



TRANSPORT AS A FACTOR AND SUBJECT OF GLOBALIZATION

Aleksandra Koźlak¹

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Abstract:

Transport system development and implementation of new solutions in integrated supply chains is an important factor conducive to the globalization of business relations. Globalization processes occurring in the world economy are not without impact on the transport and logistics sector. Transport, forwarding and logistics enterprises have to adapt to the requirements set for them by the globalizing economy as well so to submit to more and more advanced internationalization processes.

Introduction

Globalization processes take place in many areas: economic, technical, sociological or cultural; nevertheless, the greatest progress has been noted in the economic area. Globalization is treated as progressing internationalization of business activity and merging of economies manifesting itself in rapid growth of trade turnover, flows of capital and services. The process of globalization is accompanied by changes in transport networks, transport systems, organization structures of enterprises, systems of values and a reduced role of the state in the economy. The purpose of this paper is to confirm the thesis that transport is an important factor supporting globalization processes, and on the other hand, that it is also subject to those processes.

Transport as a factor of globalization

The nature of globalization processes considered from the economic point of view is determined by the following basic globalization features:

- a world network of exchange of goods and services is formed (globalization is the reason for the expansion of such an exchange and its increased scale);
- intensive development of movement of capital takes place (starting from intensive development of operations of a network of large banks in various countries in the world, through the intensification of securities trading, up to the rapid development of foreign direct investments);
- world transport system development making it possible to increase to a large extent the mass and speed of movement of cargo;
- creating a world information system whose main link is a network of global IT connections via the Internet. The IT system is also supported by traditional and mobile telephone network and more and more often by satellite communications [3].

Transport substantially supports international economic relations and plays a fundamental role in creating a world network of exchange of goods and in the transfer of capital goods among countries. A modern and efficient transport system is the reason why

¹ Aleksandra Koźlak, University of Gdansk, Sopot, ul. Armii Krajowej 119/121, a.kozlak@univ.gda.pl

large corporations are able to quickly react to the world market needs and use many modern methods of delivering large lots of cargo within a short time and in a timely manner. The speed of the high-value cargo transport on a global scale has been determined by the use of large transcontinental jet aircraft. The jet aircraft has also played a major role in passenger transport intensification. Very rapid growth in business and tourist transport has been noted.

Technological progress accelerating globalization processes has also covered all transport modes. An effect of that progress has been the development of the so called integrated systems permitting transport of cargo units by various interrelated transport modes. Covering long distances in continental and intercontinental relations involves a necessity of creating transport chains using the properties of various transport modes which is conducive to intermodal transport development. To create intermodal transport chains which are an important component of integrated delivery chains it is required to ensure uniform technical parameters for the infrastructure, cargo units and means of transport. Containers are used on a regular basis, new intermodal and ro-ro (horizontal handling of wheeled cargo units) technologies increasing the handling speed are introduced particularly in sea transport whose basic advantages are a mass scale and intercontinental range. The technological development in respect of transport of dry and liquid cargo has consisted in increasing the deadweight capacity of vessels (large tankers in particular) which has permitted to substantially decrease the transport costs of those goods (including oil, natural gas, ores, grains).

The operations of global and transnational companies affect the size and structure of the world exports and imports. The production process division into stages executed in different countries makes it necessary to transfer goods and services both inside a corporation (between the central unit and its branches or between specific branches) and in relations with suppliers and customers. Globalization of production and formation of complicated networks of interrelations are the reason why the demand for transport is greater and the quality requirements for the provided services are stricter. The operation and development of global business networks and the involved trends in the area of distribution affect the structure of supply chains which take the form of extensive logistics networks serving as the infrastructure for business networks. Those changes are characterized by a transition from the economy of “stocks” to the economy of “flows” where the last phase of production becomes the onset of a logistics and transport process [6]. In addition to the technical development and political and socio-economic changes the development of international logistics management, its implementation in large corporations, supported by massive outlays, is a stimulator for global market creation. Covering longer distances in international logistics systems has an impact on extending delivery deadlines and the probability of meeting them which, in consequence, affects the amount of stocks and costs. Spatial accessibility and transport time depend on the existence and degree of integration of the international logistics systems infrastructure (including transport systems).

Transport sector as subject of globalization

Business globalization has an active impact on the transport sector and it may be said that such impact is two-way:

- it causes changes in terms of the transport needs (it is their structure and volume that change);
- it leads to changes of strategies of entities providing transport services.

It is a very apt statement that the transport of cargo is a “mirror” of the economy in which it is possible to see changes in the production volume, its spatial distribution as well as changes in the material structure of such production. The transport needs in economically

developed countries are affected by an intensive evolution of the economic production structure. The share of highly processed goods is constantly growing in industrial production, while mass raw materials, including power, are imported from less developed countries where raw-material economy is predominant. Sea navigation has had the largest share in the transport of mass raw materials, however, the role of constantly developed and upgraded international crude oil, natural gas and electric power transmission systems has also been constantly growing. However, the European land transport is clearly predominated by road transport. Deliveries of smaller lots of cargo made more frequently in line with the principle “just in time” have contributed to the growing transport volumes and to a growing share of road transport. Everything is supportive of the fact that it will remain so as the transport system structure, formed in this way, best satisfies the needs of the economy and the society.

Globalization of economic process requires that international transport systems should develop and be combined into one network of good possibilities of commodity mass flows. Thus, a concept of a network of international transport corridors has originated in Europe through which basic streams of goods in international relations are flowing already now. In order to organize those corridors it is necessary to create a transport infrastructure of an international nature with identical technical parameters which will make it possible to use identical transport and handling technologies. Those activities are the basis on which separate transport systems of states and regions can be combined into one Paneuropean system.

Global and transnational corporations focus their operations in highly developed countries. As a result of the growth of these corporations’ economic power in recent years and the increase in highly developed nations’ economic potential three dominant economic centres have come into being in the global economy, which are located in three world zones: North America (the United States and Canada), Western Europe (the EU-15 states) and East Asia (Japan, Singapore, Hong Kong, Taiwan, North Korea and also recently China). These centres form the apex of a triangle encompassing the greatest economic powers of the contemporary world and are commonly known as the Triad. The countries belonging to the Triad are the principal source of technical progress, creation of new technologies and production of new goods. It is not only production that is concentrated in these nations, but also the consumption of highly processed goods. This means that there is a considerable concentration of transportation needs and their fulfillment in the form of the transportation of persons and cargo within a specific geographic region. [3].

The global trade in goods has shown a constant growth tendency. Considerable economic development occurred in the years 2000-2007. The highest GDP growth rates were recorded by China, India, Russia, the Republic of Korea, the United States, the European Union and Japan, that is the countries whose economic potential has a decisive impact on the state of the world economy. Dynamic growth in exports and imports has been observed in highly developed countries (table 1), which has brought about a significant rise in the long distance haulage of freight.

Starting from 2004 the value of direct investments has been growing systematically in the world. The boom in the world economy accompanied by the considerable profits earned by international corporations creates favourable conditions for foreign investments. In 2006 the surge in direct investments amounted to 1 306 USD thousand millions seen from a global perspective. According to the data from a report drawn up by UNCTAD direct foreign investments throughout the world reached a level of 12 thousand million USD. The growth in FDI that took place in 2006 concerned all of the world’s regions, although to differing degrees. Direct foreign investments amounting to 857 billion USD flowed into developed

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countries, which equates to growth of 45% compared with the previous year. This growth is the result of mergers and takeovers that occurred in 2006 amongst these countries [7].

Tab. 1. Foreign trade in the world - import and export (in USD million)

Country	Import					Export				
	1990	1995	2000	2005	2005	1990	1995	2000	2005	2005
					In the world (%)					In the world (%)
World	3 549 572	5 083 736	3 228 031	9 868 760	100	3 426 340	5 045 095	6 066 212	9 634 157	100
US	495 259	743 444	1 218 022	1 670 940	17,0	392 976	584 742	781 918	904 380	9,4
Germany	342 608	464 366	495 450	777 531	7,9	398 448	523 909	550 222	977 913	10,2
China	53 345	129 113	225 094	660 159	6,7	62 091	148 797	249 203	762 068	7,9
Japan	234 799	335 991	379 491	514 988	5,2	286 948	443 261	479 227	594 986	6,2
G. Britain	224 024	265 322	334 371	483 064	4,9	184 508	242 036	281 525	371 406	3,9
France	232 580	281 497	311 029	479 329	4,9	209 581	284 914	300 083	436 015	4,5
Italy	193 541	206 025	238 071	385 521	3,9	180 926	233 980	239 934	373 486	3,9

Source: Rocznik Statystyki Międzynarodowej 2003, GUS, Warszawa 2004; Rocznik Statystyki Międzynarodowej 2006, GUS, Warszawa 2007;

As a consequence of the globalization of many markets and ever greater competition an evident rise has occurred in the tendency for capital to be concentrated in the form of mergers as well as strategic alliances, which have become the most popular way to gain new outlet markets for one's services. As a result of globalization the clear differences between transport, freight forwarding and logistics activities have started to blur. Transnational corporations in the transport, shipping and logistics sector perform the role of multimodal transport operators and make use of various branches of (marine and land) transport for this purpose and issue a single waybill for the entire transportation route. In this way they are taking on responsibility for the performance of the entire delivery process as well as for all of the sub-contractors involved.

Enterprises providing services supporting the trade in goods, thus transport, freight forwarding and logistics must adapt to meet the demands placed upon them by the globalization of the economy and are also subject to the process of internationalization. Entry into a foreign market may be undertaken by a company's own commercial departments or this can be done with the involvement of independent intermediaries, such as brokerage firms dealing in the search for tonnage and cargo on the international freight market or freight forwarding firms, which sell the services of domestic transport operators to foreign shippers and thus export them. One of the more advanced forms of internationalization is the creation of a foreign sales subsidiary. This type of direct investment does not require a large amount of capital to be tied up, and in the case of setting up branches of transport and freight forwarding firms there is usually only a need to rent and fit out office space, especially to equip it with means of communication and to recruit the appropriate personnel. Examples of this type of solution were the joint ventures or subsidiaries set up abroad by the company, C. Hartwig, such as Poltrans in Germany or Amerpol in the United States, for instance. Powerful firms providing high quality services in line with the requirements of the global market and that have sufficient capital resources at their disposal can afford to implement an internationalization strategy at such an advanced level. These businesses were gradually

losing their national nature, which on the one hand was the consequence of the globalization process and on the other was due to the essence of their operations encompassing the most important centers of economic life in the world. The need to meet the demands stemming from the trends on the transport market, such as: the development of a pan-European service network, the propagation of IT systems in customer service and management of the sub-contractor network, the development of logistics operations, the demand for comprehensive services covering the entire flow path of freight outstrips the capabilities of a large part of not only small, but also medium sized freight forwarding firms [5].

Technical progress and the development of IT favour the emergence of operators specialising in supporting specific trades or market segments. Large corporations, including those in the transport, shipping and logistics business are more effective and guarantee high quality of services that make up the logistics process. When defining their mission the biggest logistics operators point to a worldwide scope of operations, however markets are also divided up on a regional or sectoral basis. Following in the wake of the emergence of powerful groups of companies in industry, mergers and takeovers have taken place amongst entities in the transport, forwarding and logistics sector. European logistics is shaped by a group of around 30 major operators, whose turnover represents more than 40% of the value of turnover on the entire logistics market. This means that there is a relatively high concentration of operations, however taking into account the enormous impact of the scale of production on the effectiveness of operations and the quality of services it is possible to anticipate that mergers and takeovers amongst logistics operators will continue [1]. The consolidation of firms in the logistics sector is without doubt a global trend. In recent years this process has also been observed in Poland. The key mergers and takeovers on the Polish market include:

- the integration of Servisco and DHL Poland under the umbrella of the DHL brand,
- the takeover of the firm, Euroad by the Dutch firm, Vos Logistics,
- the purchase of the remainder of shares in Masterlink Express by GeoPost,
- the merger of Spedpol and Schenker,
- the takeover of the courier firm, Messenger Service Stolica by UPS.

For some time the process of consolidation of small and medium freightage firms has been noted, although on a considerably smaller scale than in the case of logistics operators. The number of haulage firms is constantly falling on the European market, with the average number of heavy goods vehicles per transport company rising at the same time. In recent years in the majority of Western European countries the proportion of road hauliers operating more than 10 vehicles has grown in particular and now every fifth Dutch or Belgian transport operator has at least 10 vehicles. If they do not take advantage of the opportunities offered by the various forms of consolidation, a considerable share of the small and medium sized haulage firms will not be in a position to face up to the increasing competition [2].

The intensive development of international strategic alliances has meant that not only businesses that have entered foreign markets in the form of direct investments are perceived as being transnational corporations, but also those that co-ordinate activities of many various companies in different countries. An example of such a corporation could be the lead company in an international airline alliance (Lufthansa – the leader of the Star Alliance, or British Airways – the leader of the One World alliance) [4]. In the transport sector strategic alliances actually occur to the greatest extent in the air industry. Changes in the conditions and tools of competition arising in the airline sector are the result of globalization as well as at the same time being a condition for it and air transport has become a global sector.

Summary

The intensification of international competition and the search for new development reserves have forced many businesses to expand into new output markets, to use cheaper raw material resources and labour resources located outside the borders of the country of origin of the parent company, often in very faraway parts of the world. Covering distances is always associated with transport and the efficient running of transnational corporations would be impossible without the appropriate provision of transport and logistics functions. Transport has become a factor that is conducive to the globalization process, predominantly thanks to the implementation of modern technologies relating to haulage, transshipment and the flow of information between individual links in the supply chain. This has brought about the acceleration of the transport process at every one of its stages and an increase in the reliability of delivery. On the other hand technical progress in the design of means of transport has made it possible to increase their carrying capacity and reduce transport costs and owing to this has been fostered the transportation of bulk raw materials over long distances.

In the era of globalization and the continuing expansion of supply chains the two most serious challenges facing firms in the transport, shipping and logistics sector is cost reduction and ensuring the appropriate service level. In order to be in a position to support the trade in goods on a worldwide scale it has had to undergo the processes of globalization and set up a network of links corresponding to the directions and structures of flows of goods. Running operations on the global market has required companies in this sector to apply ever more advanced internationalization strategies, starting from the simple export of services, via licensing agreements and joint venture companies through to establishing their own subsidiaries (frequently via mergers and takeovers). In recent years in particular there has been an evident tendency for smaller firms to merge and for companies to be taken over by global logistics operators, which in turn brings about the further expansion of the networks all over the world.

The second clear tendency in this sector caused by the processes of economic globalization is the integration of transport, forwarding and logistics services. The activities falling within the scope of the three types of services have a complementary nature, and performing them as a combined package by entities that operate on the market facilitates the creation of integrated supply chains adapted in line with clients' diverse needs. The optimization of international goods flows means that we have to move away from the division of markets between sectors of transport and this favours the emergence of businesses with a global reach of operations that perform the role of multimodal transport operators.

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