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Agenda

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No safe harbours: competition issues in ports and port services

Current competition questions in the ports sector cover competition between ports, and between transport modes, countervailing buyer power and essential facilities. Drawing on an OECD roundtable on competition in ports and port services, for which Oxera was asked to provide a background paper, we examine these issues in the context of anti-competitive practices, mergers and acquisitions, and privatisation and regulatory reform in the sector

In recent years, a number of competition authorities have examined competition issues in the ports sector. For example:

- **anti-competitive practices**—in 2008, the French Competition Council (Conseil de la Concurrence) examined a joint venture formed between ship owner, Maersk, and local stevedoring group, Perrigault, to operate a terminal at the French port of Le Havre. The authorities found that the joint venture restricted competition;[1]

- **mergers and acquisitions**—in 2004, the German Competition Authority (Bundeskartellamt) considered an acquisition through which Belgian company, Sea-Invest, took control of a fruit storage and handling terminal at the port of Hamburg. No competition concerns were raised in this case, since the geographic market was found to include a number of ports situated between Hamburg and Le Havre;[2]

- **privatisation and regulatory reform**—in 2005, the Netherlands Competition Authority (Nederlandse Mededingingsautoriteit, NMa) conducted an investigation to enable the country's government to assess whether additional specific rules on competition were needed at the port of Rotterdam. The NMa found that the port had a dominant position with regard to some services it provided, and recommended the introduction of sector-specific regulation.[3]

These cases prompt the question as to whether the ports or the providers of port services have market power. What are the competitive constraints that players face in the ports sector, and are ports essential facilities? Some of these important issues are discussed below.

Market power in port services

Under EU case law, a company could be considered to have market power if it is able to behave independently of its customers and competitors to an appreciable extent.[4] While the possession of market power in itself is not necessarily a problem, there is a risk that this power might be abused. Such abuse can lead to consumer harm and welfare detriment in the form of higher prices, reduced output, reduced service quality, or reduced innovation.

A competitive maritime sector is important to global economic growth, since international trade is underpinned by waterborne transport. In 2009, a total of 7.8 billion tonnes of cargo was loaded onto ships worldwide.[5] In addition to this large volume of goods, maritime transport is important in terms of its value. In 2007 the value of globally shipped goods was around $4.6 trillion.[6] The waterborne freight sector continues to grow significantly; worldwide maritime freight volumes doubled between 1990 and 2009.[7]

When considering market power in the ports sector, four aspects are of particular relevance. The first relates to competition between different modes of transport: if the price of port services increases, customers might switch to other modes. The second relates to competition between different ports: if prices increase at port A, customers might switch to port B. Third, where customers have an ability to switch, they might be able to exercise countervailing buyer power to keep prices down. Finally, where substitution between different modes of transport or different ports is limited, and customers do not have countervailing buyer power, ports might be deemed to be essential facilities—an extreme form of market power.

Competition between different modes of transport

The demand for port services is a derived demand, in that it depends on the demand for transport as a whole. Transport demands can be met by different modes—eg, inland water, road, rail or air, and waterborne transport may compete with the other modes of freight transport. If the price of one or more port services were to increase, some shippers might decide to switch to a different mode, such as road or rail.

The prerequisite for any such substitution is the availability of the required infrastructure for the other mode of transport. Demand for transport by sea can be switched to transport by rail, say, only if the required rail infrastructure is in place. Any trade of bulk freight between Australia and North America, for example, would need to travel by sea, and hence through a port. In this case, there would be no scope for demand-side substitutability between sea and other modes of transport (although other types of good may be transported by air).

When considering the degree of substitutability between different modes of transport, it is also useful to examine the value density of goods transported by the different modes. Value density is a measure of the average financial value per unit of volume or weight for a commodity. Data published by the European Commission for 2008 shows that the value density differs greatly between different modes of transport (see Table 1 below)—for example, the average value per tonne transported by sea was only a quarter of that transported by road. Air transport had by far the highest value density.

Furthermore, UK data published by the Department for Transport again suggests that certain types of good are predestined to be transported by certain modes of transport. For example, the most common goods transported by inland water are oil and petroleum. In the case of rail, the most common good is coal, and for road it is foodstuffs, beverages and tobacco.[8]

Observing differences in value densities and types of good transported by different modes of transport (ie, low-value bulk goods transported by sea, higher-value lighter goods by road, and expensive goods by air) is consistent with limited demand-side substitutability between these modes—in particular, between maritime and rail or road transportation. This implies that other modes of transport are likely to pose only a limited competitive constraint on transport by water. Nonetheless, sometimes even a limited constraint at the margin may be sufficient to make price increases unprofitable, and hence widen the relevant market. Whether this is the case is an empirical question.

Competition between different ports—ability to compete for hinterland traffic

A port may also be constrained by competition from other ports. Since the customers of ports ultimately require transportation from origin to final destination, ports that can economically receive goods from, or deliver them to, these destinations can compete for these customers. This is often referred to as competition for hinterland traffic.

The ability of different ports to serve customers in a given hinterland needs to be assessed on a case-by-case basis. In principle, however, a distinction can be made between captive and contestable hinterlands. All regions where one port has a substantial competitive advantage because of lower transport costs to them (for example, owing to short distances to the port's customers' final destinations) belong to the captive hinterland. Such a port is likely to handle the majority of all cargoes to and from these regions. Competition between ports is more likely to occur in those regions where no single port has a significant cost advantage over other ports.

An example of an area in a contestable hinterland is Austria, a country without a coastline, but with significant international import and export activities. Data published in the Österreichische Seehafenbilanz (produced by a weekly publication about transport logistics and business) shows that a total of eight seaports currently service shippers moving goods to and from Austria (Antwerp, Bremen, Constanta,

Table 1 Value density of goods transported in 2008 (EU imports and exports)

Mode of transport	€ per tonne
Air	43,308
Road	3,289
Sea	865
Rail	470
Inland waterway	383

Source: European Commission (2010), 'EU energy and transport in figures'.

Hamburg, Koper, Rijeka, Rotterdam, Trieste). The largest of these are Hamburg, Bremen, Antwerp and Rotterdam to the north of the country, and Koper and Trieste to the south.[9]

The port of Hamburg handles around a fifth of Austrian import and export volumes moved through ports; around a quarter are moved through the port of Koper. To determine whether ports that are as far apart as Hamburg and Koper (1,300km by road, and much further by sea) constrain each other to such an extent that neither has market power would require further analysis. In principle, however, the greater the overlap between ports' hinterlands, the greater the probability that these ports constrain each other. See the box below for a discussion of catchment areas.

Competition between ports—ability to compete for transshipment traffic

In addition to hinterland traffic, ports may compete for transshipment traffic where larger vessels use a port to transfer cargo to smaller feeder vessels. These feeder vessels then transport the cargo on to ports that serve the required hinterland.

The distinction between hinterland and transshipment traffic means that two ports that do not serve the same hinterland may still constrain one another if they compete for the same transshipment traffic. For example, the port of Grimsby and Immingham, the UK's largest port, is unlikely to serve the same hinterland as the port of Rotterdam in the Netherlands. Nevertheless, the two ports might still constrain each other if they compete for the same transshipment traffic between Europe and other continents (given that both are deep-water ports).

The European Commission found that the geographic market for stevedoring services for transshipment traffic was wider than that for hinterland traffic. The Commission distinguished between the Mediterranean market and the northern European market, which spreads across the geographic range between Le Havre and Gothenburg and includes the UK and Ireland. In a recent Decision, the Commission was inclined to consider that the northern European market should be further segmented because it was observed that, for various reasons, not all ports in northern Europe are substitutable. Such reasons were draft restrictions (the minimum depth of water that a ship or boat can safely navigate); distance from main shipping routes; distance from 'transshipment markets' (such as Scandinavia/the Baltic countries, Spain/Portugal and UK/Ireland); and capacity limitations that restrict switching.

Countervailing buyer power

Independently of the outcome of the analysis of existing competition between modes of transport and different ports, a port's ability to exercise any market power will depend on customers' countervailing buyer power. In such a situation, the buyer power of downstream operators—such as shipping companies and brokers—prevents an upstream business from acting to an appreciable extent independently of its customers.

Countervailing buyer power might exist where buyers are large relative to their supplier(s), and where buyers have the ability to switch between suppliers. In terms of port users' size, data published by the United Nations looking at the concentration of the global container shipping market indicates that several players hold a significant global share of supply. At a global level, the largest four shipping lines (Maersk, MSC, CMA CGM Group, and Evergreen Line) accounted for 32% of all containers transported by water in 2010.[10] At a regional or port-specific level, concentration will tend to be at least as high. There is also evidence that concentration has increased over time. This level of downstream concentration among port users could lead to countervailing buyer power, particularly at ports with only a few main users. However, it is not sufficient to be large to have such power. Buyers must also be able to credibly threaten to switch away a significant proportion of demand in the event of a price rise (which will depend on their outside options).

Catchment areas

The European Commission found that the geographic area within which ports compete for hinterland traffic is determined by the 'catchment area' of the ports—ie, the inland geographic range to which containers can be economically distributed. The Commission has identified three such geographic blocks in Europe: the UK and Ireland; Northern Europe; and the Mediterranean.[1] It left open the question as to whether northern Europe should be further divided, the widest geographic range being Hamburg–Le Havre and the narrowest Hamburg–Antwerp. Although the question was left open, in a recent decision the Commission was inclined to consider the narrower geographic range as more appropriate.[2]

Note: [1] The Commission has acknowledged, however, that the catchment area of some northern European and Mediterranean ports might overlap with respect to the landlocked countries of west and central Europe, such as Switzerland and Austria. [2] The Commission considered that there was limited competition between the German and French ports because of limited overlap in their catchment areas and the higher handling fees at the German ports. See European Commission (2008), 'Case No COMP/M.5066 EUROGATE / APMM', Commission decision of 5 June 2008.

In this regard, the Commission was doubtful that shipping companies had countervailing buyer power over ports or port service providers. It found that shipping companies have difficulties in switching between ports because of the complexity of reworking schedules, timetables, loops and changes in terminal cut-offs, which a switch would require. Another important switching constraint is the fact that, following a switch, a port's customers—the shippers—will have to adapt their logistical arrangements for transporting the cargo from the port to their final inland destination.

Essential facilities

Where substitutability between modes of transport and different ports is limited, and where customers cannot exercise countervailing buyer power, ports might be said to be 'essential facilities'. When found to be an essential facility, a port may be required to allow downstream access on terms set under the competition rules.

A port might be deemed an essential facility when it fulfils the following three conditions:[11]

- without access to the facility, firms cannot operate economically in the related market—access is therefore essential, rather than 'nice to have';
- it enables a firm that is refusing to supply the essential facility to reserve to itself the secondary (related) market; and
- there is no objective justification for the refusal to supply the facility.

Furthermore, a firm must control all the potential essential inputs into production in the second market—reproduction of the facility must be economically or physically unfeasible. The conditions for a facility to be deemed essential are thus relatively strict, but may apply in the case of sea ports.

The Bundeskartellamt addressed the essential facility question in the context of ferry services provided in the Baltic Sea between the ports of Puttgarden in northern Germany and Rødby in southern Denmark. The ferry route Rødby–Puttgarden essentially links Denmark (and Sweden) with Germany and the rest of western/central Europe. There is no viable alternative to the ports of Rødby and Puttgarden since, due to their location, duration of crossing, and connection to further means of traffic, they are able to offer services that no other port can.

Scandlines GmbH is the owner and operator of the port in Puttgarden and the only operator (through a subsidiary) of ferry services on the Rødby–Puttgarden route. Following a complaint by two shipping companies, the Bundeskartellamt found that the port constituted an essential facility, and that Scandlines infringed competition law by refusing to grant access to the complainants on reasonable, non-discriminatory terms.[12] The Bundeskartellamt defined the relevant upstream market as 'organisation of port services in Puttgarden'—ie, a single port, because other ports in the region were not seen as viable alternatives.

Conclusion

In recent years, there have been a number of competition investigations in the EU concerning ports and port services, and covering areas including anti-competitive practices, mergers and acquisitions, as well as privatisation and regulatory reform. The competitive constraints that ports or providers of port services were found to face varied greatly. For example, some ports were found to lack any competitive constraints (eg, the port of Puttgarden), while others that were as far apart as Hamburg and Le Havre were found to constrain each other (eg, in relation to fruit cargo-handling at the port of Hamburg). This illustrates the importance of an in-depth case-by-case assessment of the competitive constraints from other modes of transport and other ports, as well as customers' countervailing buyer power.

[1] Conseil de la Concurrence (2008), 'Décision n° 08-D-19 du 31 juillet 2008 relative à une demande de mesures conservatoires de la société AP Moller-Maersk', July 31st.
[2] Bundeskartellamt (2004), 'Beschluss B9-101/04'.
[3] Organisation for Economic Co-operation and Development, Directorate for Financial and Enterprise Affairs Competition Committee (2011), 'Competition Concerns in Ports and Port Services', Working Party No. 2 on Competition and Regulation, DAF/COMP/WP2/WD(2011), June 27th.
[4] Court of Justice of the European Communities (1979), *Hoffmann-La Roche & Co. AG v Commission of the European Communities*, Case 85/76.
[5] United Nations Conference on Trade and Development (UNCTAD) (2010), 'Review of Maritime Transport 2010', Table 1.3.
[6] World Shipping Council Trade Statistics (2007), 'Top 20 Exporters of Liner Goods by Value, 2007'.
[7] UNCTAD (2010), op. cit., Table 1.3.
[8] Department for Transport (2008), 'Delivering a Sustainable Transport System: The Logistics Perspective'.
[9] Verkehr (2010), 'Österreichische Seehafenbilanz'.
[10] UNCTAD (2010), 'Review of Maritime Transport 2010'.
[11] These conditions were first set out in the Magill case. *Radio Telefis Eireann and Independent Television Publications Ltd v European Commission*, joined cases C-241/91 P and C-242/91 P, European Court of Justice.
[12] Bundeskartellamt (2011), 'B9-188/05 "Scandlines"', pp. 45 and 50.