

Logistic Aspects of Barriers to Market Entry and Exit

Andrzej Jezierski

The University of Gdańsk, Poland

If one associates the scope of logistics with widely understood logistic competition, looking at logistics through the prism of enterprises competition factor and hence the factor which influences the market, one may also easily find the essential role of logistics in methodological approach concerning the shaping of the market and referring to the assumptions of new industrial economics – the approach that stresses the so called dynamics in market structures and is connected with market entries and exits (the mobility of market players) as well as with power and domination in the market, problems of appearing and disappearing of the businesses (businesses demography) other than competition between the forms of market coordination. This paper focuses on one of the most fundamental areas of new industrial economics, such as market entries and exits and barriers to them, which may be of logistic type. That is why the purpose of this article is to identify and characterise logistic barriers to market entries and exists. The paper is based on critical analysis, system analysis and hermeneutic methods.

Keywords: market entry and exit barriers, logistics, strategies.

1. INTRODUCTION

The prevalence of inventory processes flow and thus the necessity of taking them into account in any interactions between businesses led to relating competition problems with the field of logistics. It should be noted that competition problems, discussed in economic research from two basic perspectives: the first one dealing with two fundamental economic issues: the general market characteristics (its structure, development, functioning, existing situation) and strategic behaviours of market players, and the second perspective covered by the theories related to the role of the state in market economy [Brodecki 2004, p. 26], are to some extent referred to in logistics literature which seemingly emphasizes the enterprises' strategic behaviours. Thus it should be stated that, in various forms and to various extent of concreteness, logistic aspects are referred to the following issues:

- creation of market power or monopolistic force,
- occurrence of the sources of competition imperfection,

- concentration of the economic activity in the hands of a given number of businesses,
- different level of the intensity of businesses competition,
- barriers to entry to and exist from the market.

The purpose of this article is to present the selected aspects of logistics as sources for potential barriers to market entry and exit.

2. THEORETICAL FRAMEWORK OF THE LOGISTIC SOURCES OF MARKET ENTRY AND EXIT RESEARCH

Interdependence of the market and market entities behaviours, including logistics behaviours, may be referred to the particular levels of economic analysis and within their framework to the specified currents of economic research. Traditionally, economists specialized in micro and macroeconomic issues. Within the recent several dozen years there have appeared new – comparing to the traditional differentiation – levels of delimitation in economic studies [Gorynia 1993, p. 501]: micro-micro (nano), micro, mezo, and

global. The traditional theory of competition, created by three great economists: Edward Chamberlin [Chamberlin 1933], Joe Bain [Bain 1956] and George Stigler [Stigler 1964], may constitute the starting point for our analysis. The theory, based on the theory of the market, covers two key economic problems: an overall market characteristic, i.e. its structure, development, performance, and the situation in the market (*market structure, market conduct, market performance*), and strategic behaviours of businesses, which on the one hand are determined by the existing market characteristics, and on the other hand, shape the market [Brodecki 2004, p. 26]. The second theoretical framework for researching the interdependence of markets and market entities' conduct relates to the influence of the state on the market economy, the analysis of obstructing the market as a regulating mechanism, i.e. analyzing those spheres of the market in which the effectiveness of Adam Smith's "the invisible hand of the market" may be questioned. Thus, from the historical perspective, the model of perfect competition may be treated as a reference point to the analyses of interdependence of the market, its structure, its characteristics and features forming it, including market conducts (also in the field of logistics).

According to this model, all producers have the same market share, so the problems of market power or dominant position do not exist. Competition does not depend on strategic decisions of the firms, no player has influence on the market or on other market players and price competition is the basic type of competition. The market and its structure lacks auto-dynamizing elements. Any changes in the market structure may only be caused by exogenous factors [Gorynia 1995, p. 822].

Contrary to the model assumptions of perfect competition, imperfect competition displays the entirely different market structure, the structure with different behaviours of firms, namely – strategic behaviours, different competition forms and tools and thus differently perceived factors creating the market. Imperfectly competing markets are characterized by asymmetric market shares of market members, the feature which results from such issues as:

- appearance, to a certain degree, of market power or monopoly force,
- existence of the sources of competition imperfection,

- concentration of business activity in the hands of a limited group of firms,
- appearance of dominant firms,
- different forms of abusing market power,
- different degree of the intensity of competition,
- new competition forms, especially non-price competition,
- determined consequences for public policy.

Barriers to market entry and exit are the feature that is very often emphasized in the theory of imperfectly competing markets. The research on the relationship between market entities is conducted in the framework of two – overlapping to a large extent – subdisciplines of economics: industrial economics [Rainelli 1996, p. 28] and industrial organization [Łyszkiewicz 2000, p. 237]. At the beginning of the 1990s the organization and management studies took an increasing interest in the above mentioned issues and this resulted in the development of the discipline called industrial organization, dealing mainly with research of market organization and its influence on competition and to a lesser degree with price theory [Brodecki 2004].

The development of research on competition contributed to the emergence of a new research current, described as "new industrial economics" or "new organization economics", which focuses mainly on mezzo-systems, e.g. industries, that is why in literature the current is often called economics of industry. This current stresses strategic market behaviours of firms and interdependence of market conditions and market conduct. It indicates that firms can create market conditions and market structures, while achieving their own economic objectives at the same time. The analysis of factors that dynamize the market, i.e., barriers to market entry and exit is one of the most important issues new organization economics focuses on. Entry and exit barriers may be of different character and features, including but not limited to the character and nature of logistic barriers.

3. LOGISTICS AS A SOURCE OF MARKET ENTRY AND EXIT BARRIERS

Numerous academics, authors of different analyses name logistics as a potential source of market entry and exit barriers. Their analyses, however, are mainly of contributing character, they are selective and do not present logistics as the entry and exit barriers' source per se. M. Porter's model of five competitive forces [Porter 1990, p. 18] analyses the main sources of barriers to entry to the market. In each of the six main sources of entry barriers: economies of scale, product differentiation, capital requirements, access to distribution channels, cost disadvantages, and government policy, logistic aspects as potential sources of entry barriers can be traced. Within economies of scale the role of logistic aspects may be visible in advantages gained from the so-called associated costs. Such costs occur when a firm making product A (or performing an operation which is part of product A manufacturing process) needs a capacity to manufacture product B. Firms competing in industries (markets) that are related to one another by occurrence of associated costs can have advantages over firms competing only in one market. An example of this may be set by logistics firm offering passenger air services as well as freight air services.

Product differentiation is another source of entry barriers in which in many cases logistic aspects play a crucial part. A specified level of logistic customer services, by determining product differentiation (in the meaning of utility value increased by place and time utilities), creates entry barriers and forces an entrant to incur high costs in order to overcome customer loyalty [Lambert, Stock, Ellram 1998, pp. 43-48]. Creating and strengthening customer loyalty by using logistic services aspects may be of particular importance under specified conditions connected with widely-understood logistic service, e.g. cooperation based on interventional delivery systems, long distances between contractors, supplies of special types of products, e.g. customized services, etc. [Jacoby, Chestnut 1978]. There are numerous examples of market players using the advanced level of logistic customer services to function and compete in the market. Market entities assume different behaviour strategies in order to gain competitive advantage resulting from a unique way of product delivery. For example the mission of Spedopol, a logistic operator: "On time, To place, For sure" emphasizes

a high-quality of logistic customer services offered by the firm. Fierce competition in the ceramic roof coverage market has proved that the firm's success no longer depends on product quality and price but on a specified strategy of logistic services. Ceramic tile is a product which, when packaged and palletized, is of a large size and weight, hence the success may only be achieved by operations like:

- shipment to the customer,
- handling the goods on the customer's construction site (in the case of large supplies – enabling the customer to use a pallet truck, in the case of smaller supplies – preparing packages with a suitable number of pieces, e.g. eight, to make carrying them convenient),
- quick reaction to complaints, e.g. an immediate replacement of the defective part of the product using the firm's transport and at the firm's expense,
- replacement of the hatch of the goods if a customer has changed his mind as to color or texture, etc.

It is hard to argue with a stipulation that in principal overall logistic operations, the quality level of logistic services, and in general, the way of delivering goods to end customer contribute to differentiation and hence to strengthening the firm's competitiveness. Nowadays market conditions force firms to deliver goods quickly, efficiently and safely, and this is true not only about physical goods but also about services. Creating a new service concept or an innovative approach to a service that the firm already offers is the first step in designing the service and the system of its delivery. It is already at this point when it is vital to include into the designing team specialists in widely-understood logistics, who will prepare logistic support for the service, i.e. they will match the system of the service delivery with the innovative process of customer services. During the global financial economic crisis, Bank of America gave an example of involving logistics specialists in financial (banking) services. The Bank's management created the Innovation and Development Team comprising some logistics specialists, whose aim was to design new banking services [Thomke 2003, pp. 70-79].

Access to distribution channels (logistic channels) or costs of changing a supplier constitute another vital source of entry barriers [Porter 1992, pp. 27-28]. Costs of changing a supplier are a fundamental part of logistic costs connected with the costs of choosing a new supplier, looking for a

new source of purchases, employees training, auxiliary equipment, etc. Respectively high costs of the change of a supplier make new entrants offer lower prices to persuade a customer to change a supplier. This constitutes an important market entry barrier. One of the basic logistic reasons for entry barriers to arise is that it is necessary to ensure access to goods, so to ensure logistic channels by a new entrant. More than once unofficial connections of competitors with "logistic channels", long-term cooperation based on high-quality services or even exclusive business partnerships, and loyalty of cooperating businesses constitute a significant barrier to entry for a new firm, sometimes such big a barrier that an entrant must create a new logistic channel. There are several examples of such behaviour. The WalMart corporation carried out several takeovers which were accompanied by operations of logistic character – changes of suppliers of logistic services, reorganization of logistic processes, constructing new logistic centers, etc. Other businesses, seeing unofficial connections of competitors with "logistic channels", loyalty of cooperating businesses based on long-term cooperation, high-quality services or even exclusive business partnerships, decided to build their own logistic channels, like e.g. the Timex corporation in the watch market [Jeziarski 2015, p. 62].

Cost disadvantages, independent of their size (hence interdependent of the achieved economies of scale), are also the source of entry barriers which falls in the range of logistics. The following factors may appear beneficial here: patents, licenses, law regulations, advantageous locations, and experience. It should be noted that some of these factors, although they are related to the field of logistics, constitute external determinants, somehow independent of logistic activities, but directly affecting them (e.g. patents or government subsidies), while others result directly from logistic operations (e.g. experience gained through performing logistic processes).

Capital requirements may sometimes be regarded as a factor that constitutes the most significant barrier to entry. Logistic services market in Poland has gone through difficult processes to adapt to the EU market rules of cooperation. Undeniably, it was foreign capital firms that introduced logistic concepts into the Polish economy, but numerous Polish businesses, by meeting requirements, i.e. capital ones, have been able to overcome foreign competition.

Different industries retail and wholesale markets are systematically becoming concentrated. More and more Polish capital distribution centers are appearing. In classifications and statistics logistic firms with a hundred per cent Polish capital are ranked high as to revenue or other metrics indicating the success on the market.

Competition on micro or mezzoscale must also be perceived on a macroscale – from the perspective of the whole Polish economy in relation to other EU economies, and even from the global point of view. Hence, the government policy is regarded as one of the sources of entry barriers. In the logistic dimension such policy is understood as logistic policy [Skowrońska 2009]. The high ranking of the Polish logistic services market – Poland comes as 28th of 160 world economies, measured with LPI (Logistics Performance Index) – is not only an effect of the services provided by Polish transport companies to the European market, but also of the increase in the level of investments in logistic infrastructure and of several macrologistic initiatives of the Polish Government taken in recent years. According to The Institute of Logistics and Warehousing (Instytut Logistyki i Magazynowania), Poland comes as 7th in Europe as to the value of logistic services (€ 42.2 bn), although the value is disputable because it is difficult to reliably identify and define the logistic services market and even a logistic service itself. According to Statistics Poland (GUS), in 2016 revenue from all transport services (both freight and passengers) totalled to PLN 231.1 bn (broken into: freight – PLN 106.7 bn, warehousing and additional services – PLN 36.2 bn, CEP (courier, express and postal) services – PLN 6.5 bn). In the State logistic policy there appeared a concept of building the Central Airport (Central Communication Port), whose costs are estimated at an unprecedented level of PLN 30 bn. There is also a concept of building the state system of logistic support as an instrument of implementing the strategy of the Polish economy sustainable growth.

3. CONCLUSION

Taking the above into consideration it must be stated that numerous analyses point at logistics as the factor influencing firm's competitiveness, creating firm's competitive advantage, and thus enabling an increase in business's market share. That is why in the scope of logistics the sources of entry and exit barriers may be found. The role of logistics in creating competitive advantage is

perceived in literature in various ways. It should be noted that seeing logistics as a factor creating competitive advantage in the market refers to a defined objective which motivates the firm's activity and influences its behaviour, and the objective is: maximizing the market share, "effort to build firm's own monopoly and its defense against similar efforts of other firms". As it was claimed above, objectives of operating firms, or market entities in general, may be of different character. In each case, defined processes realized by market entities determine the market structure in a defined way. Logistic activities, whose aim is to ensure proper resources to all market processes, appear as one of the most significant factors enabling achievement of the objectives. Thus, logistics may be seen as an area from which sources of barriers to market entry and exit come. In each of the six main barrier sources discussed in this paper – economies of scale, product differentiation, capital requirements, access to distribution channels, cost disadvantages, and government policy – logistic aspects as potential barrier sources may be indicated. Beginning with microeconomic approach concerning functioning of and attaining objectives by one firm, through mezzo-systems – competing industries, specified economic regions, an ending at a global scale – competition between state economies, logistics plays one of the most important roles in shaping markets, thus constituting one of the main source of market entry and exit barriers.

REFERENCES

- [1] Alexander J., *Pomiar satysfakcji i lojalności klientów*, Oficyna Ekonomiczna, Kraków 2003.
- [2] Bain J., *Barriers to New Competition*, Harvard University Press, Cambridge 1956.
- [3] Brodecki Z., *Konkurencja*, Wydawnictwo Prawnicze Lexis Nexis, Warszawa 2004.
- [4] Cichosz M., *Lojalność klienta a logistyka firm usługowych*, Oficyna Wydawnicza Szkoły Głównej Handlowej, Warszawa 2010.
- [5] Chamberlin E., *Theory of monopolistic competition*, Harvard University Press, Cambridge 1933.
- [6] Gorynia M., *Poziomy analizy w naukach ekonomicznych*, "Ekonomista", (1993)/4, pp. 501-506.
- [7] Gorynia M., *Mezoeconomia – modele samoregulacji branży*, "Ekonomista", (1995)/5-6, pp. 815-837.
- [8] Jacoby J., Chestnut R. W., *Brandt Loyalty*, John Wiley & Sons, New York 1978.
- [9] Jeziński A., *Konkurowanie logistyką w warunkach kryzysu w świetle teorii Organizacji branży*, [in:] Witkowski J., Skowrońska A. (ed.) *Strategie i logistyka w warunkach kryzysu*, nr spec. "Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu", 382 (2015), pp. 53-65 - <https://dbc.wroc.pl/dlibra/publication/32376/edition/29054/content?&ref=struct&action=ChangeMetaLangAction&lang=pl>
- [10] Lambert D. L., Stock J. R., Ellram L. M., *Fundamentals of Logistics Management*, McGraw – Hill, International Edition, New York 1998.
- [11] Łyszkiewicz W., *Industrial Organization. Organizacja rynku i konkurencja*, Wyższa Szkoła Handlu i Finansów Międzynarodowych, Warszawa 2000.
- [12] Porter M. E., *Competitive Advantage*, The Free Press New York, Collier Macmillan Publishers, London 1990.
- [13] Porter M. E., *Strategia konkurencji. Metody analizy sektorów i konkurentów*, Polskie Wydawnictwo Ekonomiczne, Warszawa 1992.
- [14] Rainelli M., *Ekonomia przemysłowa*, Polskie Wydawnictwo Naukowe, Warszawa 1996.
- [15] Skowrońska A., *Rola polityki logistycznej państwa we wdrażaniu zrównoważonego rozwoju*, Wydawnictwo Uniwersytetu Ekonomicznego, Wrocław 2009.
- [16] Stigler G., *A Theory of Oligopoly*, "Journal of Political Economy", 72(1964)/1, pp. 44-61 - <http://home.uchicago.edu/~vlima/courses/econ201/Stigler.pdf>
- [17] Thomke S., *R&D comes to services. Bank of America's pathbreaking experiments*, "Harvard Business Review", 81(2003)/4, pp. 70-79.

Andrzej Jeziński
The University of Gdańsk
andjez@panda.bg.univ.gda.pl

