ML), with 4-6 positions lost;
- category III with a significant loss (SL), with 10-19 positions lost;
- category IV with a very high loss (VHL), with 28-57 positions lost.

Table 3: Classification of the groups of export products, according to the number of positions lost in the international market, during 2014 against 2001

<table>
<thead>
<tr>
<th>Categories of goods exported, by intervals, of lost positions number on the world market</th>
<th>Name of the export goods groups, (in brackets are indicated the percentage share in total world exports and number of lost positions in 2014 compared to 2001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category I less significant loss (LSL) 1 – 3 (lost positions)</td>
<td>Ceramic products (0.23 %, -1); Vegetable textile fibres nes, paper yarn, woven fabric (0.004 %, -1); Umbrellas, walking-sticks, seat-sticks, whips, etc. (0.003 %, -1); Articles of apparel, accessories, not knitted or crochet (3.85 %, -2); Articles of apparel, accessories, knit or crochet (1.39 %, -3); Footwear, gaiters and the like, parts thereof (2.69 %, -3); Musical instruments, parts and accessories (0.02 %, -3); Percentage share in Romania’s total export: 8.19%; Total number of export groups: 7</td>
</tr>
<tr>
<td>Category II medium loss (ML) 4 – 6 (lost positions)</td>
<td>Mineral fuels, oils, distillation products, etc. (6.01 %, -4); Edible fruit, nuts, peel of citrus fruit, melons (0.18 %, -4); Edible vegetables and certain roots and tubers (0.17 %, -4); Nickel and articles thereof (0.01 %, -4); Furskins and artificial fur, manufactures thereof (0.01 %, -4); Toys, games, sports requisites (0.22 %, -5); Glass and glassware (0.24 %, -5); Pulp of wood, fibrous cellulosic material, waste etc. (0.03 %, -6); Percentage share in Romania’s total export: 6.87%; Total number of export groups: 8</td>
</tr>
<tr>
<td>Category III significant loss (SL) 10 – 19 (lost positions)</td>
<td>Organic chemicals (0.23 %, -10); fertilizer (0.59 %, -11); Carpets and other textile floor coverings (0.02 %, -12); Inorganic chemicals, precious metal compound, isotopes (0.35 %, -16); Lac, gums, resins, vegetable saps and extracts nes. (0.002 %, -17); Salt, sulphur, earth, stone, plaster, lime and cement (0.11 %, -19); Percentage share in Romania’s total export: 1.3%; Total number of export groups: 6</td>
</tr>
<tr>
<td>Category IV very high loss (VHL) 28 – 57 (lost positions)</td>
<td>Ores, slag and ash (0.11 %, -28); Zinc and articles thereof (0.01 %, -29); Cork and articles of cork (0.0001 %, -36); Manufactures of plaiting material, basketwork, etc. (0.0002 %, -57); Percentage share in Romania’s total export: 0.12%; Total number of export groups: 4</td>
</tr>
</tbody>
</table>

Source: Own calculations based on the International trade in goods - Exports data 2001 - 2014 ITC (www.intracen.org)

The 1st category (LSL) with the smallest number of lost positions (1-3) includes 7 groups of export goods, with a total weight of 8.19%, out of which the most important are: manufactures and ready-made clothes, not mercerized or crocheted accessories (3.85%); footwear (2.69%); suits, crocheted accessories and items (1.39%).
It is worth mentioning that the so called export based on the „lohn“ production consists of components with the biggest weight of lost position for this category of products (textiles, ready-made clothes, footwear).

The 2nd category (ML), with a loss between 4 and 6 positions in the international export classification list, includes a number of groups which represent a weight in the total exports of the country of 6.87%, out of which 6.01% is represented by the mineral fuels, oils and distilled products.

The 3rd category (SL), with an important number of lost positions between 9 and 19 positions, includes 6 groups of exports with a total weight of 1.30%, each group counting under 1.0% of the total Romanian exports.

The 4th category (VHL), with the most lost positions between 28 and 57, includes 4 groups of goods with a total weight of 0.12%.

Romania has recorded the biggest loss in competitiveness at the category “other products” export, which had a relatively small weight in the total exports of the country, meaning that Romania’s export diversification is a very slow process.

Tables 4 and 5 present the total number of competitors in Central and Eastern Europe with upper and lower rank, against Romania, in 2014 in the world’s exports.

For the determination of the Romanian Export Competitiveness we selected for comparison the EU New member Countries (Bulgaria, Czech Republic, Greece, Hungary, Poland, Slovakia, Slovenia) which were positioned upward and downward Romania, within each group of exports by the following three categories (weak, medium and high potential of competitiveness)

Table 4: Total number of competitors (outperformers) in Central and Eastern Europe with higher ranks, than Romania, in 2014 in the world’s exports

<table>
<thead>
<tr>
<th>Intervals on the number of competitors with higher rank than Romania</th>
<th>Name of the export goods groups and position (rank) outperforming Romania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category I with weak potential of competitiveness 10-7 outperformers</td>
<td>Cork and articles of cork (10); Beverages, spirits and vinegar (9); Stone, plaster, cement, asbestos, mica, etc articles (9); Dairy products, eggs, honey, edible animal product nes. (8); Live trees, plants, bulbs, roots, cut flowers etc (8); Milling products, malt, starches, inulin, wheat gluten (8); Vegetable, fruit, nut, etc food preparations (8); Salt, sulphur, earth, stone, plaster, lime and cement (8); Tanning, dying extracts, tannins, derives, pigments etc (8); Albuminoids, modified starches, glues, enzymes (8); Manufactures of plaiting material, basketwork, etc. (8); Pulp of wood, fibrous cellulosic material, waste etc (8); Zinc and articles thereof (8); Clocks and watches and parts thereof (8); Fish, crustaceans, molluscs, aquatic invertebrates nes. (7); Edible fruit, nuts, peel of citrus fruit, melons (7); Lac, gums, resins, vegetable saps and extracts nes. (7); Animal, vegetable fats and oils, cleavage products, etc (7); Cocoa and cocoa preparations (7); Cereal, flour, starch, milk preparations and products (7); Miscellaneous edible preparations (7); Miscellaneous chemical products (7); Paper and paperboard, articles of pulp, paper and board</td>
</tr>
<tr>
<td>Intervals on the number of competitors with higher rank than Romania</td>
<td>Name of the export goods groups and position (rank) outperforming Romania</td>
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<tr>
<td>6-4 outperformers</td>
<td>(7); Wadding, felt, nonwovens, yarns, twine, cordage, etc (7); Carpets and other textile floor coverings (7); Knitted or crocheted fabric (7); Umbrellas, walking-sticks, seat-sticks, whips, etc (7); Other base metals, cermets, articles thereof (7); Toys, games, sports requisites (7);</td>
</tr>
<tr>
<td>Category II with medium potential of competitiveness 6-4 outperformers</td>
<td>Edible vegetables and certain roots and tubers (6); Coffee, tea, mate and spices (6); Sugars and sugar confectionery (6); Inorganic chemicals, precious metal compound, isotopes (6); Organic chemicals (6); Essential oils, perfumes, cosmetics, toiletries (6); Photographic or cinematographic goods (6); Furskins and artificial fur, manufactures thereof (6); Printed books, newspapers, pictures etc (6); Ceramic products (6); Glass and glassware (6); Copper and articles thereof (6); Nickel and articles thereof (6); Tools, implements, cutlery, etc of base metal (6); Miscellaneous manufactured articles (6); Meat and edible meat offal (5); Vegetable plaiting materials, vegetable products nes. (5); Residues, wastes of food industry, animal fodder (5); Ores, slag and ash (5); Pharmaceutical products (5); Explosives, pyrotechnics, matches, pyrotechnics, etc (5); Plastics and articles thereof (5); Iron and steel (5); Aluminium and articles thereof (5); Miscellaneous articles of base metal (5); Machinery, nuclear reactors, boilers, etc (5); Railway, tramway locomotives, rolling stock, equipment (5); Vehicles other than railway, tramway (5);Products of animal origin, nes. (4); Mineral fuels, oils, distillation products, etc (4); Soaps, lubricants, waxes, candles, modelling pastes (4); Rubber and articles thereof (4); Articles of leather, animal gut, harness, travel goods (4); Cotton (4); Vegetable textile fibres nes, paper yarn, woven fabric (4); Mannmade filaments (4); Impregnated, coated or laminated textile fabric (4); Tin and articles thereof (4); Electrical, electronic equipment (4);</td>
</tr>
<tr>
<td>Category III with high-potential of competitiveness 3-0 outperformers</td>
<td>Meat, fish and seafood food preparations nes. (3); Other made textile articles, sets, worn clothing etc. (3); Headgear and parts thereof (3); Articles of iron or steel (3); Lead and articles thereof (3); Optical, photo, technical, medical, etc. apparatus(3); Aircraft, spacecraft, and parts thereof (3); Furniture, lighting, signs, prefabricated buildings (3); Tobacco and manufactured tobacco substitutes (2); Fertilizers (2); Raw hides and skins (other than furskins) and leather (2); Wool, animal hair, horsehair yarn and fabric thereof (2); Special woven or tufted fabric, lace, tapestry etc. (2); Articles of apparel, accessories, knit or crochet (2); Ships, boats and other floating structures (2); Musical instruments, parts and accessories (2); Cereals (1); Oil seed, oleaginous fruits, grain, seed, fruit, etc., nes. (1); Wood and articles of wood, wood charcoal (1); Manmade staple fibres (1); Articles of apparel, accessories, not knit or crochet (1); Bird skin, feathers, artificial flowers, human hair (1); Commodities not elsewhere specified (1); Live animals (0); Silk (0); Footwear, gaiters and the like, parts thereof (0);</td>
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</tbody>
</table>
In the category of Central and Eastern Europe countries with high rank potential of competitiveness, Romania:

- 1st place in "live animals", "silk", "shoes", 2nd in "cereals", "Oil seed, oleagic fruits, grain, seed, fruit, etc.", "articles of apparel, accessories, not knit or crochet", and 3rd place in "tobacco and manufactured tobacco substitutes", "fertilizers", "special woven or tufted fabric, lace, tapestry etc.";

- regarding medium potential of competitiveness, Romania ranks 6th in "aluminium and articles thereof", "plastics and articles thereof", "ores, slag and ash" and 7 in "edible vegetables and certain roots and tubers ", "Inorganic chemicals, precious metal compound, isotopes ", " glass and glassware ";

- other Romanian exports fill weaker rank namely: 10th place "Stone, plaster, cement, asbestos, mica, etc. articles", 9th at "Dairy products, eggs, honey, edible animal product nes.", " Live trees, plants, bulbs, roots, cut flowers ", etc.

Table 5: Total number of competitors (underperformers) in Central and Eastern Europe with lower rank, against Romania, in 2014 in the world's exports

<table>
<thead>
<tr>
<th>Intervals on the number of competitors with lower rank than Romania</th>
<th>Name of the export goods groups and position (rank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category I with weak potential of competitiveness</td>
<td></td>
</tr>
<tr>
<td>0-3 underperformers</td>
<td></td>
</tr>
<tr>
<td>Fish, crustaceans, molluscs, aquatic invertebrates nes. (3); Edible fruit, nuts, peel of citrus fruit, melons (3); Lac, gums, resins, vegetable saps and extracts nes. (3); Animal, vegetable fats and oils, cleavage products, etc (3); Cocoa and cocoa preparations (3); Cereal, flour, starch, milk preparations and products (3); Miscellaneous edible preparations (3); Miscellaneous chemical products (3); Paper and paperboard, articles of pulp, paper and board (3); Wadding, felt, nonwovens, yarns, twine, cordage, etc. (3); Carpets and other textile floor coverings (3); Knitted or crocheted fabric (3); Umbrellas, walking-sticks, seat-sticks, whips, etc. (3); Other base metals, cermets, articles thereof (3); Toys, games, sports requisites (3); Dairy products, eggs, honey, edible animal product nes. (2); Live trees, plants, bulbs, roots, cut flowers etc (2); Milling products, malt, starches, inulin, wheat gluten (2); Vegetable, fruit, nut, etc. food preparations (2); Salt, sulphur, earth, stone, plaster, lime and cement (2); Tanning, dyeing extracts, tannins, derives, pigments etc. (2); Albuminoids, modified starches, glues, enzymes (2); Manufactures of plaiting material, basketwork, etc. (2); Pulp of wood, fibrous cellulosic material, waste etc. (2); Zinc and articles thereof (2); Clocks and watches and parts thereof (2); Beverages, spirits and vinegar (1); Stone, plaster, cement, asbestos, mica, etc. articles (1); Cork and articles of cork (0);</td>
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<tr>
<td>Category II with medium potential of competitiveness</td>
<td></td>
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<tr>
<td>4-6 underperformers</td>
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<tr>
<td>Products of animal origin, nes. (6); Mineral fuels, oils, distillation products, etc. (6); Soaps, lubricants, waxes, candles, modelling pastes (6); Rubber and articles thereof (6); Articles of leather, animal gut, harness, travel goods (6); Cotton (6); Vegetable textile fibres nes., paper yarn, woven fabric (6); Manmade filaments (6); Impregnated, coated or laminated textile fabric (6); Electrical, electronic equipment (6); Meat and edible meat offal (5);</td>
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<tr>
<td>Intervals on the number of competitors with lower rank than Romania</td>
<td>Name of the export goods groups and position (rank) underperforming Romania</td>
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<td>---------------------------------------------------------------</td>
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<tr>
<td>Vegetable plaiting materials, vegetable products nes. (5); Residues, wastes of food industry, animal fodder (5); Ores, slag and ash (5); Pharmaceutical products (5); Plastics and articles thereof (5); Iron and steel (5); Aluminium and articles thereof (5); Tin and articles thereof (5); Miscellaneous articles of base metal (5); Machinery, nuclear reactors, boilers, etc. (5); Railway, tramway locomotives, rolling stock, equipment (5); Vehicles other than railway, tramway (5); Edible vegetables and certain roots and tubers (4); Coffee, tea, mate and spices (4); Sugars and sugar confectionery (4); Inorganic chemicals, precious metal compound, isotopes (4); Organic chemicals (4); Essential oils, perfumes, cosmetics, toiletries (4); Explosives, pyrotechnics, matches, pyrotechnics, etc. (4); Photographic or cinematographic goods (4); Furskins and artificial fur, manufactures thereof (4); Printed books, newspapers, pictures etc. (4); Ceramic products (4); Glass and glassware (4); Copper and articles thereof (4); Nickel and articles thereof (4); Tools, implements, cutlery, etc. of base metal (4); Miscellaneous manufactured articles (4);</td>
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<tr>
<td>Category III with high-potential of competitiveness 7-10 underperformers</td>
<td>Live animals (10); Silk (10); Footwear, gaiters and the like, parts thereof (10); Cereals (9); Oil seed, oleaginous fruits, grain, seed, fruit, etc., nes. (9); Wood and articles of wood, wood charcoal (9); Manmade staple fibres (9); Articles of apparel, accessories, not knit or crochet (9); Bird skin, feathers, artificial flowers, human hair (9); Commodities not elsewhere specified (9); Tobacco and manufactured tobacco substitutes (8); Fertilizers (8); Raw hides and skins (other than furskins) and leather (8); Wool, animal hair, horsehair yarn and fabric thereof (8); Special woven or tufted fabric, lace, tapestry etc. (8); Articles of apparel, accessories, knit or crochet (8); Ships, boats and other floating structures (8); Musical instruments, parts and accessories (8); Meat, fish and seafood food preparations nes. (7); Other made textile articles, sets, worn clothing etc. (7); Headgear and parts thereof (7); Articles of iron or steel (7); Lead and articles thereof (7); Aircraft, spacecraft, and parts thereof (7); Optical, photo, technical, medical, etc. apparatus (7); Furniture, lighting, signs, prefabricated buildings (7);</td>
</tr>
</tbody>
</table>

Source: Own calculations based on International trade in goods - Exports data 2001-2015 SITC (www.intracen.org)

Number of Central and Eastern Europe countries with lower rank potential of competitiveness, Romania frontloads:

In the category with highly competitive potential, we have 10 countries at "live animals", "footwear, gaiters and the like, parts thereof ", 9 countries to "cereals", "articles of apparel, accessories, not knit or crochet", 8 countries at "fertilizers", "tobacco and manufactured tobacco substitutes ", etc.;

the category with medium potential of competitiveness, 6 countries at "Mineral fuels, oils, distillation products, etc.", "cotton ", "electrical and electronic equipment ", etc., 5 countries at "iron and steel"," plastics and articles thereof ", "pharmaceutical products" and 4
countries at “coffee, tea, mate and spices”, “inorganic chemicals, precious metal compound, isotopes”, “glass and glassware”, etc.;

the category with weak potential of competitiveness, no country at “cork and articles of cork”, 1 country “stone, plaster, cement, asbestos, mica, etc. articles”, two countries “vegetable textile fibres nes, paper yarn, woven fabric”, “zinc and articles thereof”, “salt, sulphur, earth, stone, plaster, lime and cement”, etc.

**Some Conclusions and Final Remarks**

According to experts that have participated in drafting of the National Export Strategy for 2014-2020, in terms of competitiveness criteria, perspective, resilience and vulnerability, we can distinguish the following categories of export for Romania:

exports, as relatively strong points for Romania, with a share of over 70% in the total export value volume, have been identified during 2007-2013 for the following groups of the CAEN code: manufacture of the motor vehicles for road transport, trailers and semi-trailers; manufacture of machinery and equipment; manufacture of electric equipment; metallurgic industry; computers, electronic and optic products; agriculture, hunting and the connected services; production of rubber and plastic products, manufacture of chemicals and chemical products; wood processing, wood and cork manufacture except furniture; straw articles and vegetal wickerwork; manufacture of furniture.

sectors with significant export perspectives and opportunities (over 8.5% share in total exports) are: industry for metallic constructions and metal products, exclusively machinery, tools and installations; food industry; manufacture of basic pharmaceutical products and pharmaceutical substances; manufacture of other non-metallic minerals products;

neuter sectors with a still unclear outlook (over 6.60% share in total exports) targeting: manufacture of other means of conveyance; goods not elsewhere classified; manufacture of tobacco products;

sectors with potential vulnerabilities and relative weak points (representing over 11% of the total exports) referring to: manufacture of wearing apparel; cok and refined products obtained from petroleum processing; tanning and finishing of leather; manufacture of clothes and leather articles, harness and footwear; dressing and dyeing of fur; manufacture of textile articles; other industrial activities; manufacture of paper and paper products; manufacture of beverages; production and supply of the electric and thermal energy such as: gas, hot water and air conditioning.

The evolution of Romanian export competitiveness in the post-accession period shows a sign of competitiveness betterment supported by a larger member of won positions on the international markets in 2014 against the year 2001.

Of course the progress so far recorded in the field of competitiveness represents a necessary but not sufficient convergence required by sustainable development challenges.

For a series of export products from the processing industry field, Romania has an important potential which can be used to get a better position on the competitiveness scale, deepening the inter and intra-branches specialisation (Gheorghe Zaman, Valentina Vasile, 2012).
The different degree of competitiveness of the Romanian exports is conducive to the necessity of promoting smart specialization policies for certain products, semi-products and components, trying to find the so called „niches” which may offer comparative and competitive advantages mainly based on innovation, international cooperation within value chains and networking.

Due to the reduction of the export products nomenclature over the period 1990-2015, the promotion of more diversified and highly qualitative exports in Romania, including knowledge based industrialization represent a challenging milestone for both foreign direct investment companies headquartered in Romania and national firms.

Romanian exports competitiveness analysis (SITC two digits), based on the positions won/lost in the world hierarchy exports reveals that Romania fills relatively significant positions (among the top 15-20 exporters), particularly in products with relatively low processing level, in general being on foreign markets a "price-taker" rather than a "price-maker"; in 2014, as compared to 2001, Romania has won positions in the world's exports at 68 commodity groups and lost positions only at 28 groups, suggesting a favourable trend of increasing Romanian foreign trade competitiveness extremely necessary, but still insufficient to bridge the gap that separates us from the developed countries.

Romania is a country with an emerging economy, which is characterized by a structure of export of goods marked notably by a relatively low share of high-tech groups of approx. 8% (Financial Stability Report, 2015 BNR).

If 70% of total exports in Romania are controlled by companies with foreign capital participation, it is assumed that there are premises for increasing competitiveness given the relatively high level of productivity and profitability of the subsidiaries of mother companies producing in Romania. For example, in the top 100 exporters of goods from Romania, only 4 firms have Romanian capital, the rest belong to foreign capital.

Romania’s competitiveness increase in the future has the opportunity to better use the advantages of a higher EU structural funds accession in parallel with a greater contribution of a private economic sector.

The vagueness and complex character of the notion raises a lot of problems in the domain of competitiveness metrics especially if we take into consideration the heterogeneity of enterprises, at least from their size standpoint.

References


