The International Trade in Global Economy

Ion Botescu
Ph.D. Senior Lecturer
University „Ovidus” of Constanța

Abstract. The intensification of the globalization of the world economy is the result of the amplification and diversification without precedent of the material, financial and human flows between the world’s states.

The international commerce has known in the last period a strong expansion, almost uninterrupted, surpassing the industrial production growth and PIB on a world scale.

Among the PIB evolution and the evolution of the world commerce there is a strong relationship of correlation, fact shown by the linear correlation coefficient.

The structure on exports of country categories confirms the fact that the process of globalization has been fully completed in the world.

Romania, through its achieved economic opening, has boosted its participation to the international economic trades. In this way there is a chance for Romania’s economy in the future to become more competitive, even though in the present our country faces serious problems concerning the strong deficit of the foreign trade balance.

Key words: global economy; linear correlation coefficient; competitiveness; trade balance; economic opening.

Globalization is a trendy concept in social sciences, a term frequently used by economists, a reality politicians often pertain to. The beginnings of globalization started with the first exchanges of merchandise between the various regions of the world and finally between national states. Basically, what we considered for a very long time to be world economy was grounded only on the exchange of merchandise and services made by the countries of the world.

We can appreciate that globalization is an evolutionary process. In a commercial aspect, the amplification of the export and import activities emphasizes the actual process of globalization.

The last 285 years, with a sole exception recorded between 1913 and 1950, were characterized by the rapid growth of the international commercial exchanges, in comparison to the world economic growth. During 1720-1913 the growth of the international commerce was 1.3 times larger than the GDP increase. The period 1913-1950 included the two world wars and the great economic crisis of 1929, fact that lead to an outmatch of the international commerce growth by the economic growth on the level of promoting protectionism, with the latter being pretty anemic. Throughout the last 55 statistically emphasized years, the international merchandise commerce has evolved in value from 61 billion dollar in 1950 to 10,120 billion in 2005, which represents a multiplication of approximately 166. This accentuated dynamics was partly due to the growth of the physical volume of the merchandise traded
outside the border and on the other hand to the growth in
the prices of these merchandises or the depreciation of the
exchange rate, especially the American dollar. The
evolution of the annual average growth rhythms of the
world commerce in this last period was as follows: 6.4%
(1950-1960); 9.3% (1961-1970); 20.3% (1971-1980); 8%
(1981-1990); 6% (1991-2000); 14% (2001-2005). For
comparison we must mention that the increase recorded by
the exports of merchandises was approximately 1.65 times
larger than the growth afferent to the global production.

When analyzing the evolution of the value of exports
we must consider the tendency of the prices, which is
generally growing. Thus the average growth of the
international prices in 2005 in comparison to 2004 was
6.5%, which can be considered to be reduced if we take
into account that in 2004 an average increase of 11% was
recorded in international prices, unlike in 2003. In 2005
the international prices grew in comparison to the previous
year, varying from 3% with produces to 35% in the case of
oil and derived products.

The territorial distribution of the growth of merchandise
exports was, by far, considered to be uniform. During 1950-
2005 western Europe (from 31% to 39%) and Asia (from
13% to 28%) recorded growths of the weights of their own
exports in the world total and decreases were recorded by
north America (from 27% to 14%), Latin America (from 12%
to 3.5%) and Africa (from 7% to 3%). After a significant
increase recorded in Central and Eastern Europe in exports
with merchandise in the 70’s, the former socialist countries
in this area recorded a sudden decrease of the value of exports,
holding, in 1991, a weight of only 2.6% of the world total.
The evolution of the 19 countries straightened – 8 of them
accessed the EU in 2004 – in regard to exports, whose weight
in the world total reached 7.7% in 2005.

The accentuation of the international interdependencies
through commercial fluxes resulted from a major
mutation, which took place in the area of world commerce:
the cross from basic products types of reports structures
versus manufactured products (interdependencies
between sectors, characteristic to the first half of the
century) to manufactured products types of structures
versus manufactured products (interdependencies
between sectors) and then to the exchange of products
within branches of the industry or within groups of
products (industrial interdependencies). The development
of the industrial commerce mirrors the progressive
deepening process of the international work division in
the decades that followed the ending of the last global
conflagration.

On the other hand, the statistic data concerning the
distribution of the world commerce on categories of
countries show that the process of internationalization did
not take place homogenously in the global economy. In
2004 the weight of various groups of countries in the
international merchandise commerce was as follows:
developed countries – 63.0%, developing countries –
33.5% and countries with economy in transition from
southeastern Europe and CSI – 3.5%.

The structure of the global export of merchandise on categories of countries

<table>
<thead>
<tr>
<th>Economic regions</th>
<th>Years</th>
<th>Years</th>
<th>Years</th>
<th>Years</th>
<th>Years</th>
<th>Years</th>
<th>Years</th>
<th>Years</th>
<th>Years</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed Countries</td>
<td>65.27</td>
<td>72.04</td>
<td>67.78</td>
<td>69.03</td>
<td>69.98</td>
<td>68.77</td>
<td>65.72</td>
<td>66.29</td>
<td>65.54</td>
<td>64.84</td>
</tr>
<tr>
<td>Developing Countries</td>
<td>29.47</td>
<td>24.26</td>
<td>27.61</td>
<td>29.31</td>
<td>27.65</td>
<td>28.98</td>
<td>31.64</td>
<td>30.93</td>
<td>31.64</td>
<td>32.09</td>
</tr>
<tr>
<td>South-Eastern Europe and the CSI</td>
<td>5.26</td>
<td>3.70</td>
<td>2.62</td>
<td>2.66</td>
<td>2.37</td>
<td>2.24</td>
<td>2.64</td>
<td>2.78</td>
<td>2.82</td>
<td>3.07</td>
</tr>
</tbody>
</table>


The analysis of the global commerce of services must
always start from their characteristics, namely: they can
not be stocked, there is simultaneity between their
production and use, they can not be resold etc. For this
reason the weight of services in the total global exports is
relatively small: 19.3% in 2005. During 1990-2005 the
multiplication coefficient of the value of exported services
(2.9 times) was relatively close to the one recorded by
exported merchandise (2.8 times). We must not forget that
due to the fact that services are not transferable, the majority
of FDI stock entries on a world level (61%), at the end of
2004, endorsed this sector of activity.

A significant liberalization of the national markets took
place in the last 20 years, in the services area. Be that as it
may, we can say that except for financial services there are
few global markets in this domain.
The International Trade in Global Economy

There is a direct connection between the dynamics of global exports and the dynamics of the global GDP. The fact that throughout the entire analyzed period – except for the period between the two world wars – the annual average growth rhythm of merchandise and services exports outnumbered the one recorded by the GDP, entitles us to say that the global market’s ability of absorption increased.

In order to emphasize the connection between the dynamics of the global GDP and that of global exports, during 2001-2005, we can use the linear correlation coefficient:

\[ C_c = \frac{\sum_{i=1}^{5} (e_i - \bar{e})(p_i - \bar{p})}{\sqrt{\sum_{i=1}^{5} (e_i - \bar{e})^2 \times \sum_{i=1}^{5} (p_i - \bar{p})^2}} \]

Where:

- \( C_c \) – linear correlation coefficient;
- \( e_i \) – the deviation (growth or decrease) of the value of export in the year \( i \) in comparison to the year \( i-1 \);
- \( \bar{e} \) – the arithmetic mean of the annual deviations of exports in the five analyzed years;
- \( p_i \) – the deviation of the value of GDP in the year \( i \) in comparison to the year \( i-1 \);
- \( \bar{p} \) – the arithmetic mean of the annual deviations of the GDP in the five analyzed years.

The meaning of the results is the following:
- \( 0 \leq C_c < 0.2 \) - there is no significant connection;
- \( 0.2 \leq C_c < 0.5 \) - there is a weak connection;
- \( 0.5 \leq C_c < 0.7 \) - there is a medium intensity connection;
- \( 0.7 \leq C_c < 0.95 \) - there is a strong connection;
- \( 0.95 \leq C_c \leq 1 \) – there is an extremely powerful connection.

The evolution of merchandise and services exports on regions

<table>
<thead>
<tr>
<th>The Region</th>
<th>The Category of Export</th>
<th>1991</th>
<th>%</th>
<th>1995</th>
<th>%</th>
<th>2000</th>
<th>%</th>
<th>2005</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Total</td>
<td>Products</td>
<td>3515</td>
<td>80.9</td>
<td>5122</td>
<td>81.1</td>
<td>6430</td>
<td>81.4</td>
<td>10121</td>
<td>80.7</td>
</tr>
<tr>
<td></td>
<td>Services</td>
<td>826</td>
<td>18.1</td>
<td>1191</td>
<td>18.9</td>
<td>1465</td>
<td>18.6</td>
<td>2415</td>
<td>19.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4341</td>
<td>100</td>
<td>6313</td>
<td>100</td>
<td>7895</td>
<td>100</td>
<td>12536</td>
<td>100</td>
</tr>
<tr>
<td>Europe</td>
<td>Products</td>
<td>1712</td>
<td>80</td>
<td>2404</td>
<td>80.9</td>
<td>2774</td>
<td>79.2</td>
<td>4642</td>
<td>78.5</td>
</tr>
<tr>
<td></td>
<td>Services</td>
<td>428</td>
<td>20</td>
<td>566</td>
<td>19.1</td>
<td>726</td>
<td>20.8</td>
<td>1288</td>
<td>21.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2140</td>
<td>100</td>
<td>2970</td>
<td>100</td>
<td>3500</td>
<td>100</td>
<td>5910</td>
<td>100</td>
</tr>
<tr>
<td>North America</td>
<td>Services</td>
<td>549</td>
<td>76.6</td>
<td>777</td>
<td>77.6</td>
<td>1058</td>
<td>77.3</td>
<td>1478</td>
<td>77.8</td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>167</td>
<td>23.4</td>
<td>224</td>
<td>23.4</td>
<td>310</td>
<td>22.7</td>
<td>420</td>
<td>22.2</td>
</tr>
<tr>
<td>Latin America</td>
<td>Services</td>
<td>145</td>
<td>87.5</td>
<td>229</td>
<td>83.8</td>
<td>359</td>
<td>85.6</td>
<td>351</td>
<td>83.7</td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>31</td>
<td>12.5</td>
<td>44</td>
<td>14.2</td>
<td>60</td>
<td>14.4</td>
<td>69</td>
<td>16.3</td>
</tr>
<tr>
<td>Africa</td>
<td>Services</td>
<td>19</td>
<td>12.5</td>
<td>26</td>
<td>18.9</td>
<td>31</td>
<td>17.4</td>
<td>57</td>
<td>16.2</td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>119</td>
<td>100</td>
<td>138</td>
<td>100</td>
<td>179</td>
<td>100</td>
<td>353</td>
<td>100</td>
</tr>
<tr>
<td>Middle East</td>
<td>Services</td>
<td>123</td>
<td>100</td>
<td>152</td>
<td>100</td>
<td>261</td>
<td>88.1</td>
<td>529</td>
<td>90.7</td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>123</td>
<td>100</td>
<td>152</td>
<td>100</td>
<td>261</td>
<td>88.1</td>
<td>529</td>
<td>90.7</td>
</tr>
<tr>
<td>Asia</td>
<td>Services</td>
<td>886</td>
<td>83.0</td>
<td>1448</td>
<td>81.3</td>
<td>1830</td>
<td>85.7</td>
<td>1826</td>
<td>83.7</td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>181</td>
<td>17.0</td>
<td>331</td>
<td>18.7</td>
<td>303</td>
<td>14.3</td>
<td>548</td>
<td>16.3</td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>1067</td>
<td>100</td>
<td>1779</td>
<td>100</td>
<td>2133</td>
<td>100</td>
<td>3374</td>
<td>100</td>
</tr>
</tbody>
</table>


The evolution of the annual global deviations of exports and the GDP during 2001-2005

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual deviation of exports (( e_i ))</td>
<td>-251</td>
<td>405</td>
<td>1313</td>
<td>1904</td>
<td>1403</td>
</tr>
<tr>
<td>Annual deviation of the GDP (( p_i ))</td>
<td>-524</td>
<td>1223</td>
<td>3944</td>
<td>4422</td>
<td>3714</td>
</tr>
</tbody>
</table>

Source: estimates made by the author based on the data offered by UNCTAD.

\[ \bar{e} = \frac{-251 + 405 + 1313 + 1904 + 1403}{5} = 954 \]
\[ \bar{p} = \frac{-524 + 1223 + 3944 + 4422 + 3714}{5} = 2555 \]

\[ \sum_{i=1}^{5} (e_i - \bar{e})(p_i - \bar{p}) = (-251 - 954)(-254 - 2555) + (+405 - 954)(1223 - 2555) + (1313 - 954)(3944 - 2555) + (+1904 - 954)(4422 - 2555) + (1403 - 954)(3714 - 2555) = 7234155 \]

\[ \sum_{i=1}^{5} (e_i - \bar{e})^2 = (-251 - 954)^2 + (405 - 954)^2 + (1313 - 954)^2 + (1904 - 954)^2 + (1403 - 954)^2 = 2986408 \]

\[ \sum_{i=1}^{5} (p_i - \bar{p})^2 = (-254 - 2555)^2 + (1223 - 2555)^2 + (3944 - 2555)^2 + (4422 - 2555)^2 + (3714 - 2555)^2 = 18012756 \]
The result that fits the last category of evaluation shows that there is a determining connection between the evolution of global exports and the evolution of the global GDP.

The intensification of the international commercial relations in the contemporary period is the result of various factors, such as:
- The technical and scientific revolution generated, through technical progress, a deepening of the international work division with direct consequences on production specialization;
- Promoting a liberal politics in the international exchanges area, GATT/OMC playing a decisive role in the elimination of cost barriers from the commerce between countries;
- The amplification of the regional economic integration processes, which took place in all the corners of the world, at a different extent, including all the categories of countries.

In regard to the territorial expansion, but especially in regard to the intensification of the commercial exchanges, we can state that the world is globalized. Comments must be widened with appreciations concerning foreign direct investments fluxes, international migration of work force, the activity of multinational firms on foreign markets etc.

---

**Bibliografie**


Drăgan, Gabriela (2002). *Fundamentele comerțului mondial internațional*, Editura ASE, București
