

TRADE GLOBALISATION AND MOVEMENT ENVIRONMENTAL IMPACT

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ABSTRACT

This paper discusses the phenomenon of globalization, namely the thematic areas, dimensions and causes of globalization, but also the limits and opportunities of globalization on sustainable development. Globalization affects us all in more or less directly. A prudent assessment of the opportunities and risks of globalization trends allows a better judgment on the tendencies to demonize, or, conversely, to worship of the consequences of this phenomenon.

Keywords: trade, globalization, movement, ecological impact

1. Topics of globalization

Globalization is a term frequently used in political debates, scientific and journalistic, being regarded either as a threat or as an opportunity. The problems arise from the moment of trying to find the defining of this notion. Here it should be noted that scientists and public opinion have yet agree on a single definition.

Apparently, globalization is a complex process of global integration in economics, politics, technological and socio-cultural aspects.

First, it is important to see what can be subordinated to the globalization process; in any way, it is not reduced to business processes, even though economic globalization has been a starting point and a significant driving force.

Thus, if the dimensions of globalization and thematic areas are highlighted (Fig.1) it is important to note that they are not completely "contained" in globalization, but neither can be treated outside the globalization process. Thus, for example, global environmental problems can not be studied isolated from the dimension "economy" or "policy".

This paper focuses on the economy and the environment which are the subjects in most debates about globalization (enormous growth of trade and direct investment, globalization of financial markets, transnational integrated production, transnational corporations, local competition among states and regions, depletion of national economies).

Regarding the environment, global issues such as atmospheric warming, the ozone hole or cutting of tropical forests show in an impressive way the phenomenon of globalization, because in this case it is clearly about global issues that require holistic approach.

Obviously, regarding environment there are many regional and local issues, even if they have sometimes a character beyond borders, such as the example of pollution of rivers.

There are other situations, for example, the survival of small island states is seriously threatened by the continuous rise in sea level.

Globalization affects humans directly in a more or less degree. A prudent assessment of the opportunities and risks of globalization trends allows a better judgment on the tendencies to demonize, or, conversely, to worship of the consequences of this

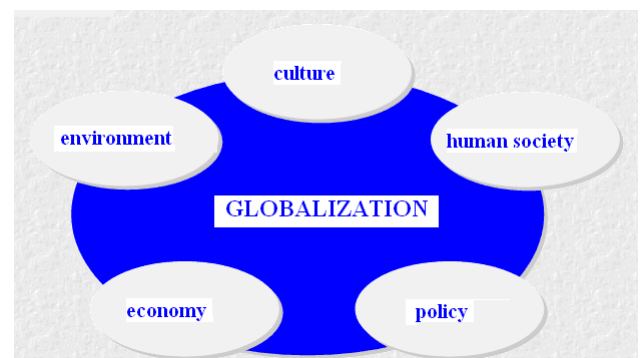


Fig. 1 - Thematic areas of globalization [1]

phenomenon.

Such a complex phenomenon cannot be defined and explained unless considering its determination causes.

Technology and technical innovations, especially those in computers and communications, have played and still play a central role.

Internet is in many ways, the emblem of globalization.

Globalization of financial markets, the transfer of enormous sums of money in seconds around the globe or integrated transnational organization of production would not be possible without this

increased ecological footprint, the contradictions and inequalities.

Currently human footprint has become so overwhelming that planet cannot support it. Thus, if

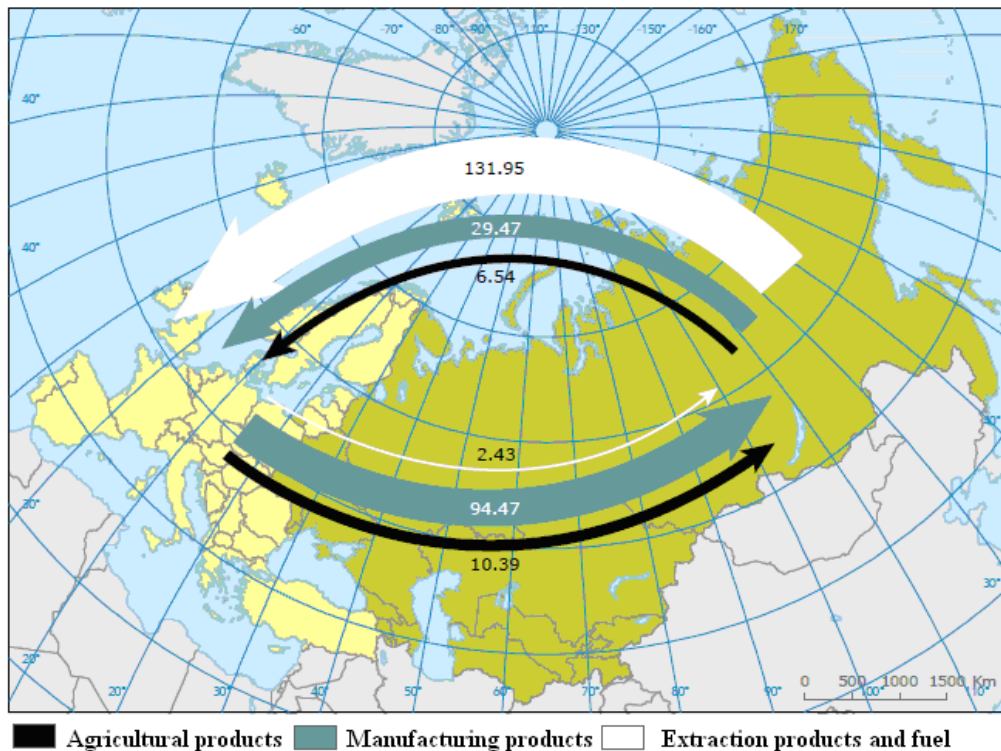


Fig. 2 - The main categories of trade flows between the EU and Southeast Europe, Eastern Europe, Caucasus and Central Asia [billion dollars - World Trade Statistics, 2006]

technology.

Low costs and high transport speed gave incredible momentum trade, another element of economic globalization, because goods could be transported more quickly, while rapidly reducing transport costs.

This can be seen especially in the service sector where software products or databases can be transmitted in seconds from one end of the world in the other.

It seems that liberalization and globalization are a result of U.S. regulatory policy that started at the end of the Second World War.

Without global trade liberalization under GATT, WTO respectively, this type of development could not be really possible. Today, global market economy system is dominated by giant transnational companies with outstanding technological and economic achievements, which provides opportunities and limits to sustainable development.

3. Globalization of trade and the movement environmental impact

Unfortunately, globalization has not only contributed to global economic growth but also

every human (of the nearly 7 billion) would live like a middle western we would need three planets like ours for satisfying our needs.

The movement of critics of globalization claims that the current model of production, consumption and distribution, with outstanding technological achievements and economic prosperity in some areas is inconsistent with poverty and conflict in many parts of the world, overpopulation, pollution, social crises, environmental degradation, economic instability, and recent global crisis.

In the second half of the twentieth century, world trade has increased 6 times for raw materials and over 40 times for semi-finished products (WTO, 2006) and environmental impact of a product or of a resource due to world trade can move and affect several countries.

Trade flows between WCE and SEE, on the one hand, and EECCA on the other hand are very significant but asymmetrical (Fig. 2). The main flow from WCE and SEE countries to EECCA countries consists of manufactured goods. In contrast, exports from the EECCA and SEE EVC consisted of over 80% of fuels and mining products in 2006.

In three SEE countries (Bulgaria, Romania and Turkey), exports participation in GDP increased from 16% to 31%. However, the share of imports in GDP was also higher, moving from 21% to 35%. EECCA countries, the contribution of imports to GDP increased from 20% to 29% and exports from 20% to 39%.

In the EU15, the annual consume is about four tons of fossil fuel per capita. Most of this fuel is imported from EECCA.

Since the period 1992-2004, when exports of mineral fuels from EECCA to the EU15 increased by over 400%, fuels are the product of the fastest export growth in EECCA region (Fig. 3).

Exports of biomass, minerals and metals have also increased in a significant proportion, but lower than the export of fuels.

Regarding imports into the EU 15, the most pronounced increase was in EECCA products.

Imports into the EU 10 have also increased significantly, doubling and even more in the last decade. Imports of metals and biomass in the EU 10, for example, increased over 250%.

Imports of semi-finished iron and steel products contributed largely to the total increase in imports in the period 1992-2004, while imports of biomass consisted more in wood and wood products.

Steel production is a good illustration of economy specialization. Western and Central Europe is one of the biggest users of iron ore in the world and a net exporter of steel, although iron ore used in the region, with the exception of Sweden, is almost entirely imported.

Steel tends to be at the level of "high technology" production chain, resulting in specialized steel products of great value.

Contrary, EECCA countries (Russian Federation, Ukraine and, to a lesser extent, Kazakhstan), although rich in iron ore deposits and energy, tend to produce and export crude steel.

International trade thus leads to a displacement of ecological problems from consuming countries to exporting countries because of significant environmental damage occurring in the latter.

Raw materials extraction and low processing are associated with pressure on the environment: the contamination of air, soil and water to destroy the landscape and are a threat to biodiversity.

Production of industrial minerals and metals play an important role in environmental damage caused by them. This production tends to be associated with high consumption of resources.

Mass ratio extracted unused and used can vary from 10:1 (for iron and aluminum) to over 100:1 (copper), 6 000:1 (zinc) and 000:1 to about

1000 gold and diamonds. So, this industry, not only collects large quantities of tailings from mines and quarries, but part of the tailings can be very toxic and a danger at least for the local environment. The gold industry is particularly damaging to natural ecosystems of mining ponds and causes significant artificial changes to vast surrounding areas.

Thousands of hectares of land are directly affected by mining activities and the mountains of waste (tailings) - made up of millions of m3 of waste (of which most are radioactive) - rise in areas exposed to natural disasters such as earthquakes and slides field.

In addition, resource-exporting countries are likely to turn into "mono-economies", in which growth is based on a single dominant sector, such as extraction of natural resources.

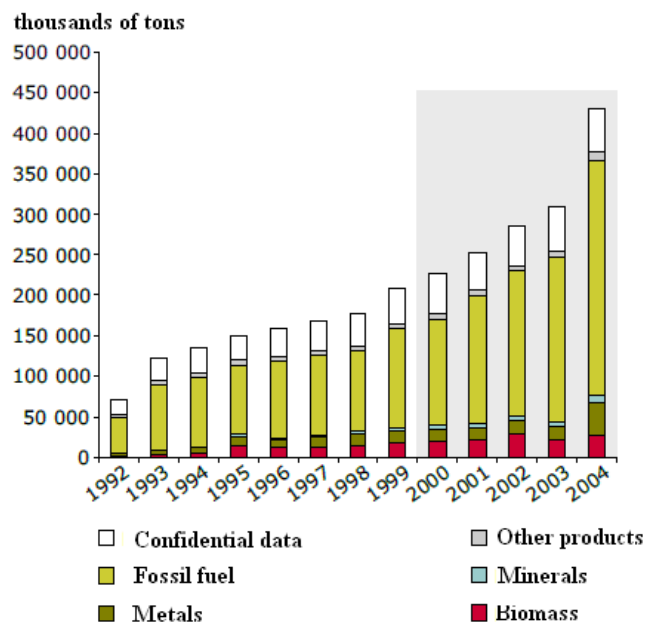


Fig. 3 - EU15 imports from EECCA, 1992-2004 [World Trade Statistics, 2006]

Economies of this type are very vulnerable. Therefore, on the long term, countries in this situation sometimes prefer to diversify their economies and to develop manufacturing capabilities and services.

In the early '90s, it was believed that economic reforms will lead to more efficient use of resources and energy in EECCA countries and therefore to mitigate environmental problems in the region.

Profitable economically sectors, which managed to attract foreign investment, there were indeed such pluses of resources and diminished environmental impact per unit of production.

However, industries that have continued to grow were the generators of pollution intensive, such as ferrous metals, electricity, petroleum refining and extraction of coal and gas.

In recent decades, all economies have undergone a structural change, consisting of a shift towards services, which increased the contribution of services to GDP (Fig. 4).

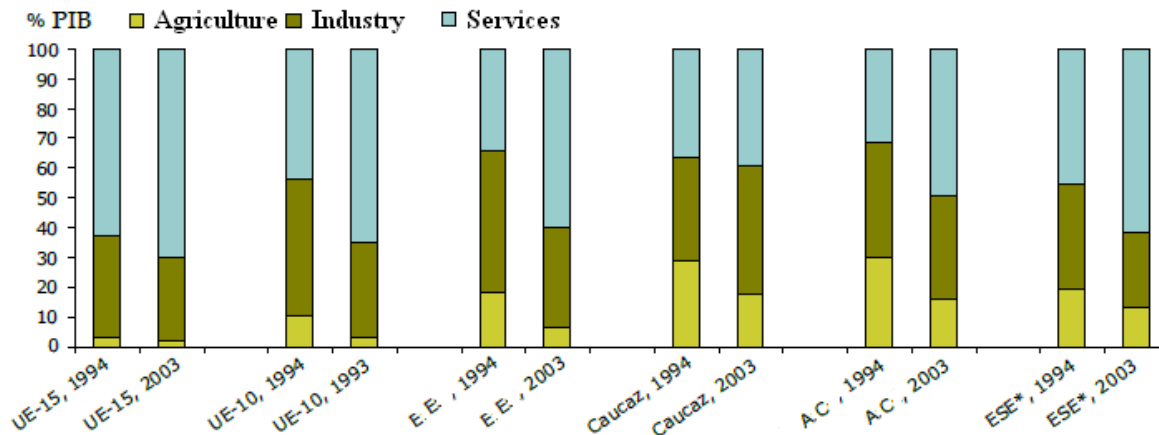


Fig. 4 - Structural changes in the economy, per regions [World Bank, 2005]

Services dominate the economies of the EU15 Member States, representing 70% of GDP, compared to 28% and 2% agriculture industry. In EU-10 economies, the share of services increased to 65%, while industry's contribution fell to 32%.

4 Conclusions

Raw material extraction and low processing levels are associated with high pressure on the environment: the contamination of air, soil and water, destroying the landscape and are a threat to biodiversity.

Thus, in the Caucasus and Central Asia, the contribution of agriculture is still high, reaching 18% at respectively 16%, while service share of 39% and 49%, still the lowest compared with other regions studied.

Environmental impact Of industry declined in the EU25, due to stricter regulations, better enforcement of them and the closure of heavy industry in the new member states. As the yield increases in the dominant, it generates greater revenues, diverting resources from other economic sectors.

The example of Norway shows however that this scenario turns out, though checked in many

cases, it is not insurmountable. Norway extracts natural resources, particularly oil and gas, four times more than they consume in their own economy.

However, Norwegian industry is highly developed and diversified. In addition, the country benefits from an advanced social security system, financed from a fund fed by taxes on oil extraction.

The result is an equal distribution of oil

benefits to the population. As a result, Norway is one of the richest countries in the world with a GDP of \$ 39,200 / per capita. Norway's situation differs radically from that of another oil exporter, Kazakhstan, where GDP per capita is only \$ 1800 / per capita. In Kazakhstan, manufacturing and service capacity is very limited, social insurance and education level is lower and income distribution is quite uneven.

Some experts argue that having large reserves of natural resource highly sought, can limit the development of healthy and diversified economy. Increasing dependence on revenues from the extraction of resources, be it oil, gas and metal ores, can lead to increased investment in that sector, sometimes to the detriment of other sectors.

References

- [1]***<http://www.dadalos.org/globalisierung/index>
- [2] Șoaita D. - *Bazele dezvoltării durabile*, Editura "Universității Petru Maior", Tg. Mureș, 2010
- [3]*** - *Indicators of Sustainable Development: Guidelines and Methodologies*, 2009, <http://www.un.org/esa/sustdev/natlinfo>;
- [4] *** - *United Nation Environment Programme, Division of Technology, Industry and Economics*, <http://www.unep.org>;
- [5]*** - *Sustainable consumption and production, Resource productivity*, <http://epp.eurostat.ec.europa.eu/portal/page/portal/sdi/indicators>.