An analysis of the structure of entities managing seaports, illustrated with an example of Szczecin and Świnoujście Seaports Authority SA

Introduction

This article presents an analysis of the clients of entities, who manage first and second-generation seaports, regarded as one of the competitive forces influencing the competitive position of an enterprise in the market. The analysis has been illustrated with an example of the entity managing the ports of Szczecin and Świnoujście. Client groups and their importance to the earnings structure of Szczecin and Świnoujście Seaports Authority SA have been presented. Connections between clients and the managing entity in the process of handling cargo in a seaport and what influence particular groups of clients, in this context, have on the volume of handling in the ports of Szczecin and Świnoujście have been pointed out. This analysis is of a general nature. Although it has been carried out as a case study it can be applied for other seaports and connections existing between managing entities and their clients in the processes of cargo handling and seaport development.

Clients of a managing entity

The external task environment of entities who manage seaports includes a variety of institutions and enterprises that can, in general, be divided into:

- Controllers
- Clients
- Suppliers
- Competitors
- Social forces.

This division is based on the studies conducted by M. E. Porter and the Strategor Group with regard to the competitive forces existing in the environment of an enterprise, but the author has modified it to suit seaports and the most important external environment forces influencing their operation and development (see Figure 1).

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2 Reviewed paper.
The analysis included in this article deals with institutions and enterprises which can be recognized as a group of Clients (regarded as one of the forces in the dynamics of competition) of an entity managing a seaport. Focusing on this group results from the fact that it is the clients who are a market force which influences not only the competitive position, but, first of all, the level of income which conditions fulfilment of an enterprise development strategy. In the case of seaports the issue is more complicated since the analysis of the income strategy of Szczecin and Świnoujście Seaports Authority SA shows that the level of revenue derived from particular groups of enterprises is not always appropriate for a particular group to generate a port handling volume and increase importance of the port in the service market.

In the case of ports of Szczecin and Świnoujście the clients of the managing entity are divided into two groups. This structure of clients is typical of first and second-generation ports in which controllers establish managing entities as landlords with a limited range of operations. The first groups includes enterprises and institutions operating on the managing entity's property (Leaseholders). The second group includes carriers (Carriers), using the port infrastructure for fulfilling passenger, cargo and freight unit transport services.

There are, of course, situations when a particular client of the entity managing a port is both a Leaseholder and a Carrier. Shipowners investing in port terminals, especially in container terminals (which is taking place in several European ports) or buyout of port enterprises, such as transhipment companies or operators, by carrier enterprises, leads to circumstances in which a client recognized as a Carrier becomes a client from the group of Leaseholders. A reversed process, in which a port terminal operator or forwarder expands their operations with cargo or passenger transport and becomes a carrier, is also possible. One example of this situation is the Fast Group which includes the Fast Lines liner shipowner and Fast Terminals port operator. The latter was established as a result of the shipowner's expansion and their willingness to develop a wide array of services provided for loaders, including not only maritime transport, but also forwarding, port services as well as cargo distribution.

Leaseholders

This group includes enterprises and institutions, whose operations are based on the seaport technological infrastructure belonging to the managing entity, which use this infrastructure on the basis of contracts concluded under Civil Law. These contracts can be concluded with regard to rent, lease or use in compliance with the Polish Civil Code provisions and Act on ports and maritime harbours. The group includes:

- transhipping and warehousing companies (transhipment companies), stevedore companies and port terminal operators, i.e. enterprises which provide technological and executive services with regard to cargo, means of transport and passengers
- forwarders, clearing and freight agents, customs agents, inspection and maintenance companies, piloting, towing and mooring companies, i.e. enterprises which provide disposition services or technological and executive services related to handling cargo as well as means of transport and passengers
- production, processing and service companies, i.e. enterprises which perform production or processing operations resulting from the industrial function of a seaport as well as service enterprises providing a range of maintenance services for the operation and service companies and carriers who are seaport users
- state institutions which perform tasks which are necessary for appropriate land and sea cargo handling in the international trade.

The group of Leaseholders can be divided into two subgroups. The first group includes forwarders, ship agents and such institutions as the Customs Bureau and Border Guard who are office rooms or office buildings lessees under contracts concluded for an indefinite time which very often do not require any tender procedures. The same pertains to part of the expertise or service enterprises which provide maintenance for other port enterprises. In the income structure of the managing entity this subgroup of Leaseholders is of no great importance. However, it does not mean it is unimportant to the volume of general income of the managing entity. Quite on the contrary. Operations performed by this subgroup of Leaseholders condition efficiency of handling cargo and means of transport and in the case of forwarders they also condition the volume of cargo handling, which has its impact on the volume of the managing entity's income derived otherwise, which is presented in Table 1. of this analysis.

The second group of Leaseholders includes transhipment companies, terminal operators, producers and large maintenance enterprises such as repair shipyards, repair works and dredging works enterprises. Because of their primary operations these companies use the port infrastructure which is of significant value and therefore are big payers on account of it. In the case of ports of Szczecin and Świnoujście it certainly relates to the enterprises operating on the land belonging to ZMPSiŚ SA. This subgroup of Leaseholders is a source of primary income of the entity managing the seaport. In particular, it relates to the transhipment companies and terminal operators for whom the managing entity becomes a beneficiary of income which is derived not only from a lease of the port infrastructure and services connected with it, but also from harbour dues collected from the vessels which make use of the berths and port terminals where transhipment companies and operators operate.
Carriers

The group of Carriers includes enterprises which deal with cargo and passenger transport as well as their representatives who are port users. In general, they are not bound by rental agreements or lease contracts concluded between them and the managing entity. The group includes:

- maritime shipowners and vessel operators operating on shipowners’ vessels, for whom, from the seaports’ point of view, it is crucial to divide navigation into regular liner navigation and irregular charter navigation
- inland shipowners who are often bound by long-term contracts with forwarders and multimodal transport operators
- road transport carriers who are often bound by contracts concluded with forwarders and multimodal transport operators, and also with transhipment companies
- rail transport carriers who are also bound in a similar way by short-term and long-term agreements (preferred by this group of carriers) concluded with forwarders, multimodal transport operators and loaders
- agents who represent carriers, especially shipowners
- multimodal and intermodal transport operators who arrange cargo transport in the event of considerable diversity of organizational structures as well as forms of operation; this group includes couriers and distribution businesses which arrange transport and distribution, forwarders who have their own or leased means of transport and who operate as multimodal transport operators.

This list of carriers from different transport branches is representative for most of seaports, including the ports of Szczecin and Świnoujście. The structure of carriers depends, of course, on such factors as:

- condition of the transport structure providing access to the port from mainland in the context of its multibranched make-up including road transport, rail and inland transport
- cargo structure for which it is commonplace that the number of liner navigation connections with other ports is in direct proportion to the handling volume of a particular port with regard to such cargo categories as self-propelled and non-self-propelled high-cube and rolling containers
- arrangement of containerized cargo transport for intermodal transport in the case of which it has been the last twelve years or so that the operators have been placing emphasis on regular rail transport of containers from ports to and from intermodal terminals operating on hinterland and located in the close vicinity to the points where cargo is collected or shipped; the same principle applies to the ports with a considerable share or majority share of container handling in the general port handling including the ports of Rotterdam, Antwerp, Hamburg, Bremerhaven or Gdynia and Gdańsk.

In the case of ports of Szczecin and Świnoujście the structure of carriers is conditioned by the first two factors. The infrastructure of access to the ports from mainland facilitates rail, road and inland transport. On the other hand the structure of cargo handled in both ports, where dry and liquid bulk cargo are dominant, results in a small number of navigation lines with one exception which is Ferry Terminal in Świnoujście where 11 ferries leave for Sweden everyday (self-propelled and non-self-propelled rolling cargo).

The income structure of Szczecin and Świnoujście Seaports Authority SA

Table 1 shows the level of income of the entity managing the ports of Szczecin and Świnoujście and what this income is derived from. The primary source of income includes harbour dues collected by ZMPSiŚ SA from the vessels calling at the ports, revenue derived from the lease of the managing entity’s property, which is generally related to the land property and technological infrastructure, as well as the revenue derived from selling utilities and auxiliary services provided for Leaseholders and Carriers. In 2013 the total revenue derived from these sources was 87.5% of ZMPSiŚ SA general income.

<table>
<thead>
<tr>
<th>Type of activity</th>
<th>Income in zlotys</th>
<th>Income structure in percentage terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>General income derived from service sales; including:</td>
<td>135,777,909,67</td>
<td>100,0</td>
</tr>
<tr>
<td>Harbour dues,</td>
<td>54,567,384,06</td>
<td>40,2</td>
</tr>
<tr>
<td>Operator (shipowner) charges for Ferry Terminal in Świnoujście,</td>
<td>15,629,731,82</td>
<td>11,5</td>
</tr>
<tr>
<td>Revenue derived from the lease of zmpsiś SA property,</td>
<td>41,549,009,53</td>
<td>30,6</td>
</tr>
<tr>
<td>Revenue derived from selling utilities and auxiliary services,</td>
<td>22,683,432,27</td>
<td>16,7</td>
</tr>
<tr>
<td>Revenue derived from other activities which are not listed above.</td>
<td>1,348,351,99</td>
<td>1,0</td>
</tr>
</tbody>
</table>

Resources: On the basis of the financial report of Szczecin and Świnoujście Seaports Authority S.A. for the financial year as of 31 December 2013.

These three sources of income of the entity managing the ports of Szczecin and Świnoujście are typical of most of the ports in Europe. Channel charges and revenue derived from operator charges (see the case of analysed ports) can also be included. It results from specific qualities of a particular port or adopted structural solutions. A good example is Ferry
Terminal (BPM) in Świnoujście where in 2001 ZMPSiŚ SA took over the role of an operator concluding contracts with operators and sea ferries shipowners for handling ships, passengers and cargo in rolling vessels and commissioning stevedoring services to an appointed company.

Figure 2 presents a scheme of relationships existing among the managing entity, Carriers and Leaseholders in the process of handling cargo, which illustrates connections between the revenue derived from the lease and auxiliary services and revenue derived from harbour dues which are of key importance to each seaport in terms of income which allows to fulfil primary and strategic objectives related to its development.

The primary sources of income of the entity managing the ports of Szczecin and Świnoujście presented in Table 1. and Figure 2 illustrating the scheme of relationships among transhipping and warehousing terminal operators and forwarders acting on behalf of loaders show what enterprises determine the strength of a seaport and its handling volume. The market position of forwarders or multimodal transport operators as well as port operators is of key importance to the position of the port as a whole. These enterprises are a crucial group of clients of the managing entity. First of all, they generate specific income for the port authority derived from the port infrastructure lease and relevant services. Secondly, they lead to generation of subsequent income of the managing entities derived from harbour dues collected from maritime carriers and charges for using the port infrastructure by land and inland carriers.

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**The income structure of Szczecin and Świnoujście Seaports Authority SA**

In the group of Leaseholders the biggest subgroup (in terms of the managing entity's income) includes transhipment companies and port terminal operators operating with the use of port infrastructure leased from ZMPSiŚ SA. The most important enterprises include:

- Port Handlowy Świnoujście Sp. z o.o., which operates at several berths in the port of Świnoujście, owned by OT Logistics SA which is a holding consisting of inland navigation companies and forwarders as well as inland port terminals operator; the main cargo handled by this company is dry bulk cargo including coal, iron ore and corn

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5 www.portszczecin.pl (30.08.2014)
• Bulk Cargo - Port Szczecin Sp. z o.o., which operates at numerous berths in the ports of Szczecin, owned by a managerial group; the main cargo handled by this biggest company in both ports includes dry bulk cargo (coal, biomass, ores, corn) and liquid bulk cargo (pitch, tar, sulphur acid) as well as other general cargo (steel products, copper, aluminium)

• DB Port Szczecin Sp. z o.o., which operates at numerous berths in the port of Szczecin, owned by DB Schenker Rail Polska - a company belonging to the DB Schenker Group which is one of the biggest concerns in the TSL sector in the world. This company specializes in handling containers, non-self-propelled rolling cargo and other general cargo

• Elevator Ewa Sp. z o.o., which operates at three berths located on the Ewa peninsula in the port of Szczecin, owned by Glencore Polska Sp. z o.o. which is part of the Glencore Group - a global company which trades mainly in corn and feeds. The company mainly handles corn, feeds and rape (dry general cargo).

On the ZMPSiŚ SA land in the ports of Szczecin and Świnoujście there are also (apart from those four operators) several smaller operators who commission services to the enterprises listed above. The group of Leaseholders also includes forwarders, ship agents, maintenance companies, production enterprises as well as customs and phytosanitary institutions.6 The group of Carriers includes shipowner enterprises and the sea ferry operator Unity Line, inland navigation enterprises with OT Logistics SA being the biggest one, railway carriers (the biggest ones include PKP Cargo SA, DB Schenker Rail Polska), road transport enterprises which are mainly small and medium-sized businesses, which is typical of the Polish market.

In terms of income of the managing entity the most important enterprises in this group of Carriers are shipowner enterprises and Unity Line. As stated previously, primarily, the ports of Szczecin and Świnoujście handle such cargo as dry bulk cargo, self-propelled rolling cargo and other general cargo. Handling containers and liquid bulk cargo is of secondary importance. Because of this structure of handling the biggest revenue derived from harbour dues comes from the charter navigation vessels and sea ferries. It is difficult to point the main cargo in the group of irregular navigation shipowners, which results from the rules of chartering vessels by loaders. However, it is necessary to point out the ferry shipowners and Unity Line in the group of liner navigation shipowners whose vessels call at the ports of Szczecin and Świnoujście.

Polska Żegluga Bałtycka and TT-Line have agreements signed directly with ZMPSiŚ SA for performing their operations at Ferry Terminal in Świnoujście. However, the Polska Żegluga Morska and Euroafrica ferries are managed by Unity Line and it is this company who represents both shipowners in the agreements signed with ZMPSiŚ SA7. Other liner shipowners include Fast Line, Unifeeder and Nor Lines.

Conclusions

1. Because of the statutory situation and proprietorial supervision policy adopted by the Ministry of State Treasury the group of Clients of the entities managing the Polish ports does not include the final clients of the TSL sector, i.e. loaders and logistic operators.

2. Without a doubt, the managing entity's revenue derived from the lease of port property generates the revenue from harbour dues.

3. The task of the entities managing the ports is to facilitate their development. It is common knowledge that in order to facilitate development it is necessary to have capital and long-term lease agreements connected with external capital investment projects which are the best method to increase financial flows directed at port operations, which, in turn, increases handling and, as a result, the revenue from harbour dues.

4. The strength of a seaport and its cargo handling volume are determined by the market position of transhipment companies and operators collaborating with forwarders and loaders.

5. The process of expanding the range of operations by of carriers, operators and forwarders in order to improve their position in the competitive TSL market is now normal and the entities managing seaports must take this normality into account while designing their development plans.

6. By performing marketing actions in foreland and hinterland of a particular seaport a forwarder enhances their position and as a result becomes (along with the managing entity, transhipment companies and port operators) an "ambassador" of their interests. That is why in third and fourth-generation ports the managing entities attach considerable weight to collaborate with forwarders, especially these who operate as multimodal transport operators, in the processes of developing the logistic and distribution function of a seaport.

Abstract

The article presents a Porter five forces analysis of the Clients of entities who manage seaports. The Clients have been divided into Leaseholders and Carriers. The analysis has been performed by means of a case study for which Szczecin and Świnoujście Seaports Authority has been selected. It is the Clients of enterprises, including port authorities, who represent the

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6 In the ports of Szczecin and Świnoujście there are numerous operators who are based on their own land, which is property of ZMPSiŚ SA, located within the boundaries of both ports.

7 One has to realize that the ferry traffic generates approximately 30% of the cargo handled in both ports. Hence the importance of revenue derived from harbour dues collected from the sea ferries is so crucial. But the revenue derived from terminal charges, which is 11.5% of the general revenue earned by ZMPSiŚ SA in 2013, is of crucial importance to the revenue earned by the managing entity.
market force and have a significant influence on the competitive position of a company. This, of course, does not relate to
seaports so straightforwardly. Notwithstanding, the analysis has shown the main groups of clients of the managing entity and
importance of relationships between the port authority and Clients for the seaport development and its position in the market in
port services. The analysis has shown, which is extremely important, that the importance of particular Clients of the entity
managing a seaport is not determined by the revenue of the seaport authority, but what determines it is the importance of
a particular group of Clients in the TSL market, which is vitally important in the context of how the seaport authority operates.

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