



Maritime transport properties and competition law issues: partial function cooperation agreements in liner and tramp shipping

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**MARITIME TRANSPORT PROPERTIES
AND COMPETITION LAW ISSUES:
PARTIAL FUNCTION COOPERATION
AGREEMENTS IN LINER AND TRAMP SHIPPING**

Dissertation re-submitted by

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AND TRAMP SHIPPING**

ABSTRACT:

The thesis deals with selected competition issues that occur within the dynamic and high-risk market of shipping, examining competition law issues in liner consortia and tramp pools through an EU Competition Law prism. These partial function joint ventures are the predominant form of alliances in the maritime sector. Liner trade is primarily organised in consortia, while pools are the most common form of tramp shipping alliance.

The thesis' synthetic and analytic research incorporates the methodology and structure used in its competition law bibliography, while the legal analysis is informed with sources from microeconomics and maritime economics.

The issues that are examined in relation to shipping include the four main areas of competition law: the relevant market, indicators of dominance, compliance of the alliance agreements with Article 101 TFEU and abusive conducts by dominant undertakings under Article 102 TFEU.

The development of the above areas aims to demonstrate the interaction of sector particularities with competition law as a whole.

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INTRODUCTION

I. Background

Approximately 90 percent of the international trade in goods is currently carried out by sea¹, despite the development of other means of transport. When it comes to transport, it is maritime transport which undisputedly provides the principal means of carriage of goods.²

Globalisation means that the sea transport will continue to play pivotal role in trade particularly in the European Union.³ No other continent has such long shoreline in relation to its total surface area to serve its trade. Also, the concentration of ports in the European Union is the highest in the world; moreover, the EU-controlled commercial fleet is by far the largest in the world. Liner and tramp shipping are, without doubt, the most important means of transportation used for international trade.

Two-thirds of world trade (in terms of weight), and one-third (in terms of value) is carried by ocean borne vessels (notably through bulk and

¹ International Maritime Organisation (IMO) Report, 'International Shipping, Carrier of World Trade', IMO publication, (2005)]

<http://www.imo.org/includes/blastDataOnly.asp/data_id%3D18900/IntShippingFlyerfinal.pdf> [accessed 02 June 2009] p. 1. The International Maritime Organisation is a specialised agency of the United Nations with 168 Member States and three Associate Members. The IMO's primary purpose is to develop and maintain a comprehensive regulatory framework for shipping and its remit today includes safety, environmental concerns, legal matters, technical co-operation, maritime security and the efficiency of shipping.

² There are more than 45,000 merchant ships trading internationally today, transporting every kind of cargo. The world fleet is registered in over 150 nations, and manned by over one and a quarter million seafarers of virtually every nationality. IMO Report, 'International Shipping, Carrier of World Trade', op. cit p. 1

³ 'Opinion of the Committee of the Regions on the role of local and regional authorities within the new Baltic sea strategy', OJ [2009] C200 /06

<<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:200:0023:0030:EN:PDF>> [accessed 02 June 2009] Paragraph 49

liner carriers). This does not necessarily mean that liner and bulk (shipping) sectors are two distinct independent entities. They consist of several sub-sectors and specialised sub-markets. Thus, to call it a unitary industry would be misleading: it is usual to distinguish a number of widely differing services and sub-markets which exist within it.⁴

There are basic differences as well as similarities between the two sectors of liner and bulk shipping.

The most important difference is that liner service is a scheduled service where container vessels call certain ports according to a given frequency, while bulk vessels trade around the globe in pursuit of profitable freight in a dynamic but unpredictable pattern. Another difference relates to the design of the vessels: liner vessels have the capacity to transport large and variable numbers of goods in parcels or cargo units, while tramp vessels carry bulk dry or liquid cargo (oil, ore). Moreover, goods moved in liner services are high-value ones, i.e. either manufactured or semi-manufactured goods. Substantially different also are the contractual terms accompanying liner transport vis-à-vis tramp shipping: in the former mode of transportation, the relationship between shippers and carriers is regulated by standard printed forms of contracts (e.g. bills of lading or similar documents) whose terms and conditions are directly prepared by carriers without any negotiation with their contractual counterparts, except as regards tariffs. In tramp shipping, the trader normally charts and pays a negotiated rate for the whole ship, either for a voyage or for a period of time.⁵ Another significant difference between the sectors is the degree

⁴ The maritime transport covers several trades as well as produces subsequent services. According to UNCTAD 2004 reports (chapters 1 and 4) the broader maritime industry with the actual transport operation, the financial services, the insurance, administrative, IT sector, and the technical management sector employs about three million people in the European Union alone. See: UNCTAD REVIEW OF MARITIME TRANSPORT, 2004 [UNCTAD/RMT/2004] Source: <http://www.unctad.org/en/docs/rmt2004_en.pdf> [accessed 3 April 2006]

⁵ Tramp (or spot) vessel services are defined in Article 1§3 (a) of Regulation (EEC) No 4056/86 as the transport of goods in bulk or in break bulk in a vessel chartered

of cooperation that exists inside them. Cooperation among liner shipowners has always been structural⁶; the predominant form of alliance in liner shipping has been the conference, global alliance, full function merger or the consortium. The quest for cooperation among competing shipping lines has for a long time been explained using sophisticated economic theories; that approach lasted for decades and still continues to fascinate some scholars. In contrast, tramp shipping synergy is a phenomenon of the last decade or so, and is expressed mainly by tramp pools or other forms of alliances on which legal and economic research is relatively limited.

Yet all these services are provided on local and international scales, calling either in liner transnational routes or random ports (i.e. the spot market), as is the case with liner and tramp shipping respectively. In this context, maritime transport is justly called a unique globalised sector. Several questions arise regarding the properties of this sector with reference to its globalised nature. For instance, it is a common knowledge that there is a connection between the global character of a business like shipping and its competitiveness; yet this feature also constitutes a difficulty in defining relevant markets in the context of competition law. On the one hand, numerous studies from the field of the maritime economics have adequately analysed the subject and the properties of the ocean borne transport. On the other hand, it has been generally accepted

wholly or partly to one or more shippers on the basis of a voyage or timecharter or any other form of contract for non-regularly scheduled or non-advertised sailings where the freight rates are freely negotiated case by case in accordance with the conditions of supply and demand. It is mostly the unscheduled transport of one single commodity which fills a vessel. The Commission has identified a series of characteristics specific to specialised transport which render it distinct from liner services and tramp vessel services. They involve the provision of regular services for a particular cargo type. The service is usually provided on the basis of contracts of affreightment using specialised vessels technically adapted and/or built to transport specific cargo. See: Commission Decision 94/980/EC of 19 October 1994 in Case IV/34.446, Trans-Atlantic Agreement (OJ [1994] 376) (hereinafter the TAA decision), paras 47-49. See also: Article 1 of Council Regulation (EEC) No 3577/92, applying the principle of freedom to provide services to maritime transport within Member States (maritime cabotage) [OJ 1992 L 364].

⁶ Munari Francesco, see *infra* § 26

that globalisation plays an important role, especially when considering competitiveness; yet, it is also accepted that the shipping sector is a complex and dynamic market where parameters, practices and behaviours are sector specific and not limited to its globalised nature. This has been more or less recognised in every jurisdiction. The global character of shipping is considered the central element of the business from which the other features derive (e.g. dynamic, unstable, competitive etc). Hence, the special uniform practice of conferencing has been established worldwide, offering protection in liner conferences by any major maritime countries. Conference members meet, fix and agree on schedules and rates, in order to rationalise the capacity and the frequency of services offered to their customers; rates are publicly available. Likewise, contractual relationships with shippers are identical for all conference shipowners, so that shippers enjoy the same terms and conditions of carriage independently from the liner that they use on the trade served by the conference. These contractual conditions may provide the trades with freight stability contributing to the stability of transport costs, but they may also restrict competition further, as it happens when shippers are granted rebates on tariffs if they grant exclusivity to the conference members. This kind of arrangement has been called a loyalty agreement and occurred frequently in the past.

For a long time, scholars explained the need for shipowners to avoid competition among themselves using economic theories: in particular, it was maintained that liner shipping demonstrates peculiarities that cannot cope with a competitive market model since, *inter alia*, (a) fixed costs are proportionately much higher than variable costs, (b) entering and exiting a given market (i.e. a liner service) is not easy and entails substantial shifting costs, (c) the unit of supply in the liner shipping market (i.e. the vessel) does not correspond to, and is much bigger than, the unit of demand (i.e. the parcel or cargo unit), this making it quite awkward for the carrier to constantly adapt its offer in order to

match the fluctuations of demand. The above reasons stood as an obstacle to conceptualising the application of the perfect competition model in the liner sector: hence, it was a matter of common sense to state that if liner carriers were to compete among themselves for pricing, this would produce “rate wars” and a “destructive competition” whose consequences would undermine the stability of trade.⁷

Nonetheless, by 2000, the conference system had naturally and gradually met its demise, especially in the United States of America and Europe. Owners started to appreciate mergers or independent commercial practice more than the conference system, which had been bureaucratic and demanding, as it needed constant cooperation and supporting administrative mechanisms. In March 2003, the OECD published a Report⁸ on Competition in Shipping which severely criticized the need for conferences to have antitrust exemption. In light of these developments, the EU Commission decided to re-examine Regulation 4056/86 that granted block exemption to liner conferences.

The Commission adopted a three stage approach: the first being a consultation paper in March 2003,⁹ followed by a White Paper published in October 2004,¹⁰ and thereafter, a legislative proposal for a Council regulation to repeal the conference exemption on 14

⁷ The matter of destructive completion assumption is addressed by relatively all scholars. Indicatively, see §§ 12, 21 - 33

⁸ OECD, “Competition Policy in Liner Shipping”, Final Report [16/4/2002], sections 2.4 and 2.5. The OECD report recommended that member countries seriously consider removing antitrust exemptions for price fixing and rate discussions. Exemptions for other operational arrangements may be retained so long as these do not result in excessive market power

⁹ See Commission, ‘Consultation Paper on the review of Council Regulation (EEC) No 4056/86 laying down detailed rules for the application of Articles 81 and 82 of the Treaty to maritime transport’, 27 March 2003

¹⁰ See Commission, ‘White Paper on the review of Regulation 4056/86, applying the EC competition rules to maritime transport’, COM (2004) 675

December 2005.¹¹ The proposal to repeal the block exemption was thus the result of a thorough three-year process of consultation, review and studies. The Commission findings were that the exemption did not fulfil the four cumulative conditions of Article 81(3) which were necessary for it to continue, these being:

- concrete benefits resulting from price fixing and capacity regulation are identified;
- a fair share of the proved benefits are passed on to consumers;
- the indispensability of price fixing and capacity regulation for the provision of reliable services; and
- competition is not eliminated on a substantial part of the market.

Following these recommendations, the EU has been the first jurisdiction to put an end to the possibility of the liner carriers to meet in conferences, fix prices and regulate capacities with effect from October 2008.¹²

¹¹ See Commission, 'Proposal for a Council Regulation repealing Regulation (EEC) No 4056/86 laying down detailed rules for the application of Articles 85 and 86 to maritime transport, and amending Regulation (EC) No 1/2003 as regards the extension of its scope to include cabotage and international tramp services', COM (2005) 651

¹² Council Regulation (EC) No 1419/2006, of 25 September 2006, repealing Regulation (EEC) No 4056/86 laying down detailed rules for the application of Articles 85 and 86 of the Treaty to maritime transport, and amending Regulation (EC) No 1/2003 as regards the extension of its scope to include cabotage and international tramp services, OJ L 269/1 [28/9/2006]
See related articles: Fruhling Pierre, Whiddington Charles, Cassels John and Decat Elisabeth, "The application of European competition law in the transport sector", *Journal of European Competition Law & Practice* 1(2) [2010], pp. 144-154; Phang Sock-Yong, "Competition law and the international transport sectors", *Competition Law Review* [2009] Volume 5 issue 2, pp. 193-213; Munari Francesco, "Liner shipping and antitrust after the repeal of Regulation 4056/86.", *Lloyd's Maritime and Commercial Law Quarterly* [2009] 1(Feb), pp. 42-56; Neocleous Panayiotis and Stamatiou Costas, "The new era of EC competition law in the shipping industry", *International Company and Commercial Law Review*, [2009, 20(1)], pp 1-9; Baughen Simon, "European Union Maritime Law", *Lloyd's Maritime and Commercial Law Quarterly* 2010, 3(Aug) Supp (International Maritime and Commercial Law Yearbook 2010), pp. 122-127; Chuah Jason, "Liner conferences in the EU and the proposed review of EC Regulation 4056/86", *Lloyd's Maritime and Commercial Law Quarterly* [2005] part 2 (May), pp. 207-233. Marquez Terry, "Shipping, Competition, and Dumping: The European Community's Liner Shipping Regulations", *Tulane Maritime Law Journal*, Volume 23 [1998-1999] pp. 139-182. Marquez (p. 142), from the position of an American observer provides a clear and simple explanation as to what

Currently in 2012, we see a paradox: With the exception of the EU, all maritime countries preserve the conference system and assume that conferences can provide a solution against destructive competition that could start among liner companies and thus overheat the sector. These legislative and judicial developments on EU Competition law and the greater EU Maritime Policy are creating a new territory – so that we may be speaking of a ‘territorialité communautaire’¹³, or better, a ‘Euro-territoriality’¹⁴ that could create, at least temporarily, questions and possibly frictions with the outside.

The different jurisdictional and legislative approach by the EU, in contrast to global *lex mercatoria*,¹⁵ stimulate research interest. Price fixing in freight rates is now prohibited in the EU and directly caught by article 101 of the TFEU. Despite the abolition of conferences, alliances (in the form of consortia and pools) continue to exist. Maritime transport synergies are well established and cover substantial portions of global trade. Obviously, the jurisdictional approach by the EU did not target shipping alliances; in reality it is

are the motives that drive legislative initiatives in the EU. His argument is political and legal: In accordance with the article 2 of the Treaty of Rome (1957), harmonisation and uniformity with the principles of the EU Union constitutes a good basis for legislative reform. He claims that as part of the customs union, the Member States are to "abolish internal tariffs and erect a common external tariff." To this end, the EC may enact laws which are binding on the Member States. This uniformity provides a stable legal environment in which business may be conducted, as well as the certainty required for cross-border investment and international services such as maritime transport. Though he published his article in 1999, the content remains valid. See also commentary Analysis on the Liner Consortia Commission Regulation 870/95 by Clough Mark, "The devil and the deep blue sea (EC competition law and liner shipping consortia)", *European Competition Law Review*, Volume 16 [1995] pp. 417-427.

¹³ Bergé Jean-Sylvestre, 'The Community Framework for Cross-Border Intellectual Property and Information Technology Litigation' in Nuyts A., Hatzimihail N, Szychowska K (eds.), *International Litigation in Intellectual Property and Information Technology* [Kluwer Law International 2008] pp. 49 -60

¹⁴ Hatzimihail Nikitas, "Concluding Remarks: Territoriality, International Governance and Cross-Border Litigation of Intellectual Property Claims", in Nuyts A., Hatzimihail N, Szychowska K (eds.), *International Litigation in Intellectual Property and Information Technology* [Kluwer Law International 2008] p. 308

¹⁵ See: Hatzimihail Nikitas, "The Many Lives - And Faces - Of Lex Mercatoria: History as Genealogy in International Business Law", *Law and Contemporary Problems* [2008] Vol. 71 (3) pp. 169-190

generally acknowledged that alliances in shipping are beneficial to the general economy, providing that competition remains effective. It is also evident that the key issue behind this reform by the EU has been the shielding of the economy against any increase in the freight rates that could jeopardise global trade stability. As mentioned in the UNCTAD 2011 Report on Maritime Transport,¹⁶ transport costs are key determinants of a country's trade competitiveness. Excessive shipping costs are considered a major barrier to trade, often surpassing the cost of customs duties.¹⁷ In this context, understanding the determinants of freight rates and transport costs and how such costs influence trade flows, volume, patterns and structure is crucial. Relevant determinants of competition within a market (as expressed by the freight rates) can be considered the transport costs, which include, *inter alia*, distance, competition in shipping and port services, economies of scale, trade imbalance, capital costs of infrastructure, and type and value of goods.¹⁸ These are parameters that undoubtedly influence the maritime sector. My view is that these parameters could also be deemed characteristic of the sector; inherent properties that have to be taken into account. In my research I decided to take into consideration some of the above-mentioned factors and incorporate them into my competition law analysis; I consider them as properties of the subject matter.

II. Thematic and Research Question

Against this background, this thesis investigates the competition law issues in liner shipping consortia and tramp shipping pools. In light of the recent changes in the EU competition law regime in shipping,

¹⁶ United Nations Conference on Trade and Development (UNCTAD), "Review Of Maritime Transport 2011", *UNCTAD/RMT/2011 United Nations Publication* [2011] p. 64

¹⁷ Ibid. p. 64

¹⁸ Ibid. p. 64

which repealed the block exemption in liner conferences, I discuss specific factors of the maritime sector in order to establish compliance of a partial function (limited) horizontal co-operation agreement in shipping, i.e. the liner consortia and tramp pools, with articles 101 and 102 TFEU. In particular:

“What are the competition law issues in partial function (limited) cooperation agreements in Liner and Tramp Maritime Transport? Which sector-specific factors and particularities affect (predominantly EU) competition law?”

Schematically, the structure of the thesis is the following:

First, I describe the sector specific parameters and I relate them to shipping synergy, i.e. the partial function consortia and pools that do not directly fall within the EC Merger Regulation.

Then I identify cases that fall foul of articles 101 and 102 TFEU: I discuss the nature of the joint venture agreement as whole, and I examine particular distortions in competition as result of consolidation and market power of consortia and pools.

Competition law issues in shipping alliances require the examination of four constituent areas: the relevant market, indicators of dominance, compliance of the alliance agreements with Article 101 TFEU and abusive conduct by dominant undertakings (i.e. the organized categories of abusing conduct). The development of all the above areas has been necessary as I intend to demonstrate particularities of maritime industry and their influence on competition law areas. Should I have focused in one category or subject e.g. Article 101 or 102 TFEU, I could not have confirmed this result. In addition to the traditional analysis, I explore some of the properties of the sector and their influence on some of the above mentioned factors. In particular, I take into account factors like economies of scale, the geographic and time parameters which determine the relevant market,

the fixed and average costs, the capital access and costs in order to determine dominance and market power.

For the purposes of this thesis it is also necessary to follow a strategy with regard to the subject of law, and inevitably observe several limitations.

Hence, I believe that the choice of competition law has been the most efficient for the following reasons: First, it provides the research with a centre of gravity. Second, it allows me to highlight, in the best possible manner, those sector specific properties that play a significant role in the industry. Finally, the findings provide the basis for further research in related fields of law, such as international law (e.g. extraterritoriality of EU Competition law in idiosyncratic and global industries), transport law (the consequences of alliances in air, maritime and multimodal transport), and interdisciplinary research with the involvement of economics and systems theory. Third, the choice of liner and tramp loose consortia, i.e. the partial function forms of cooperation that are currently predominant in shipping is made based on the criterion that liner consortia are a kind of successor to the liner conferences and the tramp shipping pools are the most common form of synergy in tramp shipping.

Having said the above, my research focuses on investigating the following topics:

- The special EU competition law issues that arise in ocean borne liner shipping services¹⁹ carried out by liner maritime firms that

¹⁹ According to Guidelines on the application of Article 81 (currently 101 TFEU) of the EC Treaty to Maritime Transport Services [OJ 2008 C 245/2] para 11, a “liner shipping involves the transport of cargo, chiefly by container, on a regular basis to ports of a particular geographic route, generally known as a trade. Other general features of liner shipping are that time tables and sailing dates are advertised in advance and services are available to any transport user”. Liner services play a central part in the global trading network, carrying about 60 per cent of the value of goods shipped by sea. They provide fast, frequent and reliable transport for almost any cargo to almost any foreign destination at a predictable

chiefly use container vessels whether or not they act independently, or through partial function (limited) co-operation agreements, i.e. the liner consortia;

- The special EU competition law issues that arise in ocean borne tramp bulk shipping services²⁰ – carried out by independent companies or through partial function joint ventures, the most predominant of which are the tramp shipping pools.
- The special properties of the maritime service, which play an important role in the effective competition of the industry, that are either common in both sectors (liner and tramp) or particular to certain of them and affect the competition law analysis.

charge. On this basis a shipper can work out profits and cash flow and make the necessary delivery arrangements with confidence. If the destination was not Europe, but Iceland, Kenya or India, the procedure would be much the same: the shipper could ship wine on a regular service at a fixed tariff that may increase with inflation but will not go through the wild peaks and troughs encountered in the charter market. It is an important business for the world economy as well as the shipping industry.

In the “Maritime Transport Study” the United Nations identified 32 maritime coastal regions and 1,024 potential liner routes (trades) between these areas. The industry generally divides the trade routes into three major categories - East-West / North-South and Intra-Regional. Spot and liner shipping serve these routes as analysed by the following six trades:

The Trans-Pacific Trade, the North Atlantic Trade, (ii) the Western Europe to the Far East Trade, (iii) the Round the World Services, (iv) the North-South Routes, (v) the Marginal Liner services and (vi) the Intra-regional Trades and Feeder services. Ibid. pp. 338, 366-372

²⁰ In the majority of circumstances the shippers prefer to leave independent shipowners to take the shipping risk and to rely on hiring ships from the market when they are needed. There are many industries, notably agricultural cargoes such as grain and sugar, where shippers never know how many cargoes they will have in future or how many ships will be needed. So the shippers go to the freight market and hire transport when they need it. This is briefly the definition of “Spot” or else “Tramp” Shipping. In this context, the risk is dual sided and it is based on the demand – supply principle. In the first case the shippers may secure cheap freight if there is abundance of available vessels. In the second case the shippers may pay expensive freight if there is limited offer of available vessels. Yet, in both situations, ships are always available. In Spot shipping shipowners take the bigger share of the entrepreneurial risk in view of the investment they have committed and its return (ROI). Thus, shipowners trading on the spot market make their living by taking a “shipping risk”. They back their judgement that the ships they buy will be in demand and provide a worthwhile return on capital. With so much at stake, it is no surprise that maritime spot shipping occupies much the same position as game theory mathematics. Stopford, (1997) p. 40.

On the whole, several research purposes are met within the thesis, such as:

- Evaluation of the effectiveness of the existing legal tools to define a relevant shipping (liner and tramp sector) market
- Compliance of the cooperation agreements with the article 101 TFEU and description of the anti-competitive practices of liner consortia and tramp pools
- Assessment of the market power indicators
- Alternative ways to deal with problems related to market definition.

III. Motivation

The motivation to research on this topic has been based on professional criteria. From an academic point of view, the motivation arose to research the interaction between specific and idiosyncratic industries, like shipping with the EU Competition Law. Secondly, I examined the topic having acquired substantial experience as a maritime lawyer and shipbroker; this helped me as I was sufficiently subject-informed, understanding sector specific particularities.

III. Methodological Approach and Research Aims

I examine the matter from a legal doctrinal perspective of competition law incorporating the methodology and structure of competition law bibliography. In addition, I research into the available bibliography that refers to economic functions of the industry. I have chosen to investigate on multiple fields as the study of competition law is

interdisciplinary in nature. Nonetheless, this has been a challenging task as for many years (2000-2007) there has not been specialised bibliographical information. That changed in 2007 with the publication of important works by Luis Ortiz Blanco (2007)²¹, Alla Pozdnakova (2008)²² Antonis Antapassis, Lia Athanassiou and Erik Røsæg (2009)²³, Philip Wareham (2010)²⁴, Jason Chuah (2005-2009)²⁵ Francesco Munari (2005-2012)²⁶, Christopher Townley (2011)²⁷. For the fundamental competition law analysis I was based, but not limited, on the works of Richard Whish²⁸, Richard Whish & David Bailey²⁹, Christopher Bellamy & Graham Child³⁰.

Thus I extended the research further by informing legal analysis with sources from microeconomics and maritime economics, like

²¹ Blanco Luis Ortiz, *Shipping Conferences under the EC Antitrust Law: Criticism of a Legal Paradox* [Hart Publishing, Oxford and Portland, Oregon, 2007]

²² Pozdnakova Alla, *Liner Shipping and Competition Law*, [Kluwer Law International BV, Netherlands, 2008]

²³ Antapassis Antonis, Athanassiou Lia, Røsæg Erik (eds), *Competition and Regulation in Shipping and Shipping Related Industries* [Martinus Nijhoff, Leiden and Boston 2009]

²⁴ Wareham Philip (ed), *Competition Law and Shipping: The EMLO Guide to EU Competition Law in the Shipping and Port Industries* [Cameron May, London, 2010]

²⁵ Chuah Jason, "Liner conferences in the EU and the proposed review of EC Regulation 4056/86", *Lloyd's Maritime and Commercial Law Quarterly* [2005] part 2 (May), pp. 207-233. See also: Chuah Jason, "The Commission Guidelines on The Application to Maritime Transport Services Of EC Treaty Rules on Restrictive Business Practice", *Journal of International Maritime Law* [2008] 14. See also: Chuah Jason "The New Liner Shipping Consortia Block Exemption Comes Into Force" *Journal of International Maritime Law* [2009] .

²⁶ Munari Francesco, "Liner shipping and antitrust after the repeal of Regulation 4056/86.", *Lloyd's Maritime and Commercial Law Quarterly* [2009] 1(Feb), pp. 42-56. See also: Munari Francesco, "Competition Law in Liner Shipping", in Basedow Jürgen, Magnus Ulrich, Wolfrum Rüdiger, Dutta Anatol (editors), *The Hamburg Lectures on Maritime Affairs 2009 & 2010* [Springer-Verlag Berlin Heidelberg 2012].

²⁷ Townley, Chris, "The Relevant Market: an acceptable limit to competition analysis?" *European Competition Law Review*, 10, [2011] pp. 493-495. See also: Townley Chris, "The Liner Shipping Block Exemptions in European Law: Has the Tide Turned?", *World Competition* Volume 27(1) [2004] pp. 107-153. See also: Townley Chris (Townley 2011 b), "Inter-generational Impacts in Competition Analysis: Remembering Those Not Yet Born", *European Competition Law Review*, [2011 Issue 11] pp. 580-590

²⁸ Whish Richard, *Competition law* [Oxford University Press 2004]

²⁹ Which Richard, Bailey David, *Competition Law* [Oxford University Press 2012]

³⁰ Bellamy (Sir) Christopher, Child Graham, Roth Peter (ed) *European Community Law of Competition* [Sweet & Maxwell; 5th Revised edition 2001]

Stopford³¹, Grammenos³² and studies from the maritime economics also contribute to the thesis. I also include special sector specific scholarly Reports in the Maritime Sector; indicatively I mention as exemplified the Fearnley Consultants Report on Tramp Shipping³³, OECD and UNCTAD Reviews on Maritime Transport.

In this context, qualitative data have been used in order to exhibit the properties of the maritime system, its functions, and its interaction with competition law in relation to synergistic activity of shipping companies. This has been necessary as the maritime sector is particularly idiosyncratic and requires profound global understanding of the way it is structured and operates, so that research will have valid and verifiable objectives and findings.

There have been of course some challenges:

- First and foremost, the current legislation and case law have been limited only to liner shipping conferences and have not produced any cases related to tramp shipping pools.
- Secondly, there are no reported cases of market consolidation by any tramp shipping pool. In fact, market data confirms the case law and legislative guidelines for the competitiveness assumption of the industry. In 2008, when the Guidelines on the application of competition rules to maritime transport services (henceforth the “Guidelines”) mentioned:

“market shares provide useful first indications of the market structure and of the competitive importance of the parties and their competitors. The Commission interprets

³¹ Stopford Martin, Maritime Economics [London: Routledge, 2nd Edition, 1997] and (3rd edition 2009)

³² Grammenos Costas, Handbook of Maritime Economics and Business [Lloyds List Publications 2010 2nd edition]

³³ Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm, *Legal and Economic Analysis of Tramp Maritime Services* [‘EU Report COMP/2006/D2/002’]

market shares in the light of the market conditions on a case-by-case basis".³⁴

In my view, the wording "case by case" simply substantiates the competitiveness assumption of the shipping markets.

In particular I employ the following methods of qualitative research³⁵:

I set selection criteria based on resources of Competition Law, Maritime Competition Law and Maritime Economics. Competition Law cases that refer to transport are given priority. Likewise maritime economics are given priority and are used in order to exhibit the properties of the maritime transport sector;

Through synthetic thinking I have examined the legal framework of competition law in order to define the elements that have to be taken into account in a shipping market. The intention here is to present the properties of a certain shipping sector and their effect on the relevant market. We hence start from the basis of "what", "where", "when" (quantitative data) and we expand to "why" and "how" (qualitative investigation) of decision making for the purpose of discovering underlying meanings and patterns of relationships. As mentioned, in principle the thesis is theoretically-driven research that employs legal research in conjunction with economic findings.

Overall, I have employed a combination of analysis and synthetic thinking to explain market behaviour and the properties of maritime transport, and in the conclusion we make the necessary suggestions.

³⁴ OJ C245/02 26.9.2008 Guidelines on application of the article 81 of the EC Treaty to maritime transport services. See: Para 33 "Market shares provide useful first indications of the market structure and of the competitive importance of the parties and their competitors. The Commission interprets market shares in the light of the market conditions on a case-by-case basis. In liner shipping, volume and/or capacity data have been identified as the basis for calculating market shares in several Commission decisions and Court judgments".

³⁵ Patton, Michael Quinn, *Qualitative Research and Evaluation Methods* (California: Sage Publications, 3rd Edition, 2002) p. 4 and McConville Michael, Chui Wing Hong, *Research Methods for Law* (Edinburg University Press 2007) pp. 22-32

In a sense, we do not reduce our research to analysing only legal relations as they derive from, or relate to, the existing legal framework, as we deem that it may not be inclusive enough to cover shipping markets' phenomena. Instead, we demonstrate from the larger whole - from perceiving shipping with the traditional thinking as two main markets (liner and tramp) - the key properties of the sector (the submarkets and their divisions) and shipping particularities in light of which we reconsidered the main research hypothesis. Analysis and synthesis are complementary: neither replaces the other. We incorporate both.

This methodology coherently drives the argumentation and returns to the original hypothesis-assumption: Shipping, either regulated or deregulated, is always subject to structural dynamic volatility (the phenomenon), and that is what guarantees efficient global competition; moreover, both ways of transport (liner, and notably tramp) have self-regulating market properties as a product of this phenomenon. In addition, analysis of relevant markets, as well as market power indicators, has shown that shipping is basically an open market, thus the special conditions prevailing in the relevant market may need to be aggregated with other – preferably neighbouring – markets in order to validly assess the legitimacy of the behaviour.

The need to research on this subject consolidated over time once I confirmed that the dynamic element of the shipping market is central to any interpretation of competition law issues in the market. In particular, besides the main and collateral outcomes of this research, my research produces two significant proposals:

- *First*, I promote the idea that shipping is organised in multiple interconnected and relevant markets depending on the degree of linearity in the service (Liner vis-a-vis tramp) and the presence of the joint venture in multiple markets. The nature of the

dynamic element comprises many constituent concepts, such as the risk, time, cost, and capital; the majority of them are regarded by competition law as barriers to entry. I agree with this view, moreover I deem them as inherent barriers, not only to entry, but also to operate; in turn I consider that it is this dynamic instability that guarantees the effective competitiveness of the sector.

- *Second* I support that aggregating across markets is an appropriate choice in order to determine the true ambit of the relevant markets and the benefits to the consumer. This aggregation has wide applicability, especially in open markets like tramp shipping.

The European Union current regulation regime abolished the block exemption on liner conferences and clarified that tramp shipping law is subject to competition. This thesis examines whether the purpose of these legislative initiatives is accomplished and to what extent.

IV. Structure of the Chapters

The structure of my work has been organised in the following manner: I first examine the aforementioned competition law issues in liner shipping and in liner shipping consortia, mainly from an EU competition law perspective; this has been accomplished in two Chapters: the first analyses matters regarding the relevant market, the second analyses issues related to Article 101 and 102 TFEU. In the final Chapter, I review the nature of the maritime tramp sector and refer only to those matters that I consider relevant, given that these issues have been analysed in Chapters One and Two they are applicable also to tramp shipping.

In particular:

The thesis is based on the existing legal regime of competition law that relates to the articles 101 & 102 TFEU, and I investigate the majority of competition law that applies to Maritime Transport.

In order to achieve this, I structure the work in three parts. I schematically present the three chapters below:

Within the First Chapter, I establish the theoretical premises of the thesis that apply to liner and tramp shipping; in particular I discuss the way liner shipping consortia operate. Moreover I examine the concept of the relevant market revisiting the service and geographic criteria from the combined perspective of the maritime industry and competition law.

In Chapter Two I build on the above premise and analyse the liner shipping consortium agreement *per se* under the Article 101 TFEU. In particular, I analyse the structure of liner shipping consortia and assess the special legal issues. Then I discuss the matter of market definition in liner shipping by analysing the relevant product geographic and temporal market.

I discuss issues of market power and abuse of dominance by liner consortia. I start my analysis with the elements that are fundamental to shipping, i.e. the cost structure, economies of scale and access to capital that comprise its dynamic feature characteristics. Then I critically evaluate the effectiveness of the market share as criterion for dominance and market power.³⁶ With reference to the findings of Chapter One, I critically assess the narrow character of the geographical elements of the product market and I examine whether it

³⁶ In comparison to the traditional market shares analysis, either by the increase business volume or by means of synergies.

is possible to aggregate a consortium's market share across markets. Whereas market definition and critical market share are plausible to be calculated within strict geographical or product defined markets, for shipping (and especially for tramp shipping) such an exercise is notably difficult due to the constant mobility of the incumbent vessels that are not restricted to geographical zones.

However, I support that aggregation would require additional resources from many disciplines to be properly articulated, mainly due to the open and globalised nature of the industry. Alternatively, a reasonable approach would have been to examine a specific market in a period specific context and thus evaluate the certain market conditions at a given time. However, such an approach would produce results associated only to *de lege lata*, and would limit a synthetic and global approach. In my analysis I found that there may be grounds to correlate the temporary element of the market with the inherent volatility and/or the maritime market cycles.

Within the Third Chapter, I examine the issue of market power incurred by tramp shipping pools. I use the findings and the analyses conducted in Chapters One and Two, and focus on the special particularities of the tramp maritime sector that have not been mentioned earlier. I attempt to preserve the same thematic structure, but I prefer to refer only to those specific issues that are relevant to the tramp maritime sector, as the majority of the legal issues are common between the two sectors.

I use the findings that are common to liner shipping and investigate the sector's specific conditions that could constitute abuse in the dominant position. Again, I evaluate the legal tools available for the definition of the relevant market and the critical market share necessary for establishing dominance of the tramp pool. Whereas the absence of case law confirms the competitiveness assumption of

tramp shipping, it also produces a natural difficulty in practically assessing an anti-competitive behaviour. Since there are not any reported cases of violation (either by a single firm or by a pool) in any jurisdiction, I transfer in an analogous manner the available references of liner shipping to the tramp sector; I then expand my analysis and draw separate conclusions for tramp shipping. For our analysis we used sector specific, liner shipping (analogue) and general competition bibliographical references, analogue case law and economic data from maritime economics and independent analysts.

Overall, we confirmed that - given also the absence of tramp sector specific case law- that the sector is highly competitive. Especially I would say that the spot maritime transport may be uniquely competitive compared to other sectors of the economy. While tramp pools make the market gradually more defined and fragmented, the competitive assumption is preserved. Subsequently, market power cannot be established under constant fleet movements (nomadic and opportunistic) and at irregular intervals in time (sporadic). Hence the sector creates a natural difficulty for any analysis that aims to assess possible anti-competitive behaviour. Concepts like relevant market and/or market share acquire a *sui generis* meaning, in view of the globalised nature of the market. Though shipping pools, being a concentration, limit the immensity of the “open” relevant market, we find it difficult to effectively address anti-competitive behaviour based on 102 TFEU.

This difficulty in defining the market, the critical share, as well as other determinants (marginal cost) can be circumvented if we follow a *sui generis* approach so to include as well the “relevant neighbouring markets” and then to aggregate the market shares of the incumbent pool members across. Aggregation across markets so far is a concept

that is limited to the consumer benefits under 101(3) TFEU.³⁷ I have been obliged to borrow the use of the aggregation of benefits and to adapt to as tool for the definition of the relevant market and the critical market share in tramp shipping, as I believe it deals better with the nature of the tramp shipping as global and “tramp” (an undertaking that is nomadically only established in a certain economic zone) in contrast to the existing traditional approach of the narrow market adopted by the EC Competition law. I deem that this option assists us better in evaluating whether a pool can actually distort the competition in a relevant temporal period and in a roaming manner.

Finally, I conclude our research findings by presenting our outcomes and the motives for future research.

³⁷ See related discussion paper of the Office of Fair Trade (OFT), “Article 101(3) – A Discussion of Narrow Versus Broad Definition of Benefits”, *Discussion note for OFT breakfast roundtable* [2010]
<[http://www.oft.gov.uk/shared_ofi/events/Article101\(3\)-discussionnote.pdf](http://www.oft.gov.uk/shared_ofi/events/Article101(3)-discussionnote.pdf)>
accessed 10th March 2012

CHAPTER ONE

1.1 Introduction

Today's market conditions may present opportunities for liner companies to buy vessels cheaply, strengthen their operations and spread risk through consolidation. In this chapter we examine the substantive anti-trust issues the liner shipping alliances may face. The key issue for determination is whether such transactions will significantly impede effective competition in any EU market, or any neighbouring or overseas market in which the party is active. With reference to the Limitations of Research Section³⁸, I define "liner consortium" as a flexible type of synergy, a type of "partial function" joint venture that aims to produce economic benefits for its incumbent members³⁹. In contrast to "full function joint ventures", a consortium – in the context of the present thesis - is not subject to the EC Merger Regulation (MR)⁴⁰, as they are structured in a non-firm and flexible form of partnership; whereas the core of basic incumbents may be limited, the number of co-operating third carriers with the consortium can be substantial and take various forms. However, we have to observe that a shipping joint venture (liner consortium or a tramp

³⁸ See *infra* p. 282

³⁹ The term "consortium" is covered within Commission Regulation (EC) No 823/2000 of 19 April 2000 on the application of Article 81(3) of the Treaty to certain categories of agreements, decisions and concerted practices between liner shipping companies (consortia). It means an agreement between two or more vessel-operating carriers which provide international liner shipping services exclusively for the carriage of cargo, chiefly by container, relating to one or more trades, and the object of which is to bring about co-operation in the joint operation of a maritime transport service, and which improves the service that would be offered individually by each of its members in the absence of the consortium, in order to rationalise their operations by means of technical, operational and/or commercial arrangements, with the exception of price fixing.

⁴⁰ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation) [OJ 2004 L 24] pp. 1-22

pool) may constitute a concentration falling with the Merger Regulation, as it follows from Article 1 of the Regulation that it applies to all concentrations with a Community dimension.⁴¹ I define liner consortia as partial function joint ventures that do not perform on a lasting basis all the functions of an autonomous economic entity, hence do not constitute a concentration within the meaning of paragraph 1(b) of the MR.

The element of co-operation has been a usual business option among liner freighters that form alliances in order to rationalise the supply of service.

Global alliances have emerged in the past years as a response which allows medium-sized shipping lines to compete globally with those few lines which are able to offer independent liner services on all trades:

They are a product of globalisation within a market that, in fact, has witnessed a profound merger and acquisition development over the past twenty years and currently shows impressive levels of concentration worldwide.⁴² For many years, liner conferences coexisted with consortia, and sometimes with global alliances: when these two sets of agreements were contemporaneously in place, liner conferences concentrated on tariffs, whereas consortia focused on technical matters: indeed, antitrust concern for consortia is certainly less than that for conferences; this is the reason why, as I present below, conferences have been finally banned in the EU, whereas consortia are still practiced in the liner shipping sector.

More recently, when antitrust laws lead to the gradual demise of the conference system, other forms of cooperation among liner shipowners developed:

The so-called consortium agreements, or consortia, i.e. agreements whose objective is that of rationalising capacity on container trade and

⁴¹ Kolstad Olav, 'Cooperate or Merge? Structural changes and full function joint ventures in the shipping industry', in Antapassis Antonis, Athanassiou Lia, Røsæg Erik (ed/s.), op. cit. p. 118

⁴² Munari Francesco (2012) op.cit § 26

offering joint liner services organised by two or more shipping lines on the same route. In a consortium, pooled vessels are normally identical, and cross-slot charters are executed with a view to reserving for each member of the consortium a fixed portion of the capacity of all vessels used in the service.

Liner consortia involve transport chiefly of containerships as well as special wet and dry cargo vessels, i.e. Gas carriers or PCT carriers. The service is provided on the basis of advertised timetables to ports on a particular geographic route (the trade). These co-operative agreements in liner shipping are not quite the same as “conventional” joint ventures that are created by a limited number of undertakings. In fact, providing shippers with the frequency of sailings they require in a particular trade constantly remains a problem, as many lines cannot afford a large enough fleet to offer, say, a sailing on the same day every week. The business solution these lines provide is achieved by the formation of joint services; so that each line provides an agreed number of ships and then has a proportion of container (cargo) slots in every sailing, regardless of which incumbent’s ship it happens to be. For instance, there are cases whereby some consortium members may not contribute a vessel but, as members, still take a share of the cargo slots available on each ship. Various types of joint ventures (including consortia) always emerge and disband according to the changes in the strength of the lines involved, whereas the principle of co-operation is now an integral business strategy of the container services. In any event, the purpose of the consortium is the rationalisation (i.e. control) of the supply of and efficient cargo slots capacity management⁴³. To this point we have to make clear that not

⁴³ The concept of “cargo slot” refers to the available space that is allocated within a vessel and is subject to the management of supply; something that is different from the concept of the “port slot”. The latter refers to the special agreements of docking time purchase negotiated between liner companies (individually or being in a consortium) and the service port authority for loading and discharging. Whereas port slot management and possession has significant competition law relevance, it exceeds the scope of the current thesis and it is a

all co-operative agreements between liners can be classified as liner shipping consortia. In fact, since synergy can take many forms, we have to distinguish between liner consortia and the other types of joint ventures between liners. In any case, these agreements must comply with all four criteria of Article 101(3) individually to benefit from the exemption rule of an individual basis.

In general, carriers negotiate with each other customised co-operation agreements that best fit their operations. On many occasions we may observe cases of anti-competitive behaviour by carriers and this is the subject of analysis in this chapter. On the one hand, these joint undertakings have as their key target the rationalisation of service and aim to control the supply through joint maritime cargo services. On the other hand, consolidation of a carrier's market position on certain routes may result in significant market power that could distort competition.

1.1.1 Block Exemption on Liner Shipping Consortia

Despite the above competition law concerns, the EU recognises the beneficial role of the liner consortia to EU trade, mainly due to the tacit acknowledgement that joint ventures may in fact produce efficiencies and improvements outweighing possible anti-competitive effects. In general terms, EU Competition Law accepts that partial function joint ventures among liner companies, with the purpose of rationalisation of service, do produce quality in maritime transport services. It is on these grounds that liner consortia are being granted Block Exemption, by virtue of Commission Regulation (EC)

subject for future research (see Concluding Remarks). Nonetheless, we accept that port slots do constitute a reliable indicator of market power within a certain trade.

906/2009⁴⁴, from the EU competition law rules. The adoption of Regulation (EC) No 906/2009 on the application of Article 101(3) of the Treaty to certain categories of agreements, decisions and concerted practices between liner shipping companies (consortia), i.e. the “Consortia Regulation”, will be in effect until the 25th April 2015. Whether it shall be renewed cannot be predicted with any certainty. Exemptions in liner consortia have been preserved, in contrast to the liner conferences that have been abolished in the EU.⁴⁵

The new exemption will last until April 2015. Under these new perspectives, however, one can reasonably assume that consortia will be legitimated beyond this term, unless radical market developments take place (such as a huge market concentration in the liner shipping sector which makes joint liner services no longer necessary).

Apart from consortia, is there any room to manoeuvre left for shipping lines to enter into cooperative agreements? Munari (2012)⁴⁶ holds that liner consortia (as protected as well by the block exemption) and similar horizontal agreements among undertakings are always very difficult to justify under competition law.

However paradoxical the measure of a block exemption might have been, the EU legislation recently (2009) renewed this exemption from Community competition rules provided that the companies concerned

⁴⁴ Commission Regulation (EC) No 906/2009 of 28 September 2009 on the application of Article 81(3) of the Treaty to certain categories of agreements, decisions and concerted practices between liner shipping companies (consortia) [OJ L 256, 29.9.2009], p. 31–34

⁴⁵ Article 5 of the Regulation (EC) No 906/2009 stipulates: “For the purpose of establishing and running a joint service, an essential feature inherent in consortia is the ability to make capacity adjustments in response to fluctuations in supply and demand. By contrast, unjustified limitation of capacity and sales as well as the joint fixing of freight rates or market and customer allocation are unlikely to bring any efficiency. Therefore, the exemption provided for in this Regulation should not apply to consortium agreements that involve such activities, irrespective of the market power of the parties.”

⁴⁶ Munari Francesco (2012) op. cit. §26 p. 22

must not foreclose competitors in a substantial part of the trades in question.

Article 3 of the Regulation⁴⁷ provides that the following activities of a consortium are subject to *exemption*:

- i. the *joint operation of liner shipping services* including any of the following activities:
 - a. the coordination and/or joint fixing of sailing timetables and the determination of ports of call;
 - b. the exchange, sale or cross-chartering of space or slots on vessels;
 - c. the pooling of vessels and/or port installations;
 - d. the use of one or more joint operations offices;
 - e. the provision of containers, chassis and other equipment and/or the rental, leasing or purchase contracts for such equipment;
- ii. *capacity adjustments* in response to fluctuations in supply and demand;
- iii. the *joint operation or use of port terminals and related services* (such as lighterage between vessels or stevedoring services); any other *activity ancillary* to those referred to in points i (a), i (b) and i (c) which is necessary for their implementation, such as:

the use of a computerised data exchange system;
- iv. an obligation on members of a consortium to use in the relevant market or markets vessels allocated to the consortium and to refrain from chartering space on vessels belonging to third parties;
- v. an obligation on members of a consortium not to assign or charter space to other vessel-operating carriers in the relevant market or markets except with the prior consent of the other members of the consortium.

⁴⁷ Consortia Regulation (2009) op. cit §

In addition to the conditions above, the Regulation imposes in Article 4 core *restrictions* stipulating that the exemption provided for in Article 3 shall not apply to a consortium which, directly or indirectly, in isolation or in combination with other factors under the control of the parties, has as its object:

- i. the *fixing of prices* when selling liner shipping services to third parties (distinguishing thus the concept of conferences from that of consortia);
- ii. the *limitation of capacity* or sales except for the capacity adjustments referred to in Article 3 (see above (i)(b));
the allocation of markets or customers.

Consortia Regulation 906/2009⁴⁸ clearly provides that a consortium must observe certain *obligations* and conditions. In fact the conditions set by EU Competition law are summarised as follows: (i) proportionate measures in scope and in duration, (ii) legitimate benefits, and (iii) beneficial effect on competition. In particular:

- i) The existence of effective competition in terms of price and services provided;

⁴⁸ For legislative analysis see: Pozdnakova Alla, "New liner consortia block exemption: a legislative commentary", *European Competition Law Review*, [2010] pp. 415-420, in particular pp. 419-410. I Quote: "The block exemption no longer contains a list of obligations to be fulfilled by the consortia. The Commission first proposed retaining the obligation for a consortium to consult transport users in the draft exemption, but decided to drop it, probably because market information revealed that in practice such consultations do not take place. Instead, consultations concerning the commercial terms of the service take place on an individual basis and, moreover, as some transport users pointed out, shippers' councils rarely have the resources and information to engage in discussions with the consortium as a whole. Article 8 of the draft Regulation that imposed on a consortium an obligation to demonstrate, at the request of the Commission or the national competition authority of a Member State, compliance with the conditions and obligations attached to the block exemption has also been omitted. Lastly, the Regulation does not any longer expressly provide for a right of the Commission or national competition authorities to withdraw the block exemption in individual cases of non-compliance with the criteria of art.81(3). In principle, a provision to this end in the consortia block-exemption regulation is abundant, as the right to withdraw block exemption where co-operation turns out to be incompatible with art.81(3) is already envisaged elsewhere."

- ii) A market share of under thirty per cent (30%) – in each market – calculated by reference to the volume of goods carried when it operates within a conference, or under thirty five per cent (35%) when it operates outside a consortium;
- iii) To allow their members a degree of independence, such as the right to offer their own arrangements and services, to withdraw from the consortium without financial penalty and to engage in independent marketing;
- iv) They must not cause detriment to Community ports, users or carriers;
- v) To demonstrate to the Commission that they consult their users on important matters and that the conditions of their maritime transport services are made available to users at reasonable cost.

1.1.2 Overview of Chapter One

In view of the above, the essence of the said block exemption not only stipulates significant conditions that need to be observed by the consortia but sets out also the framework under which a co-operation can be classified as a consortium and thus be eligible to be granted an exemption. Accordingly, a consortium needs to show that it complies with the aforementioned conditions subject to proof to the contrary; hence it does not need to demonstrate direct compliance with Article 101(3) – that is the scope of the exemption ultimately.

First, I analyse the specific economic properties of the maritime industry and the way these influence the interpretation of the competition law. Moreover I examine the concept of the relevant market revisiting the service and geographic criteria from the combined perspective of the maritime industry and competition law. Briefly the Chapter is structured into the following sections:

- i) Presentation of the properties of the maritime sector;
- ii) Presentation of maritime markets subsequent to the undertaking's operation;
- iii) Examination of the current legal regime on liner consortia;
- iv) Analysis of the relevant service and geographic market and analysis of the subsequent markets in shipping. ;
- v) Analysis of the stability, temporal and dynamic elements in shipping.

1.2 Economic Analysis of the Relevant Market

The particularity of the shipping sector includes an element that by itself contributes to the high levels of competition: the inherent instability of the markets. As is proven by maritime economics, the market is being constantly re-arranged in partially regular and irregular periods. The former appear periodically in a cyclical form known as the maritime cycles,⁴⁹ normalising, in a sense, dynamic and irregular phases of volatility. I deem that the market cycles represent a temporal and essential dimension to market definition with reference to time⁵⁰. It is also confirmed that the said cycles correlate to the peaks and troughs of the global economy; moreover, they affect shipping in a greater degree in terms of the investment, planning and operation strategy required by the players. In particular, the temporal element appears in two ways: in liner shipping it is manifested in much longer periods than the usual seasonable trends (e.g. summer or winter), in alignment with the usual trends of the market, also known as cycles; and in tramp shipping, in addition to the above, we

⁴⁹ Stopford (2009) pp. 37-74 and 253-284
⁵⁰ Dabbah (2004) p. 52

also observe a seasonal element especially in bulk transport of resources (agricultural products, minerals etc).

In reality the cycles contribute to the instability of the sector and their effects become more intense due to substantial capital and cash reserve requirements, as well as the sunk costs involved. In this business context, the liner companies must be productive, allocative and dynamically efficient. Thus, all liner companies in a perfectly competitive market must arrange: (a) freight rates at the lowest possible cost (productive efficiency), (b) the right combination of vessels to be engaged in a consortium and subsequently the perfect knowledge of types of cargos (patronage) and consumers (shippers), so as to have the truthful confluence of market signals (allocative efficiency), and (c) an optimal degree of innovation, as well as the diffusion of technological advances over time that will allow them to have better, faster and more economical vessels (dynamic efficiency)⁵¹. The problem arises when liner consortia that already hold a dominant position in the market take advantage of market instability in order to distort competition and thus influence supply in their favour.

Liner alliances are becoming increasingly common and, as mentioned already, are part of the general business strategy of a shipping company. Generally speaking, joint ventures are arrangements among enterprises which have as a specific business goal the integration of part of their operation with a view to rationalise supply of service – a fact that produces an effect on demand. The principal structure of the consortium consists of members, usually called “*parents*”, who jointly trade and regulate the competitive relationships with each other and third parties. The effect of such co-operation is not always clear and

⁵¹ See analysis about efficiencies by Dabbah (2004) pp. 5-7

must be analysed on a case-by-case basis.⁵² As Munari (2012)⁵³ well notices, even when Regulation 4056/86 entered into force, the relevant case-law soon demonstrated that the antitrust immunity of liner conferences was never intended as a catch-all immunity: the EU competition policy did choose a case-by-case approach and was always ready to lift such an immunity as soon as (a) the degree of competition on a given route decreased below acceptable levels, or (b) members of a liner conference tried to implement restrictions of competition beyond the conditions allowed by Regulation No. 4056/86.

In this section I examine the agreement to set up and operate a joint venture *per se* and as whole in terms of its object and impact on the market. Accordingly, I identify the factors indicating possible restrictions on competition in the market among parent members as well as between the parent and third parties - within the meaning of Article 101(1) TFEU.

Pozdnakova (2008)⁵⁴ presents the principles that have to be observed in order to assure that competition shall not be restricted by the co-operation agreements; both among the parent members and the third parties:

⁵² In the Guidelines on the application of Article 81(3) of the Treaty [OJ 2004/C 101/08] para 22 it is stipulated: "...In other words, an examination of the facts underlying the agreement and the specific circumstances in which it operates may be required before it can be concluded whether a particular restriction constitutes a restriction of competition by object. The way in which an agreement is actually implemented may reveal a restriction by object even whereby the formal agreement does not contain an express provision to that effect". See also: European Night Services Joined Case No T-374/94, T-375/94, T-384/94 European Night Services Ltd (ENS), Eurostar (UK) Ltd, formerly European Passenger Services Ltd (EPS), Union internationale des chemins de fer (UIC), NV Nederlandse Spoorwegen (NS) and Société nationale des chemins de fer français (SNCF) vs Commission [1998] ECR II-31141, CMLR 718, § 136. The CFI emphasised: "... it must be borne in mind that in assessing an agreement under article 81(1) of the Treaty, account should be taken of the actual conditions in which it functions, in particular the economic context, in which the undertakings operate the products or service covered by the agreement and the actual structure of the market concerned".

⁵³ Munari Francesco (2012) op. cit. § 26 p. 15

⁵⁴ Pozdnakova (2008) op. cit pp.161-195

- i. Joint service agreement may not only be restrictive of the actual competition but of potential competition as well⁵⁵;
- ii. Freedom of competition, internally and towards third members, must be preserved;
- iii. Market power can be judged by the accumulation of market share in connection to the capacity of economic strength⁵⁶. In principle, joint ventures may not need to have market power in order to be efficient and produce the benefits envisaged by the parties; resource pooling – in the form of capital capacity – may provide them with significant power as shipping is a capital intensive industry.

Even if it is established that a competition consortium does not prevent internal competition between the participating carriers, it may still have negative effects on external competition existing or to be developed in the market. In particular, Pozdnakova (2008)⁵⁷ describes the following indicators:

- i) It is necessary to assess the relevant market before and after a joint venture is created;
- ii) It is necessary to assess the remaining degree of competition after the joint venture is created, as a joint venture can alter the market by making it appreciably more difficult for third parties to enter to compete. It is thus quite possible for independent carriers to face a firm market consolidation, which may oblige

⁵⁵ “...actual or potential competition to such an extent that on the relevant market negative effects on prices, output, innovation or the variety or quality of service can be expected with a reasonable degree of probability”. See: Case No T-112/99 *Métropole télévision, Suez Lyonnaise des eaux, France Telecom and Télévision française 1 SA (TF1) vs Commission* [2002] All ER EC 1, [2001] ECR II-2459, [2001] 5 CLMR 33876 and 77

⁵⁶ Pozdnakova (2008), op. cit. page 165.

⁵⁷ Pozdnakova (2008) op. cit. page 171.

them to align their market policies with those of the joint venture rather than to compete with it⁵⁸;

- iii) The probability of negative impact on external competition depends on the structural conditions of the market, the market power of the joint venture and, as one of the surrogates for market power, the share which the liner joint venture holds on the relevant market⁵⁹;
- iv) Anti-competitive implications become more serious as a result of indirect co-operation created by the co-ordination among several joint ventures and individual companies. These so called 'networks' are in fact different arrangements between the competing companies (either being within the consortium or acting independently) that occur across several markets. In this context, the existence of networks of joint ventures is likely to lead to an infringement of Article 101(1) TFEU, even though individual joint venture agreements do not as such restrict competition.⁶⁰ The globalised⁶¹ nature of shipping encourages structures of this kind that are very difficult to be investigated by competition authorities.

1.2.1 The Subsequent Markets of Shipping Undertaking- The Four Interdependent markets

Defining the relevant market is not an end in itself, but it undoubtedly provides the basis for assessing market power and other constraints on competition. A persistent problem in the literature on the maritime

⁵⁸ In *Eirpage* the Commission held: "... the fact that potential competitors are faced by a joint venture ... may have a deterrent effect on potential market entrants and thus further restrict competition". See: *Eirpage*, [OJ 1991] L 306/22 para 12.

⁵⁹ *European Night Services*, op. cit. para 149

⁶⁰ *Pozdnakova* (2008) op. cit. p. 173

⁶¹ On globalisation and competition see Dabbah Maher, *International and Comparative Competition Law* [Cambridge University Press, 2010] pp. 92-97

industry is to define the boundaries of the market vis-à-vis the products (cargoes), the geographic area (trading ocean zones and/or liner trades), and consumers (consignees or shippers) in relation to a specific time frame that is not stable – the market is cyclical (based on the pattern of 7 to 12 years) and depends on various external factors. Paragraph 13 of the Commission Notice on the Definition of Relevant Markets⁶² stipulates that firms are subject to three main sources of competitive constraints: *demand substitutability* (DS); *supply substitutability* (SS); and *potential competition*.⁶³ On the one hand, a broader market under Article 102 may mean that a defendant is found not to have a dominant position. On the other hand, a narrow market may mean that the consortium in question may not have any areas of horizontal overlap⁶⁴, with the consequence that it would not be considered as creating or strengthening a dominant position. Obviously, the broader the definition of the relevant market, the less possible it is that the examined behaviour will create concerns under competition law.⁶⁵

⁶² Commission notice on the definition of relevant market for the purposes of Community competition law OJ [1997] C 372

⁶³ Paragraph 13 of the Commission Notice on the Definition of Relevant Market stipulates: 'Firms are subject to three main sources of competitive constraints: demand substitutability, supply substitutability and potential competition...Basically, the exercise of market definition consists in identifying the effective alternative sources of supply for the customers of the undertakings involved, both in terms of products/services and geographic location of suppliers'. See: Commission Notice of December 1997 on the definition of the relevant market for the purposes of Community Competition law, OJ [1997] C372 /5, OJ [1997] C 372/5, [1998] 4 CMLR 177; see also the UK Office for Fair Trading (OFT)'s Guidelines for Market Definition and Mergers: assessment guidance (OFT 403) and (OFT 516) [Electronic Versions] .

<http://www.oft.gov.uk/shared_oft/business_leaflets/enterprise_act/oft516.pdf> [accessed 18 April 2009]. It is worth mentioning that between 1999 and 2002 the Commission received around 1250 Merger notifications.

⁶⁴ ICI & Continental Solvents vs Commission, Cases 6 and 7/73, [1974] 1 CMLR 309]. United Brands vs Commission (United Brands), Case 27/76, [1978] ECR 207, 1 CMLR 429. Nederlandsche Banden-Industrie Michelin NV vs Commission, Case 322/81 [1983] ECR 3461, 1 CMLR 282.

⁶⁵ Athanassiou Lia, 'Competition in Liner and Tramp Maritime Transport Services: Uniform Regulation, Divergent Application?' in Antapassis Antonis, Athanassiou Lia, Røsæg Erik (eds) (2009) op.cit. p.81

The issue of definition of the relevant market is dealt with extensively in EU law, especially as regards supply substitutability, though various concerns arise from time to time – from interested parties. Hence, the Community institutions proceed in defining the product and geographic markets with the use of *geographic criteria* when studying both the *product* and the *geographic* market. The methodology of examining Demand Substitutability (DS) has been the core of any market definition.⁶⁶ The Commission was required to investigate the characteristics of the products in question which made them particularly apt to satisfy an inelastic need and limited the extent to which they were interchangeable with other products. For shipping, however, the rule of case by case basis is of paramount importance, as an analysis may, from one point of view, find the necessary homogeneity in the service market in question; on the other hand, competition may still be effective despite competitive restraints. So, each case must be analysed according to the *specifics* of the market and the players' position in the market, and *balancing* the direct effects on competition and other objective justifications is often essential. First and foremost, I distinguish between the maritime transport market *per se* (as it is expressed by the freight market) and the subsequent markets that are associated to the vessel as an enterprise and asset⁶⁷.

The management team of a shipping company constantly monitors four major fields: The newbuilding market, where the company orders the ships, the freight market, where ships are chartered, the sale and purchase market for used vessels and the demolition where it finally can dispose of the vessels for scrap metal.

⁶⁶ Europemballage Corporation and Continental Can Co Inc. vs Commission , ECJ Case 6-72 R (Continental Can Co) [1973 ECR p. 00215]

⁶⁷ The Sale and Purchase (S&P) of second hand vessels, the Newbuilding and the Demolition Markets. In addition I include the Capital market as shipping is a capital intensive industry.

As affected by the markets mentioned above, the ship operator is subject to management and operational challenges, which if overcome will ensure the quality of service, the duration and the strategic planning of the company. From a customer's and an EC Competition point of view, shipping is an undertaking that provides a service. From the shipowner's point of view, however, shipping is a business which obliges the entrepreneur to effectively trade in all four aforementioned shipping markets. A shipping company has to monitor its activities as they are closely interrelated with events in the four markets. So here we have a contrast between traditional competition law and ocean economics⁶⁸ that ultimately affects the legal interpretation of the shipping phenomena. For a ship-operator, a market is the whole of the combination of the four parallel markets; for competition law, the product market relates to the service *per se* i.e. the transport, and that affects the subsequent cases of abuse, such as excessive and exclusionary pricing – though issues related to costs and investments required are used in the legal analysis. However, with regard to dominance and the relevant market share EC Competition law suffices to take into account the market presence (share wise) and whether this dominance has been abused by practices that fall within Article 102 TFEU.

Beyond the scope of the traditional legal interpretation, I consider that there is a notable distinction about what shipowners (on the one hand) and jurists (on the other) deem to be actual dominance over a market. Moreover, jurists are also divided between those who have competition law backgrounds and those with maritime law backgrounds. Perhaps for a shipping company, the pursuit of business dominance may not be an objective; businesses are more inclined to pursue stability than expansionism. For jurists, a significant market share accompanied by “evidence” of abuse may call

⁶⁸ Button Kenneth, "Is There an "Economics of Oceans?" *Ocean Yearbook*, Volume 14 [2000] pp. 16-37; in particular for maritime transport see pp.17-24. See also: Button Kenneth, "The Importance of the "Core in Explaining Shipping Alliances", *Ocean Year Book* 328, Volume 16 [2002] pp. 328-353

for investigation. The definition of the product and the extent of a geographic market also remain unclear for most of the shipowners. Competition law methodology organises markets, for the purpose of analysis, with certain produce and geographic criteria. For example, the authorities intervene: (i) when the market becomes substantially narrow, (ii) when a consortium concentrates its efforts in order to dominate on certain trades, using abusive practices that distort competition by object or effect. Abusive practices and business wars are sometimes preferred (as a business strategy) over the increase of effectiveness and quality through, for instance, the rationalisation of service. Hence, *it is necessary to consider* these strategies in the context of harsh and chaotic (from a systemic point of view) business environment as shipping, where only the powerful and prudent can survive. As it is known shipping is an exceptionally dynamic business, reserved for those that can not only operate efficiently but can survive daily competition.

In order to address this issue above, I believe that the case-by-case approach, followed by the EU Authorities, is indeed a panacea for shipping and for similar industries that are risk and cash intensive. In shipping, for example, all four aforementioned markets (subsequent to the product market) are cash intensive. Moreover, shipping is a business that offers services that must be provided within a specific time period; one cannot do otherwise but place its economics in the realm of the supply and demand principle in a certain time frame. On those grounds, the ideal conditions for providing services and having a predictable yield is when the market presents a stable equilibrium between demand for transport and vessel availability. Supply and demand, hence, play an important role in regulating the income of the shipping companies, i.e. the freight rates.⁶⁹ Thus, the four markets,

⁶⁹ For example: In the case that there are still available ships in the market and the trade does not grow, the expensive newbuildings will become nothing more than an unfortunate investment, a enormous sunk cost, for the entrepreneurs and the financial institutions that financed the project. Should there be an oversupply of vessels in the particular market, the freight rates may again subside. Eventually, the

freight, sale and purchase, newbuilding and demolition, are the main reason for the effectiveness of competition. Below I briefly present the four Markets:

1.2.1.2 The Freight Market

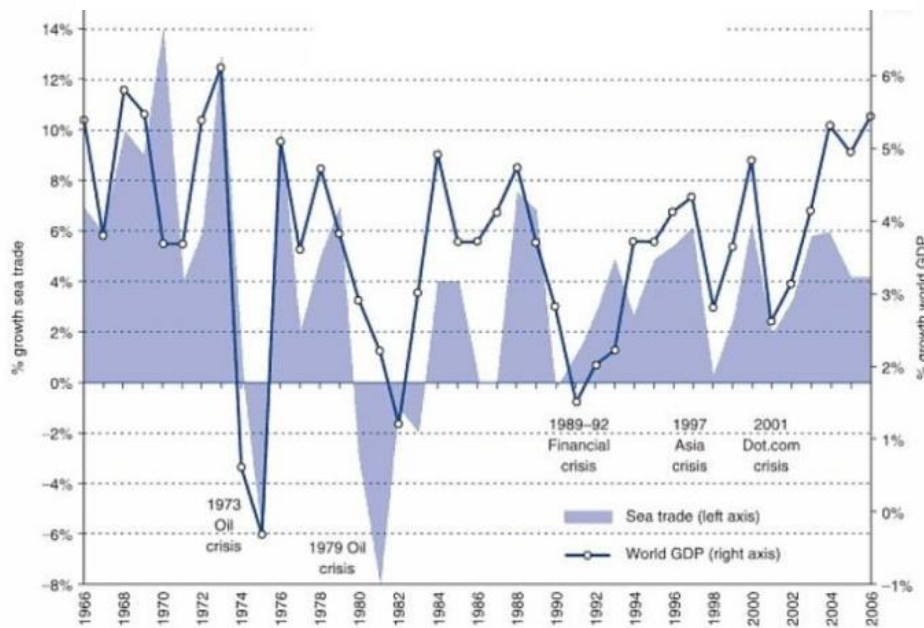
The contract of affreightment starts when the shipper buys the services of the shipping company, with a voyage charter, at a fixed price per metric ton of cargo. Alternatively, with a timecharter, the ship is hired by the day.⁷⁰ The familiarities of this ‘marketplace’ with a commodity exchange are obvious to any lawyer and manager who specialises in maritime law and carriage of goods by sea. The completion of the maritime service is nothing else but the safe and timely transportation of goods or passengers. Moreover, the freight market is the source of the main income for the companies, and the only guarantee for their survival. Steady cash flow is not always possible, and because of this the operational and managerial departments of the shipping companies are focusing particularly in securing ‘charter’. The volatility in the market is connected with the fluctuations of world trade, as the freight market is correlated with global trade patterns of growth and recession.⁷¹ The chart below presents the correlation patterns between sea trade and the world GDP.

vessels will remain docked, waiting for the market (cycle) to change and for the demand to rise again. Consequently, unpaid shipping mortgages force the creditors to cover their losses by liquidating an undervalued asset. In case the shipowner makes the effort to resume activity, it would be necessary to restore his business – trading name and to re-structure the enterprise, since literally there are only few who are competent and skilled enough in order to achieve it. The above described market dynamic is present in both liner and tramp shipping whereas in tramp shipping these phenomena are more intensified.

⁷⁰ Wilson John F, *Carriage of Goods by Sea*, [Pearson Longman 2008 6th Edition, Harlow-Essex] pp. 3-7

⁷¹ Apud. Stopford (2009), op. cit, p. 140 in figure 4.2, page 140

Figure 1 Comparison between world GDP and freight rates



As we see from figure 1, the turnovers and variances of the supply and demand equilibrium have a direct impact on freight rates. ‘Highs’ and ‘troughs’ in terms of income, i.e. freight rates, is a common phenomenon, synchronised with the fluctuations of world GDP. Moreover, it shows clearly that sea trade is very vulnerable to world economic crises of the type noted in the chart. Though the figure depicts well the fluctuations within a time framework it is difficult to precisely identify the exact period of temporal patterns. It is usually 5-12 years between peaks and troughs; maritime economics, however, have been unable to establish prediction models that exceed a one year period.

1.2.1.3 The Sale and Purchase Market

The ship’s sale and purchase market (hereinafter S&P market) is a sizeable commodity market due to the fact that the assets of the company could always change their value; either appreciating or depreciating following the trend of the freight market. The S&P market

is derivative of the main transport undertaking. It is important however to consider its influence in order to establish reliable indicators for abuses that relate to limitation of investment.⁷² As aforementioned, any vessel, apart from being the business lever for the maritime companies, is also a commercial asset. Thus the variations in supply and demand determine also the value of the assets of the market company, affecting all financial operations and especially mortgages and loans. On the one hand, bankers and other lenders are very interested in the market-value of the ships because the mortgage on the hull is the primary collateral for their loans. On the other hand, brokers, shipowners or even bankers attempt to predict the variations in the S&P market in order to profitably trade their assets (i.e. the vessels).

From the shipping company's point of view, any fluctuation in the price of their assets has a direct impact, not only on credit availability (and consequently the issue of cash-flow), but also on share price. Obviously, selling a ship when the market cycle is low can turn out to be not beneficial enough. However, as mentioned above, this decision could be made on the grounds of serious cash flow problems.

Given that the price of a vessel is influenced by its capacity to provide income for the company, any disability of the vessel has a direct impact on the freight rates. When freight rates are low, and liquidity is possibly limited, the seller (who can be a shipowner or a banker who foreclosed on his client and took possession of the ship) might be forced to sell the ship in order to pay off debts. From the buyer's point of view this may appear as an opportunity to make a profit out of speculating on the S&P market.

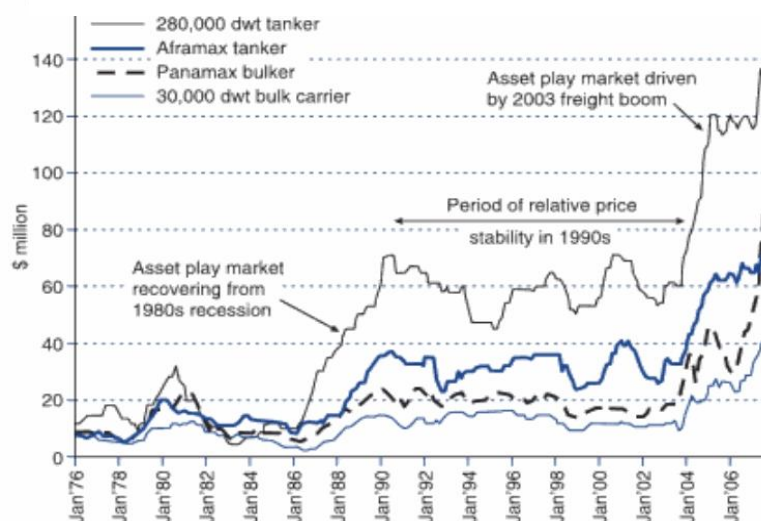
The S&P market defines shipping not only as a pure corporate business, where serious companies draw a twenty year project and follow it, but as a highly speculative and volatile market, where a spot

⁷² See *infra* sections "2.2.1.7.1 Capacity Changes and Adjustments in Relation to Time" p.128 and "2.1.2.2 Limitations of Technical Development and Investment" p. 76

small sized bulk carrier company can be as much more successful than an established PLC⁷³. The essential part of this market is that it is correlated primarily with the freight rates. When the freight rates are high, it means that there is a great demand for services, that even an older vessel can be utilized; sometimes a second hand vessel of the same tonnage may worth more than a newbuilding, as several additional factors determine its price, e.g. draft, breadth, canal design (panamax, suezmax), fuel consumption, construction quality, equipments and engines etc..

As freight rates are the primary influence on a ship's prices, 'peaks' and 'troughs' in the freight market cycle are transmitted into the sale and purchase market. The relationship is very close, especially as the market moves downwards. We will depict the issue of the S&P market by presenting three tables that exhibit the volatility of the price in the value of ships.

Figure 2 Comparative vessel price cycles for Bulk Carriers (BC) and Motor Tankers (MT).



In this figure two facts are presented:⁷⁴

First, it depicts the relative synchronisation of the submarkets and their segments.

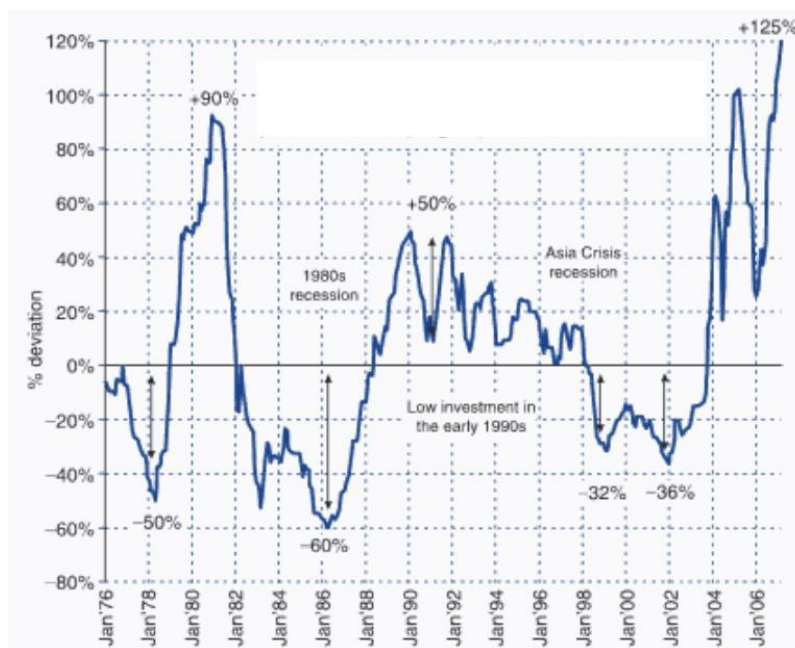
Second, it shows the relatively high volatility of the market over a thirty year period.

⁷³ While corporate players may seem to occupy a better position in dealing with crisis than small and medium spot shipping companies, this conception is not true; the key point to success in the shipping business is often the ability to infiltrate and penetrate into demanding and competitive markets. Making a better bid (in this context, an offer of lower rates than that of the competitors), where high freight rates are absolutely essential for the continuity of the medium-big shipping firms, burdened with loans in the form of bonds, secures the life of smaller shipping companies and may place competitors in difficult situations.

⁷⁴ Stopford, 2009, *op. cit.*, p. 202, apud. Clarkson Research Services Ltd.

It is worth noticing the cyclic behaviour of the market and the dramatic increases of price that in some cases reach seven hundred per cent (700%) within four years (note between 1986-1990 the price of 280,000 dwt tankers). The phenomenon of synchronisation is observed in the same intensity among various categories of vessels, as they follow the linear trend over the X axis (depicting years). Cyclic behaviour overlaps the usual twenty five year lifespan of a vessel, a fact that undoubtedly affects the financial situation and planning of a shipping company. Within the following graph we illustrate the deviation from the linear trend value, fitted by regression, in a Panamax (65,000-80,000 dwt) bulk carrier from 1976-2004.

Figure 3 Deviation from the market price of a Panamax BC.

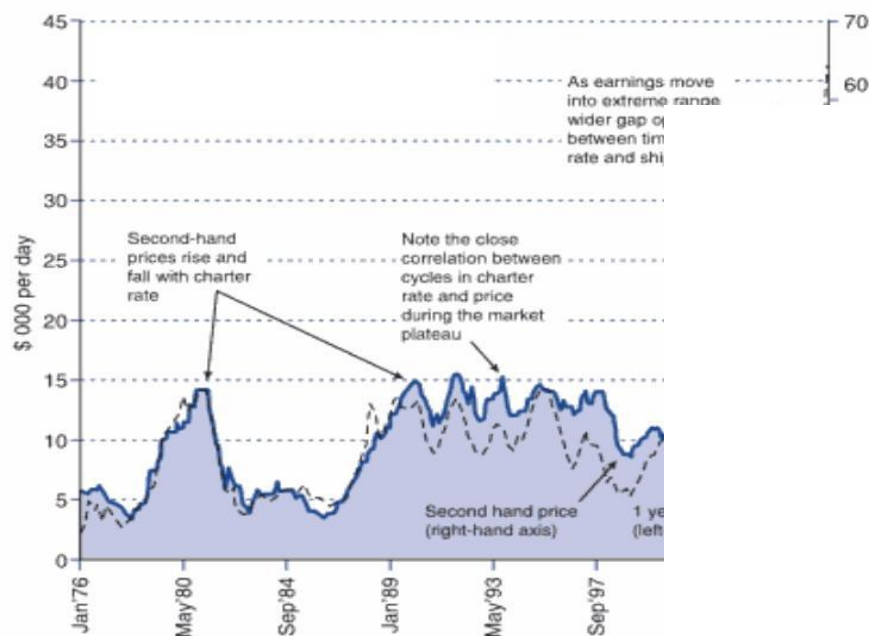


As we see from this figure⁷⁵, the linear regression trend estimation between 1977 to 2006 shows noticeable deviations; in three cases these deviations are extreme, e.g. we see that the deviation within only two years, between 1981-1983 was 140 per cent and progressed even more sharply (150 per cent overall, if we calculate 1983). By the same token, between 2002 and 2006 we see an astounding 160 per cent deviation; this trend continue even further in 2007. The reason that is

⁷⁵ Stopford, (2009), *op. cit.*, p. 203, apud. Clarkson Research Services Ltd.

responsible for this dynamic linear trend is the volatility of the freights. In the figure below we examine the correlation of a second price vessel with freight rates.

Figure 4 Correlation of second hand price vessels and freight rates



With this figure I support that, in the 30 year period shown, correlation between the one year timecharter and the price of a five year panamax bulk carrier was 0.73, suggesting that 73 per cent of the variation in prices can be explained by earnings. Yet again, despite the volatility of the freight rates, we observe the synchronisation effect throughout the examined period.⁷⁶ Thus, after careful consideration of the above statistical data, I observe a clear correlation between freight rates and a vessel's value. It is also presumed that there is a six to twelve month response time between the two markets.

Hence I argue that the S&P market is composed of the same ingredients as the freight market: high volatility and high speculation. In addition to the factor of the freight rates, the age of the ship has to

⁷⁶ Kavussanos Manolis G., "The dynamics of time-varying volatilities in different size second-hand ship prices of the dry-cargo sector" *Applied Economics* v 29 [April 1997] p.433-444

be taken into consideration.⁷⁷ In addition, the methodology of calculating the residual value of the ship follows the same pattern.

In this context, the shipowner is always faced with the following issues:

- i) The market value of the vessel in the future;
- ii) The ability to secure finance due to managerial reasons (atomicity, shipowner's personal age, size of its existing fleet);
- iii) The choices between ordering a new vessel or selecting a used one, based on the market situation⁷⁸.

In view of the business dilemmas mentioned above, there are two ways of calculating the residual value of the assets of the maritime company; an exercise that is important in order to establish the parameter of market dominance:

The first way, as applied by economists, is to take into consideration annual inflation, and the age depreciation and deduct them from the linear trend of the annual three-year cycle prices of the newbuilding market; plus the book value. Taking all the above into consideration one can re-adjust the ship's book value to meet market trends.

The second method is based on the assumption that the ship usually has a 25-30 year life span. It also has residual scrap value, which again is subject to volatility. Nonetheless, it represents an easily assessed variable, as scrap prices are more predictable and the demand for good quality steel is never lower than expectations. Thus, by dividing the aforementioned aggregation with the addition of the scrap price per year, one can conclude what will be the future price of

⁷⁷ It is implied that after the standard depreciation after 5-10 years of operation, depending on the vessel of the ship from the trend line, the whole ship's value is estimated after the evaluation certificate from the special brokers.

⁷⁸ The questions above are not relevant to the management of a shipping company, but they have a serious impact with regard to the establishment of the dominance position (see chapters three and four).

the vessel. However, as the figures above indicate, one has to take control of the market cycles; thus, the overall amount is subject to 70 per cent variation if the most extreme price movements are taken into account.

1.2.1.4 The Newbuilding and the Demolition Markets

The newbuilding and demolition markets are the two other fields of variances to be taken into consideration for our study. The market mechanisms work in the same manner. In contrast to the manufacturing industrial sector, where products follow a stable price trend, a newbuilding price is as volatile as the freight rates price, thus creating more uncertainty about the future ROI. Surprisingly, the newbuilding market follows the same methodology that allows the particular market to readjust prices in accordance to the law of supply and demand, but the newbuilding market is not part of shipping cash flow. This feature undoubtedly contributes to the overall volatility of the sector. Thus, it could be suggested that the risk of financing and investment in shipping would be more predictable if the newbuilding market was not subject to the laws of the market. One may hold the residual value as constant, over which one will be able not only to forecast the risk of the investment, but to assess the asset value of the shipping company.

Nevertheless, I once more observe a clear correlation in the figures between the demolition prices and the trend of the newbuildings, although the two markets are not subject to the same supply and demand variances⁷⁹, as the demolition market appears again to function with different methodology. The prices are determined by

⁷⁹ *Stopford (2007) op. cit p 212.*

negotiation and depend on the availability of ships for scrapping and the demand for scrapped metal⁸⁰.

1.2.2 The Problems of the Relevant Service Market

The “relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer by reason of the products' characteristics, their prices and their intended use”.⁸¹ In order to define the product market – especially in long distance trades – the Commission studied the substitutability of other types of transport and the substitutability of the services offered on those and other routes (i.e. the geographic substitutability).

To begin with, we have to distinguish between ocean-borne shipping and intra-European short sea transport. In the latter, substitutability can be easily achieved by other modes (e.g. inland waterways, rail, road, air).⁸² For the purposes of the thesis we examine only the ocean borne shipping that includes EU catchment areas.⁸³

The basis of this methodology exists in the Commission’s Notice of December 1997⁸⁴ and was followed in *TACA*⁸⁵ (1998) (in different

⁸⁰ For example, in the Indian Subcontinent and Southeast Asia, where most of the demolition yards are currently located, much of the scrap metal is used by the local steel market, though availability of scrapping facilities is sometimes a consideration. In virtue of the market forces, prices can be very volatile, fluctuating from a trough of \$100/lwt in the 1980’s, to \$200 / lwt in the 1990’s and \$650 in the 2008 with an immediate drop to \$260 in the 2009. The price also varies from ship to ship, depending on its suitability for scrapping and on how it is equipped.

⁸¹ Commission Notice on the definition of relevant market for the purposes of Community competition law [OJ C 372 of 9.12.1997]. This definition is also adopted in the special Competition Maritime Guidelines (2008). See: on the application of Article 81 of the EC Treaty to maritime transport services [OJ 2008/C 245/02] para 17.

⁸² Voionmaa Tapani, ‘Competition Law and Short Sea Shipping including some anomalies along the line’, in Wareham (2010) op. cit. p175

⁸³ See Delimitations Section in Conclusion p.281

⁸⁴ EU Commission Notice on the Definition of Relevant Market for the purposes of Community Competition Law [1997] C372/5-13

⁸⁵ TACA Decision (1998) paras 60-75.

order and different focus) and several other decisions noted in Blanco (2007)⁸⁶. Paragraph 20 of the aforementioned *EU Commission Notice* explains situations whereby ‘Supply Substitutability’ (SS) is relevant: “...whereby a supplier is able to switch production to other products and market them in the short term without incurring significant costs, signifying thus the importance of SS in connection with potential competition”. The above acquires significant importance in the effort to identify the key players and actual market size. Regardless of whether there is any competition among scheduled / non-scheduled shipping or other modes, a narrower product market (limited to a particular type of product transported by sea) would reduce competitive factors, while a wider one would allow the opposite. The same would apply for the service provided by certain vessels, should one want to take into account the carrying capacity rather than the demand for a certain type of transport service (e.g. bulk cargo, cars, containers). For example, if we conclude a narrow market interpretation, the transport of perishable goods could be limited to reefer containers or include transport in conventional reefer vessels.

The resolution arrives from Community decisions rather than the published guidelines of the EU Commission that appear from time to time. For instance, the EU Commission, within its *Guidelines for Maritime Transport* (2008)⁸⁷, defines the relevant market as follows: *The relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use.*

Obviously the above Guidelines, however recent they may be, cover a substantial area; in my opinion, they also leave many grey areas untouched. Firstly, the Guidelines assume that there is sufficient

⁸⁶ Blanco (2007) *ibid.* pp. 432-443

⁸⁷ EU Commission’s *Guidelines* (2008) on the application of Article 81 of the EC Treaty to maritime transport services, *op. cit.* para 17

guidance on the definition of "the relevant market" from case law. Undoubtedly the current jurisprudence consistently defines the market narrowly; Chuah⁸⁸ notes this, in addition to pointing out that there is no adequate case law for the tramp sector. Secondly, I believe that there is a general inconsistency in the geographical definition of the market, as concepts such as homogeneity, substitution and potential competition do not bind well in liner shipping; however, they constitute useful tools for defining market power in tramp shipping. I discuss this matter *infra* in the section referring to the aggregation across markets. Overall, I believe that the Maritime Guidelines do not significantly contribute⁸⁹ or add any pioneering information to the existing interpretation, especially to shipping professionals; yet the Guidelines will be updated every 5 years. As mentioned above, the competent EU institutions endorsed long ago (since 1998) the option of the product definition of the market by limiting the market to the liners. Despite the recent Guidelines (2008), product definition in liner shipping has not changed much in recent years. In fact, one *could* claim that it has not changed at all, despite the "agonising" efforts of the liner cartels to reverse this interpretation that became a trend. Accordingly, EU Courts⁹⁰ clearly rejected the argument that the service market is wider than the routes in which the liners operate, "*as there is in the majority of cases there is no substitutability by tramp vessels and other transport modes*". The Commission has held⁹¹ in various cases that tramp operators compete marginally with liners; in contrast, the latter are able to fully compete with tramp vessels.

⁸⁸ Chuah Jason, (2008) op. cit §25 p. 365

⁸⁹ Fergus Randolph, "The European Commission's draft guidelines - a promising starting-point or a missed opportunity?", Shipping & Transport International [2008] 7(1) pp. 11-13.

⁹⁰ *Atlantic Container Line and Others vs Commission* (TAA judgment) CFI [2002 ECR II-875] para 273. See also *Atlantic Container Line AB and Others vs Commission* (TACA Judgment) [2003 ECR II-3275] para 809.

⁹¹ TAA Decision (1994) op.cit. paras 34, 47-49. See also: Maersk/POLN Commission decision, Case COMP/M.3829 [OJ 2005 C207/8] para 13

Likewise the practice of the Commission, as also stated within the Maritime Guidelines,⁹² tends to narrow the market as much as possible, examining whenever appropriate if the market can be limited to a particular type of product e.g. perishable goods transported in reefer containers or conventional reefer vessels.

While it is possible in exceptional circumstances for some substitution to take place between break bulk and container transport,⁹³ there appears to be no lasting change from container use towards bulk. For the vast majority of categories of goods and users of containerized goods, break bulk does not offer a reasonable alternative to containerized liner shipping.⁹⁴ Once the cargo becomes regularly containerised, it is unlikely to be transported ever again as non-containerised cargo. To this day, containerised liner shipping is, therefore, mainly subject to one way substitutability.⁹⁵ In general, liner companies can attract bulk or neo-bulk goods due to discrimination with respect to type of cargo, and the cross-subsidies between expensive and cheap goods.

It is my view, however, that the presumption of non-substitutability between tramp and liner sectors may not be entirely true; a condition as such can be properly evaluated in a given time context and not as doctrine. I analyse the matter further *supra*.⁹⁶ Moreover I observe a paradox, especially when one measures interchangeability from the supply side of the market. For example, in *Continental Can Co.*⁹⁷, the ECJ criticised the Commission for not taking into account the point

⁹² Maritime Guidelines (2008) op. cit. para 19

⁹³ TACA decision, op. cit. Para 71

⁹⁴ TAA *ibid.* para 273 and TACA Judgment of 30.9.2003, CFI, Joined Cases T-191/98, T-212/98, T-213/98 and T-214/9 [2003 ECR p. II-3275] para 809. As regards the substitutability between break-bulk and container, there is no lasting change from container vessels towards bulk/break bulk. This is only one way substitutability: once cargo becomes regularly containerised it is unlikely to be transported again as non-containerised cargo.

⁹⁵ TAA *ibid.* para 281. Also see: MAERSK/PONL, op. cit. para 13

⁹⁶ *Infra* p. 151 et seq

⁹⁷ *Supra* § 66

that producers of other types of cans could amend their method of production to compete with *Continental Can* without much difficulty.⁹⁸

I will try to develop the above argument as follows:

In a similar situation in shipping, one can claim that – provided a liner market is not closed to actual and potential competition (absence of restrictions and barriers to entry) – nothing impedes bulk carriers to change their operations from spot to liner shipping; thus expanding to liner shipping operations. Perhaps the reason for not doing so could be that potential competitors have developed a special and workable *modus operandi* which they prefer not to change for entering the liner market. In other words, they prefer not to compete based on their own choice and initiative. This is an important factor that has to be included as an indicator of potential competition within a market. But, I believe that is not the case, for two reasons:

- First, the market is not similar, not to mention homogeneous, in terms of product;
- Second, the business strategy and operational details and setting are significantly different between liner and spot shipping; hence, not only are the products not interchangeable, but the producers cannot substitute the demand, due to known reasons that relate to the nature of the business: capital, economies of scale and special innovation⁹⁹ are required.

⁹⁸ Ibid. para 36

⁹⁹ As innovation in shipping (pronoun)we can deem the special business strategy that a company has to improvise in order to be successful. The innovative element is that this strategy has to change and adapt in the constantly dynamic environment of shipping.

1.2.3 The Problems of the Relevant Geographic Market

The “*relevant geographical market comprises the area in which the undertakings concerned are involved in the supply and demand for products or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas*”.¹⁰⁰ As far as the geographic element of the liner shipping services, the relevant geographic market consists of the area wherein the services are marketed, generally certain and predetermined ports at each end of the service, determined by the ports' overlapping catchment areas (alongside loading and discharging). In fact, the definition of the geographic market is largely implicit in the definition of the product market from the geographic point of view: a transport service towards a given destination is geographically substitutable by another transport service towards the same destination whereby users obtain similar transport conditions in both cases¹⁰¹. This means two things, in practice: First, as far as the European end of the service is concerned, ports in Northern Europe and/or in the Mediterranean are geographically relevant.

Second, as far as the service that originates from Europe is concerned, we understand that there is no direct interchangeability among all European ports; the shipping services from the Mediterranean are only marginally substitutable for those from Northern European ports, identifying Northern Europe and Southern Europe as two separate markets. Nonetheless, it would be myopic to limit the application of EU competition only to intra-EU trades. In reality, liner transport is a cross-continental business.

¹⁰⁰ Commission notice on the definition of relevant market (1997) op. cit. para 9
¹⁰¹ Blanco (2007) op.cit. p. 443

If we understand shipping as an international business, and not just as an intra-European affair,¹⁰² we have to take into account an additional factor besides location. While the global freight for transport depends on freight rates between two certain port points, it also relies upon the homogeneity of the demand side. As far as the former is concerned we can say that it is a factor that affects the stability of the market.

As far as the latter is concerned, Blanco (2007)¹⁰³ analyses the geographic relevance of the market and concludes that container transport defines not only the product market but also the same geographic market whereby users demand homogeneous supply of transport service. Yet, an issue arises with reference to the factors that determine supply and demand substitutability: the question of whether it is the users (consumers) that define the type of the demand (thus making the carriers supply what the consumer requires), or it is the liner carriers that impose a product (the transport service) to the market to limit alternative options, needs to be resolved. As far as we know the Commission understands the geographic context of the market as subsequent to the geographical boundaries and criteria that define the product market.

In view of the above, I assume a negative argument about given supply substitutability criteria and I assume that it is possible to have limited supply in liner shipping as container vessels cannot accommodate all

¹⁰² See: *CEWAL I Decision*, Commission Decision 93/82/EEC, 1992, [OJ 1993 L 34], paragraph 90, as confirmed by the Court of First Instance in *Compagnie Maritime Belge and Others vs. Commission* Joined Cases T-24/93 to T-26/93 and T-28/93, [1996] ECR II-1201, para 205. See also the *Trans-Atlantic Agreement* (TAA decision), Commission Decision 94/980/EC in Case IV/34.446, OJ [1994] L 376, paras 288-296, as confirmed by the TAA judgment, *Atlantic Container Line and Others vs. Commission* Judgment of the CFI, in Case T-395/94,, paragraphs 72-74. See also *Trans-Atlantic Conference Agreement* (TACA Decision), Commission Decision 1999/243/EC 1998), OJ [1999] L 95, paras 386-396. See also (Revised TACA) Commission Decision 2003/68/EC, Case COMP/37.396, OJ [2003] L 26, para 73

¹⁰³ Blanco (2007) *ibid.* p. 443

possible locations. In a similar example to the airline industry, demand comes from various organised groups or individual customers; however, with airlines, flight travel can be achieved within certain airports' limitations. The possibility of having numerous airports presupposes an ideal substitutability in terms of supply, but is problematic in terms of its viability of service. So, if we inflate the argument, in a comparable situation where liner vessels stand for schedule airlines and tramp vessel for charters we understand that charter planes serve a particular purpose, i.e. to accommodate high seasonable demand. It is evident that scheduled flights are being substituted by charter flights. Likewise, I support then that the tramp is an established - and not temporal - substitute for liner shipping with a possibility of increasing its penetration to the liner business, through either a time charterparty of long duration or by building a persisting presence in a certain short-distance market. I discuss this issue further .¹⁰⁴

In any event, the EU accepts that the objective of a competition analysis should be to identify whether the actual competitors of the undertakings involved have EU based business and/or operation, and if they are capable of constraining competition in the relevant geographic market that has at least EU significance. This geographic significance is defined by the catchment ports; the existence of at least one is enough. Guidance on this issue can be found in the Commission Notice on the definition of the Relevant Market for the purposes of Community competition law¹⁰⁵ and on the EU Commission, within its Guidelines for Maritime Transport (2008).¹⁰⁶ Paragraph 17 of the Guidelines states:

¹⁰⁴ *Infra* p. 126

¹⁰⁵ OJ [1997] C372, para 5

¹⁰⁶ EU Commission's Guidelines (2008) on the application of Article 81 of the EC Treaty to maritime transport services, op. cit. para 17

“The relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas. A carrier (or carriers) cannot have a significant impact on the prevailing conditions of the market if customers are in a position to switch easily to other service providers.”

The above definition confirms the *TAA*, *TACA* and *P&O/Royal Nedlloyd*¹⁰⁷, *EATA*¹⁰⁸ and *FETTSCA*¹⁰⁹ decisions and judgments, whereby the Commission found that the European geographic market in containerised shipping between European and American trades was defined by the actual catchment areas in ports of Northern Europe.

Blanco (2007)¹¹⁰ correctly denotes that, in the *P&O/Royal Nedlloyd* case, the Commission talked about the geographical aspect of the service rather than the “relevant geographic market”. Nevertheless, the Commission’s argumentation is linked to the concept of container catchment areas of ports. This signifies a link between geographic criteria of the product market with the geographic relevant market. In the *EATA* and *FETTSCA* cases, the Commission focuses more on the product related market, while it has not mentioned the geographic one whatsoever.

¹⁰⁷ Peninsula & Oriental (P&O) Royal Nedlloyd. Commission, Decision Case No IV/M.831 -P&O / Royal Nedlloyd [OJ 1997 C110] para 35

¹⁰⁸ Europe Asia Trades Agreement (EATA), Commission Decision, relating to a proceeding pursuant to Articles 85 and 86 of the EC Treaty (Case No IV/35.134 Trans-Atlantic Conference Agreement) [OJ 199 L 95/1] para 519

¹⁰⁹ TAA (1994) paras 67-68, P&O/Royal Nedlloyd (1996) paras 34-38 and TACA Decision (1998) paras 60-75 and 519, EATA (1999) para 38, FETTSCA para 55.

¹¹⁰ Blanco (2007) p.443

The EU assumed jurisdiction only for the EU related area and not for the whole of the trade, thus avoiding issues of extraterritoriality.¹¹¹ Yet, there is doubt if the decision to narrow the market only by reference to the European service catchment ports does actually deal with the concept of international transport *per se*. Container vessel is an homogeneous market but this does not necessarily apply for the break-bulk liner service; however, both are committed to a certain quality and timely service. In practice, a narrow geographic interpretation affects interchangeability. The methodology followed in shipping market definition presents practical economic weaknesses, though it is legally rigid. I argue that it is paradoxical to merely regulate one aspect of an ocean borne undertaking that contradicts the international character of shipping. The risk here is that shipping companies may focus more on the niche markets than the overregulated EU ports. An analysis of a product market that takes into account only the point of catchment may cause unintended consequences. It may be useful to consider additional factors in our analysis of the joint venture agreement, such as the potential (future) availability of service in the form of available tonnage, i.e. carrying capacity at a given time; a fact that can be affected by changes in the supply demand equilibrium.

The problem today remains unresolved. In contrast to the analysis conducted by all parties regarding the product market, the dominant opinion regarding the geographic market accepts the narrow character that is framed within the limits of a certain trade. The position is followed by Blanco (2007)¹¹² and Pozdnakova (2008)¹¹³, who accept a narrow and well defined relevant geographical element and move

¹¹¹ Malgorzata Nesterowicz Anna, "The Mid-Atlantic View of the Antitrust Regulations of Ocean Shipping", *University of San Francisco Maritime Law Journal* [2004-2005] pp.45-88. Malgorzata denotes that the in a similar way, United States gives itself the power to apply its laws to the activities of other governments as long as the other government's activity prejudices U.S. carriers. U.S. law applies to any agreement, even in a foreign-to-foreign trade, if the trade has a direct, substantial, and reasonably foreseeable effect on U.S. commerce.

¹¹² *ibid* p.443 *et seq.*

¹¹³ Pozdnakova (2008) raises several issues in her chapter pp 251-269 about market dominance.

forward with their analysis on market power of shipping cartels based on the EU precedents. I believe, however, that a narrow geographic market definition has to be examined on case-by-case basis, as I deem the liner consortium a strategic position of vessels (the rationalisation of service) in a global context, and not in a certain area.

My view is that a liner consortium is present in a market not only because it may be profitable, but because it does not want to abandon its market share and its port slot. A similar phenomenon exists in air transport where some routes produce significantly more revenue for an airline than others, but the aggregated revenue of annual use is a result of all routes that a company operates. An airline company that sells flights to several destinations cross-subsidises losses on flights to unpopular destinations with revenue from profitable routes. A classical example is the so called “bankers’ shuttles” flights from London, Heathrow and Frankfurt airports, respectively, to JFK.¹¹⁴ The long-haul “*business class tickets*” on intercontinental routes are profitable enough to finance the other peripheral operations of British Airways¹¹⁵ and Lufthansa. While they possess market dominance in Heathrow and Frankfurt airports respectively, this enables them to suppress revenues in other scheduled routes and preserve their clientele. It makes business sense to offer a wide range of routes so that the passengers are attracted to an airline because of its breadth of coverage.¹¹⁶ Cross-subsidisation allows the provision of wide services; without it, the service could not be maintained.

¹¹⁴ See: Commission Decision 1999 relating to a proceeding under Article 82 of the EC Treaty (IV/D-2/34.780 — Virgin/British Airways) [OJ 2000 L30/1] paras 39-41. See also: Commission notice concerning the alliance between Lufthansa, SAS and United Airlines (cases COMP/D-2/36.201, 36.076, 36.078 — procedure under Article 85 (ex 89) EC) [OJ 2002 C 181/2] para 7

¹¹⁵ Bloomberg Report “British Airways Predicts Business-Class-Only Profit (Update2)” by Steve Rothwell and Beth Mellor - September 29, 2009 “The London-based airline, Europe’s third-largest, has historically made almost all of its profit from first- and business-class travel”.

¹¹⁶ Monti Giorgio, *EC Competition Law* [Cambridge University Press, 2007] p. 479

This practice of cross-subsidising ultimately allows dominant firms to build a cash reserve for further investments and finance losses in certain markets through profits obtained from others.¹¹⁷ The economic concept of *cross subsidies* from one market to another has been analysed in *Deutsche Post*¹¹⁸ and has significant importance for liner and tramp shipping; a topic that is analysed above and in Chapter Three¹¹⁹. Cross subsidies mean that some routes may be of great significance for a consortium to finance its operation from revenues obtained through other routes. Therefore a geographic market analysis could take into account this variable profitability indicator and correlate it with cross financing. We analyse the concept of cross subsidies below.

1.2.3.1 The Concepts of Cross Subsidies and Aggregation in Shipping

1.2.3.1.1 Cross Subsidies

In *Deutsche Post*¹²⁰ the Commission analysed the concept of cross subsidies. The monopoly postal service (Deutsche Post) offered its commercial parcel service at below-cost price with the aim of ousting competitors from the market. In this way, Deutsche Post covered the resultant losses with the aid of profits made in the reserved area. From an economic point of view, cross-subsidization occurs where the

¹¹⁷ See the comments of Virgin Atlantic regarding the alliance between British Airways (BA) and American Airlines (AA) in the press release: “Regulators Need To Stop This Game Of Monopoly” whereby it states: “...BA made £883 million in pre-tax profits. The year before, it made £611 million. It has huge cash reserves of £2 billion”.

<www.virgin-atlantic.com/en/gb/allaboutus/pressoffice/pressreleases/news/regulatorsneedtostopthisgame.jsp> accessed 10th May 2012.

¹¹⁸ *Deutsche Post AG* - Interception of cross-border mail, (DEUTCSHE POST) Commission Decision, Case COMP/35.141, [2001 L 125/27]. The case concerned an undertaking, the German Post Office, a monopolist in one market, which abused its position in another related market.

¹¹⁹ *Supra* p. 66 and *Infra* p. 233

¹²⁰ *Deutsche Post AG* op. cit. *supra*

earnings from a given service do not suffice to cover the incremental costs of providing that service, and where there is another service or bundle of services with earnings which exceed the stand-alone costs. Cross subsidies do not constitute a violation *ad hoc* unless they are used to eliminate competition. This means that the dominant undertaking attempts to hinder competition by cross-subsidising commercial services through other services.

Similar phenomena exist in shipping. Incumbents may cross-subsidise routes outside the relevant market. Incumbents may have part of their fleet committed in the consortium or in a pool in which they enjoy relative stability, and operate the rest of their fleet in an independent manner. The existence of cross subsidies means that the undertaking in question is active in multiple markets, while the degree of their homogeneity and the proximity and the structure of the relationship determines whether the dominant undertaking aggregates business benefits across them.

1.2.3.1.2 From the Aggregation of Benefits to the Aggregation of Multiple Markets

Here, I attempt to establish a theoretical basis for the argument of aggregation across multiple markets, by borrowing elements from existing legislation and theory.

I use the wording from the block exemption 906/2009. Its preamble makes it clear that in order to assess market share, an account should be taken not only of direct trade between the ports served by a consortium but also of any competition from other liner services sailing from ports, which may be substituted for those served by the consortium and more controversially, of other modes of transport.¹²¹ It thus expands the geographic definition of the market not only among

¹²¹ Chuah Jason, "The New Liner Shipping Consortia Block Exemption Comes Into Force" *Journal of International Maritime Law* [2009]

the relevant catchment areas, but also to neighbouring ones, taking into account potential substitutability from competitor lines or terminals.

As far as the aggregation of benefits across markets is concerned, I note that since maritime transport serves and supports multiple industries that relate with in a subsequent manner with the transport undertaking, there is undoubtedly a spill over of benefits. In fact, the maritime production output works as a real growth accelerator for the economy that it serves.¹²² I support my argument on the findings of Townley (2011)¹²³ who considers three advantages of aggregating across markets: it enhances consumer welfare, it is closer to the exercise that companies themselves conduct and it encourages a more holistic appreciation of agreements.

1.2.4 De Minimis

The Consortia Regulation block exemption, as is commonly the case in block exemption regulations, only applies to consortia which do not exceed a given market share threshold in the market where they operate. Regulation No 823/2000¹²⁴ set a threshold of 30% for consortia that operate within a liner conference and 35% for all other ones. After the end of the liner conference system to and from Europe,

¹²² Haralambides calculated that in the case of the U.S. merchant marine it was estimated that each US dollar increase in the final demand for shipping services produces \$2.5 USD of extra output in the U.S. economy. Of course, this percentage varies according to the case. See: Haralambides, H. 'The Economic Impact of Shipping on the National Economy', International Conference on Shipping, Ports and Logistics Services: Solutions for Global Issues, organised by The International Association of Maritime Economists, Vancouver, B.C., Canada, [1996], p. 16, <

http://www.maritimeeconomics.com/downloads/papers/HH_EIS%20Vancouver.pdf [accessed 03 July 2002]

¹²³ Townley, Chris, "The Relevant Market: an acceptable limit to competition analysis?" *European Competition Law Review*, 10, [2011] pp. 493-495

¹²⁴ Commission Regulation (EC) No 823/2000 of 19 April 2000 on the application of Article 81(3) of the Treaty to certain categories of agreements, decisions and concerted practices between liner shipping companies (consortia) [OJ L 100 , 20/04/2000] pp. 24 - 30

the new uniform market share threshold of the Consortia Regulation is 30% for all consortia and thus represents a reduction of the upper limit. In practice, this reduction will not affect the majority of existing consortia currently covered by Regulation No 823/2000, as most consortia have already been subject to the lower 30% market share threshold in the past — since their members operated until recently within a conference.¹²⁵

¹²⁵ Prisker Antje, 'Commission adopts new block exemption regulation for liner shipping consortia' *European Commission Competition Publications* [2010 n.1] pp. 8-12. In particular see p.10
<http://ec.europa.eu/competition/publications/cpn/2010_1_4.pdf>
accessed in 3rd June 2012

CHAPTER TWO

In Chapter Two, I analyse the following issues:

First, I examine whether a joint venture agreement *per se* is likely to restrict competition. I accordingly examine the agreement to set up and operate a joint venture, as a whole, in terms of its object and impact on the market. Moreover, I discuss the specific restraints which can be envisaged in the framework of liner and shipping joint ventures.

Second, I investigate the effects on competition of the subsequent clauses a consortium agreement produces. Accordingly, I examine the concept of dominant position in liner shipping by defining the critical degree of market power that amounts to a dominant position within the meaning of Article 102 TFEU. I also present cases where a dominant position can be held by a group of carriers; accordingly I discuss cases and criteria that amount to abuse.

2.1 Consortia Agreements under Article 101 TFEU

Once a “partial function joint venture”’s impact on competition has been established, it is important to analyse the specific clauses of the agreement that may create specific restrictions caught by Article 101. As mentioned already, *partial function joint ventures* are flexible agreements between parents and incumbents; moreover different

agreements exist among them. Pozdnakova (2008) lists the key practical implications of the agreement:¹²⁶

First, the common aspect of liner is the common use of fleet, equipment and facilities;

Second, the rationalisation of operations aims to ensure effective route coverage and even participation of member carriers in the service earnings;

Third, liner joint ventures may find it necessary to develop a joint commercial policy and assume the sales and advertising functions of their individual participants;

Fourth, the admission policy to their membership, their competitive relations with parent carriers and third party policy;

Fifth, an effect on carriers' competitive behaviour is unlikely if they have only a small proportion of their total vessels and costs in common.

2.1.1 Rationalisation Agreements

Before I proceed with my analysis, it is useful to distinguish between the general rationalisation agreements and those that are specific to shipping consortia. On the one hand the former are directly caught by Article 101(1)(b), which prohibits agreements to “limit or control production, markets, technical development, or investment”, and therefore are handled as negative practices by object. Their purpose is to limit cargo and sailing allocation and capacity, respectively. On the other hand, consortia are *de facto* special agreements delimiting the substantive and geographical scope of the joint venture. The co-operation agreement may provide for sailing patterns, ports to be called, vessel itineraries, the number, frequency and character of sailings and ports, transit times, as well as sharing revenues and

¹²⁶ Pozdnakova (2008) op. cit. p. 176

losses¹²⁷. In this context, the consortium rationalisation agreement aims to regulate supply in a certain trade, by properly allocating vessels and delimiting the routes in order to achieve stability¹²⁸. In a sense, rationalisation equals an *a priori* delimitation of services¹²⁹, hence they do not fall within prohibitions of Article 101 directly; on the contrary, they contribute to allocative efficiency and leave space for competitors.

However, a problem arises when the rationalisation agreements change their scope from geographic to product limitations. Pozdnakova (2008)¹³⁰ refers to this matter in view of the *Horizontal Guidelines*; for the rationalisation measures to fall outside Article 101(1), it is necessary to ensure that the agreements that restrict competition are objectively necessary and proportionate to the objectives pursued by co-operation. Thus, if the capacity agreements aim to determine which routes should be operated by which carrier; restrict members to offer capacity on the relevant market outside the venture context; or, ultimately prohibit members to re-enter routes from which they have withdrawn, these agreements are caught by Article 101 as they limit production and potential competition, respectively. See also *supra*¹³¹ (Irish Beef case, Baltic Max and Minibulk Feeder cases).

¹²⁷ See: Grand Alliance Agreement II, [FMC no 011602-012-MC] article 5, <www2.fmc.gov/agreement_lib/011602-012-MC.pdf> accessed March 2012.

See also the New World Alliance, [FMC 011960-007] article 2, <http://www2.fmc.gov/agreement_lib/011960-007.pdf> accessed in March 2012

¹²⁸ Usually rationalisation agreements contain a clause explaining the geographic scope of cooperation.

¹²⁹ Pozdnakova (2008) p. 184

¹³⁰ Pozdnakova (2008) p. 185

¹³¹ See *supra* §§ 326, 330, 334 respectively ,

2.1.2 Cargo space, fleet, investment and equipment sharing

The agreements can be categorised as deep-sea vessel agreements or individual cargo service contracts¹³². They can accordingly be materialised either in the form of clauses within a consortium agreement or embedded in a separate agreement - one common use of cargo space and fleet includes vessel sharing, cargo space and slot sharing arrangements, cross chartering agreements, as well as agreements that resolve matters about the standards of equipment that would be used by the members of the consortium. Though the scope of the cargo / fleet sharing involves cargo slot sharing, these agreements often move further to regulate investment decisions, contribution of capital, advertising, use of trade names.¹³³ Moreover, it is not uncommon for the consortium to extend its operation beyond the scope of maritime transport by regulating matters of inland transport. Sometimes, the agreement exceeds the flexible horizontal nature of co-operation creating progressively a vertical undertaking of multimodal transport.¹³⁴ The task of competition analysis is to quantify to what degree these agreements cause restrictions to competition and to identify cartel behaviour.

¹³² Ward Ezekiel, "Collaboration in Liner Shipping under Article 81 EC Agreements between liner shipping undertakings following the repeal of Regulation 4056/86", *Scandinavian Institute of Maritime Law Yearbook* [2008] pp. 1-103. In particular see pp: 62-75

¹³³ All the agreements with USA geographic relevance can be found in the website of the US Federal Maritime Commission (FMC) under section of <www2.fmc.gov/agreements/type_npage.aspx> [accessed 20/3/2011]. See also Pozdnakova (2008) p. 177

¹³⁴ Maersk/Sea-Land [OJ 1999/C 259/10] para 39. See also FEFC OJ [1994 L378/17] whereby the Commission decided to prohibit the members of the Far Eastern Freight Conference from fixing prices for the inland transport of containerised cargo.

2.1.2.1 Vessel sharing

The assessment of whether or not an agreement has as its object the restriction of competition is based on a number of factors, including the content of the agreement and the objective aims pursued by it. Evidence of subjective intent on the part of the parties to restrict competition is a relevant factor but not a necessary condition. Co-operation between liner shipping companies to supply a transport service or develop a new service does not on its own merit authorise the parties to raise rate levels, limit output, share markets or otherwise affect shippers or the competitive structure of the market¹³⁵.

First, I distinguish between agreements among incumbents and those between the consortium and independents. Both may be responsible for distorting competition; however, I believe that the latter type of agreement is more susceptible to violate competition rules (I analyse the issue below).¹³⁶ Second, I distinguish between vessel sharing and artificial vessel withdrawal. This does not mean that the two concepts are not interlinked; in practice, vessel withdrawal can be achieved as an indirect consequence (intended or unintended) of a vessel sharing practice. When consortium members attempt to control the supply by making special agreements with independents it is clearly a case of a cartel that is caught under Article 101.

For example, I refer to the prohibition of vessel sharing agreements (VSA) between a conference and independent liners, in particular as been investigated in “*EATA*”¹³⁷, *TAA*¹³⁸ and *TACA*¹³⁹ decisions. The

¹³⁵ Pozdnakova (2008) op. cit. p. 180

¹³⁶ *Infra* pp 115 and 121 et seq.

¹³⁷ European Asian Trades Agreement [OJ L 193, 1999]. See also EU Commission XXIXth Report on Competition Policy [1999] para 99

¹³⁸ Trans-Atlantic Agreement (TAA), Commission Decision 94/980/EC [OJ L 376, 1994] p.1. See also EU Commission’s XXIXth Report on Competition Policy [1999] para 99

¹³⁹ Trans-Atlantic Conference Agreement (TACA Decision), Case IV/35.134 (Trans-Atlantic Conference Agreement) [OJ 1999 L95/1]

common objective among the above consortia has been to increase prices by establishing a capacity management programme concerning scheduled maritime transport services for the carriage of containerised cargo. The purpose of the *EATA* was to increase prices by establishing a capacity management programme concerning scheduled maritime transport services for the carriage of containerised cargo from northern Europe to the Far East.¹⁴⁰, while in *TAA*¹⁴¹ and *TACA*¹⁴² the issues were the maintenance of excess capacity and the artificial raising of freight rates.

Thus EU competition law is very sceptical towards capacity controls. In the XXIXth Report on Competition Policy (1999)¹⁴³ it is clearly stated that “...capacity control can only bring benefits if there was a real withdrawal of inefficient or outdated capacity so as to bring about a reduction of costs, leading to price reductions for shippers”. It distinguishes between “artificial” and “real” withdrawal of vessels and cargo slots. According to this view an artificial capacity control is forbidden under Article 101(1)(a)&(b) as their object is to prevent competition and limit the production; consequently becoming a deterrent to further investment: Withdrawing vessels from the market is a way of keeping freight rates high in response to fluctuations in supply and demand.¹⁴⁴ This practice aims moreover to control investment that can be achieved in the sector—since supply is regulated, there is no need for newbuildings or modern vessels to enter the market. Obviously, such agreements affect shippers directly because they are deprived of available supply options; they are looking for a modern and reliable fleet.

¹⁴⁰ A capacity management programme is an agreement under which the parties agree not to use a proportion of the space on their vessels for the carriage of goods in a particular trade.

¹⁴¹ TAA (1994) para 96

¹⁴² TACA Decision paras 363-364

¹⁴³ Op. cit. para 100

¹⁴⁴ Supra p. 128, I discuss the matter of capacity adjustments.

It is worth mentioning that specific restraints undertaken by carriers or their conduct can indicate whether a probability exists for *spill-over effects*. An agreement may have an effect in another relevant market than the one covered by the agreement or an alliance in question. The matter is mainly analysed under Article 2(4) of the EC Merger Regulation¹⁴⁵, and provides us with a useful explanation, though it does not have direct application to horizontal partial function shipping consortia.

2.1.2.2 Limitations of Technical Development and Investment

By regulating the amount of investment and standards of assets used in the framework of co-operation, liner consortia can restrict competition in a serious way that will amount to restriction by object. These restrictions of technical development can be realised by agreements that control either the finance for the acquisition of vessels or acquisition restrictions per se. In view of the above I will analyse two issues: First, I will identify the actual scope of the agreements that restrict competition. Second, based on the analysis of innovation that I conduct on the relevant product market¹⁴⁶, I will try to establish that the concept of innovation, as used in the R&D sector, is also transferable into shipping contexts. I will thus examine whether the argument about investments can be used in shipping in the same way as it is used in R&D related industries. I see the matter from both aspects: delimiting competition in order to avoid investment costs and organising joint investment funds in order to be ahead of competitors.

¹⁴⁵ EC Merger Regulation op. cit. article 2(4): "...To the extent that the creation of a joint venture constituting a concentration pursuant to Article 3 has as its object or effect the coordination of the competitive behaviour of undertakings that remain independent, such coordination shall be appraised in accordance with the criteria of Article 81(1) and (3) of the Treaty, with a view to establishing whether or not the operation is compatible with the common market".

¹⁴⁶ See *supra* p. 55

The matter of restricting the competition in order to avoid R&D and innovation commitments may be a secondary product of a greater strategy. A better ship is a faster and more economical tool that creates quality of service; at the same time, a service of such kind is costly. Obviously, consortia agreements that have as their purpose the restriction of competition, subsequently allowing them to limit their investment, will amount to restriction by object. This directly affects both actual and potential competition¹⁴⁷, since when the market turns from dynamic to stable, the dominant firms enjoy a lazy oligopoly. During the period of liner conferences, many examples of lazy competition (effective, but not actual) were observed between the conferences and the independents. This matter is analysed below.¹⁴⁸

There is also the chance that highly integrated consortia may consider joint investments for acquiring vessels and equipment necessary. This may bring competitors into a disadvantageous position as joint decision, as such, would reduce their capacity to enter the market due to the high risk of investment and sunk costs. The competitors must always maintain a substantial cash reserve to deal with operating costs if they attempt to substantially reconfigure their fleet between routes. In any event, competitors need to make capital investment in addition to finding long timecharters in order to reduce costs, maintain quality and ensure continuity of supply¹⁴⁹.

The matter of the creation of barriers to entry by means of innovation is dealt within the Guidelines on Horizontal agreements¹⁵⁰. In addition, the subject is dealt with in the EU Merger Control Regime¹⁵¹ that applies to shipping as any other industry – though partial function maritime consortia do not classify as mergers - they provide us with useful analysis vis-à-vis potential competition with regard to

¹⁴⁷ European Night Services op. cit. para 136

¹⁴⁸ *Infra* p. 170 et seq

¹⁴⁹ *AIRTOURS PLC vs Commission*, (*AIRTOURS*), Case T-342/99 (2002) ECR II-2585 para 18(a)

¹⁵⁰ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings [OJ 2004/C 31/03] paras 70 and 71

¹⁵¹ Regulation 139/2004 applies to all sectors of the economy

investment and R&D factors on the occasion of merger. Thus, especially in shipping, a predominantly capital intensive market, whereby economies of scale¹⁵² do matter, investment and financial resources manipulation by a consortium inevitably become indicators of dominance¹⁵³ and upgrade to a restriction by object.

Thus, potential entrants may encounter barriers to entry in the form of risks and costs which have an impact on the profitability of such an undertaking. A restriction of competition is thereby achieved once the consortium makes any third party investment inefficient, as any sponsoring may not guarantee the desired return of investment¹⁵⁴. Pozdnakova (2008)¹⁵⁵, Green and Ruttley (1993)¹⁵⁶ refer to this condition and agree on the fact that consortia agreements that aim to restrict competition through joint investment policies do infringe competition law by object.

2.1.3 Joint Commercial Policy

¹⁵² BPB Industries PLC and British Gypsum Ltd vs Commission [1993] ECR II-389

¹⁵³ Dabbah (2004) op. cit. p330-331 referring to United Brands [1978 ECR 207] paras 122-124

¹⁵⁴ Since the competitors will be enjoying the necessary liquidity to proceed to frequent investments. Ultimately any benefits of such could also be reaped by its competitors. See: Guidelines on the assessment of horizontal mergers op. cit. para 67. A similar situation exists with spill-over inefficiencies that exist in the R&D industry, for example: a firm which has invested in innovation is not able to fully exploit its profit potential, because complementary firms have taken advantage of these investments without expending any costs. In this case, the software producers in the downstream market might gain profit at the expense of the upstream innovative firm. Likewise, in shipping, the cost-benefit on investments (through the pool financial resources) that the consortium members may enjoy could significantly discourage independent competitors from investing. The benefit for the consortium in question here would be triple: (a) full advantage of capital access and economy of scale, (b) discouragement of potential competition, (c) increased market share obtained by the impairment of the remaining independents. See: Maydell Patrick, Fina Siegfried (ed.) and Vogl Roland (ed.), "Non-horizontal Mergers under the EC Merger Regulation" European Union Law, Stanford – Vienna, Transatlantic Technology Law Forum Working Papers [2012 No. 3] p. 70

¹⁵⁵ Op. cit. p.180

¹⁵⁶ Green, N., and Ruttley P. "The consortia block exemption" [1993] European Transport Law p. 487

Consortia may also need to jointly develop policy with regard to their customers and competitors. A consortium may decide to develop an independent identity towards its customs or any third parties to market its services. A joint commercial policy¹⁵⁷ may consist of joint sales and (e.g. rate agreements /price fixing policy to shippers), joint advertising policy or even joint purchasing services from third parties (e.g. chandlery and bunkering).

Rate agreements are always part of antitrust prohibitions¹⁵⁸. EU Courts, after some years of empirical observation, hold that profitability is possible for liner ship-owners even when price competition takes place¹⁵⁹. For example, Munari (2012)¹⁶⁰ and Townley (2004)¹⁶¹ generally agree with the repeal of the block exemption in liner conferences: they deem that the ability to fix prices does not help to produce efficiencies.

General co-ordination does not fall within Article 101 TFEU. However, whether this practice is indicative of a price fixing cartel shall be examined by the facts of each case, something that is also generally accepted. I also here observe an inconsistency: the outright prohibition of 101 TFEU seems to contradict the case-by-case basis standard as introduced by the Maritime Guidelines.¹⁶² Since the abolition of the liner conferences, price fixing in shipping is strictly prohibited and falls under Article 101. Thus, price collusion in shipping consortia may arise if the members authorise one

¹⁵⁷ See: Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [OJ 2011/C 11/01] §6. “...Commercialisation agreements involve co-operation between competitors in the selling, distribution or promotion of their substitute products. At one end of the spectrum, joint selling agreements may lead to a joint determination of all commercial aspects related to the sale of the product, including price. At the other end, there are more limited agreements that only address one specific commercialisation function, such as distribution, after-sales service, or advertising”.

¹⁵⁸ Munari Francesco (2012) op. cit. § 26

¹⁵⁹ *Atlantic Container Line* (TAA)[2002] ECR, II-875, § 261

¹⁶⁰ Munari Francesco (2012) op.cit. § 26 p. 20

¹⁶¹ Townley Chris (2004) op. cit. p. 126

¹⁶² Op. cit. § 34

representative to negotiate the prices on their behalf, rather than generally organising commercial policy matters. This kind of representation becomes price fixing, in effect; conversely, consortia members have to maintain their individual identities and remain free to advertise their respective services separately.¹⁶³

As regards the issue of joint advertising policy and how this may affect the joint commercial policy, there is a large body of economic literature about the extent to which advertising, reputation and goodwill may operate as barriers to entry. There can be also economies of scale in advertising, and advertising expenditures will usually be sunk costs.¹⁶⁴ Within the *Horizontal Guidelines* it is clearly mentioned that: “...However, commonality of commercialisation costs increases the risk of a collusive outcome if the commercialisation agreement concerns products, which entail costly commercialisation, for example, high distribution or marketing costs. Consequently, joint advertising or joint promotion agreements can also give rise to restrictive effects on competition if those costs constitute a significant cost factor”.¹⁶⁵ In *Nestle/Perrier* and *United Brands*, the EC considered that advertising and promotion had enhanced United Brands’ large market share, because it had ‘induced the customer to show a preference for’ branded Chiquita bananas despite a large price differential with unlabelled and differently labelled bananas”.¹⁶⁶

In shipping, however, price leadership is the most decisive factor for selection (in combination with quality) rather than advertising. Yet, a common advertising policy may deprive or significantly discourage the shipper to differentiate between services; by the same token, if this

¹⁶³ See Pozdnakova (2008) p 188. See also: Herman Amos, *Shipping Conferences* [Deventer, Kluwer Law and Taxation Publishers, 1983] pp 140-143

¹⁶⁴ *Nestle/Perrier* [OJ L356/1 1992]. See also *United Brands* op. cit. See also: Jones, Alison, Sufrin Brenda, *EC Competition Law* [Oxford University Press, 3rd Edition 2007], p 419

¹⁶⁵ Op. cit. para 243

¹⁶⁶ *United Brands* (1978) op.cit. para 91

advertising is combined with a centralised sale of agreed co-ordinated tariff rates, it is likely to have a negative effect on competition¹⁶⁷.

2.1.4 Membership

2.1.4.1 Membership Duration and Conditions

The usual practice of liner consortia is to impose certain conditions on membership in order to protect their interests and committed investments against opportunistic and speculative members. Moreover, a consortium agreement may also contain clauses that restrict parent companies' ability to compete in the same fields that are also assigned to the joint venture¹⁶⁸. Agreements on membership are not expressly mentioned in the wording of Article 101(1) TFEU though conditions of entry and exit may distort competition. This means that when a restriction related to membership exists, it can only be considered in light of the main agreement and on the main subjects that those restrictions aim to protect. In *Gottrup-Klim*¹⁶⁹ the Court assessed whether the penalties about membership for non-compliance with the statutes are *proportionate* to the objective they pursue. For instance, if the amount of investment required is considerable (moreover the expected ROI is distant), it is possible for the agreement to impose such conditions as to enable the members to achieve these results. The critical criterion is the proportionality of penalties and/or exclusions to the objective the consortium pursues.

¹⁶⁷ See: Pozdnakova (2008) *ibid* pp 188-189. See also the Horizontal Guidelines *op. cit.* para 244 whereby: "In most commercialisation agreements, some degree of information exchange is required in order to implement the agreement. It is therefore necessary to verify whether the information exchange can give rise to a collusive outcome with regard to the parties' activities within and outside the co-operation. Any negative effects arising from the exchange of information will not be assessed separately but in the light of the overall effects of the agreement".

¹⁶⁸ Pozdnakova (2008) *op. cit.* p. 190

¹⁶⁹ *Gottrup-Klim e.a. Grovvareforeninger vs Dansk Landbrugs Grovareselskab AmbA* (Gottrup Klim), Reference for a preliminary ruling [1994 ECR I-5641] para 36.

Accordingly, entry and exit conditions (in the form of a grace period or initial entry periods) do not constitute a breach, provided that such restrictions have a definite and proportional duration¹⁷⁰ that can last as long as there is a proper return of benefits to the carriers that participate in the consortium.

In *European Night Services*¹⁷¹, the CFI considered whether special conditions on membership - if connected with particularly high investment requirements - could constitute a reason for exemption from (ex) Article 85. The Court held that, should there be any grounds for exemption, the amount of investment constitutes a significant factor for duration of exemption from Article 101(3). Thus, if the restraints are directly related and cannot disassociate from the creation of a legitimate joint venture they will be compatible with the provisions of Article 101(1), as they do not have as their object or effect the prevention, restriction or distortion of competition.

2.1.4.2 Non-Competition Clause among Consortium Members

¹⁷⁰ In *Dansk Pelsdyravlerforening* [1992] ECR II-1931, paras 74-75 the CFI held: "...what would be the state of competition if the clause did not exist? In order to have a beneficial effect on competition, the aim pursued by the introduction of the clause must itself contribute to free competition. In addition, the no-competition clause itself must be necessary and proportionate to the achievement of that aim." Similarly, in *Métropole Télévision (M6)*, *Suez - Lyonnaise des Eaux, France Télécom and Télévision Française 1 SA* [2001] ECR II-2459, paras 106-107 the CFI also held that: "...the condition that a restriction be necessary implies a two-fold examination. It is necessary to establish, first, whether the restriction is objectively necessary for the implementation of the main operation and, second, whether it is proportionate to it."

¹⁷¹ *European Night Services* op. cit. para 230: "...Court considers that the duration of an exemption granted under Article 85(3) of the Treaty...must be sufficient to enable the beneficiaries to achieve the benefits justifying such exemption, namely, in the present case, the contribution to economic progress and the benefits to consumers provided by the introduction of new high-quality transport services...moreover, such progress and benefits cannot be achieved without considerable investment, the length of time required to ensure a proper return on that investment is necessarily an essential factor to be taken into account when determining the duration of an exemption".

The criterion of *proportionate* restriction with regard to the expected *legitimate* benefits is therefore of paramount importance. Thus, an agreement may contain proportional measures that must have an overall *beneficial* effect on competition. These measures have to ensure return of the original investment and/or the *legitimate benefits* envisaged by the participants. A non-competition clause by a consortium prevents competition among parent shipowners and outright infringes Article 101. Clyde and Reitzes¹⁷² confirm that the level of freight rates is significantly lower on routes where conference members are free to negotiate service contracts directly with shippers.

For example, in *Remia*¹⁷³ the ECJ held that in order to have a beneficial effect on competition, such clauses must be necessary to the transfer of the undertaking concerned and their duration and scope must be *strictly limited to that purpose* provided that such conditions are ancillary to the main agreement and lawfully serve the purpose of this agreement.

This of course contradicts with the core of the intent that motivates owners to form a joint venture. In practice, the carriers join efforts not only when they wish to rationalise service, but in order avoid excessive competitive pressure from other shipowners; otherwise they would not have invested effort into forming a venture, if they were strong and well established. From the theoretical and judicial point of view, however, in order for the non-internal competition restriction to be

¹⁷² Clyde, Paul S., Reitzes James D., "The Effectiveness of Collusion Under Antitrust Immunity, The Case of Liner Shipping Conference", *Bureau of Economics Staff Report Federal Trade Commission Washington, D.C.*, [2005] pp. 34-40. After careful analysis of the samples there has been an increase in freight rates only for high value commodities. Even when firms apparently wield market power (i.e., set price above marginal cost), there may still be a cost-based explanation for the positive relationship between market concentration and price. As applied to ocean shipping, it is likely that there are some fixed (but, not sunk) costs involved in serving a given route. If those costs were to rise, some carriers would exit the route. Consequently, both market concentration and freight rates would increase, but the rate increase might only be sufficient to allow firms to again cover their fixed costs. Thus, the exercise of market power by individual firms does not necessarily imply that those firms earn profits beyond the normal level.

¹⁷³ *Remia Bv And Nv Verenigde Bedrijven Nutricia vs Commission*, Case 42/84 [ECR 1985 p 2545] para 20

legitimate it has to be strictly necessary, in scope and in duration, with the objectives of the venture.¹⁷⁴

2.1.5 Restrictions Imposed to Deter Losses of Benefits

A joint venture agreement may contain clauses that prohibit competitors to use assets or facilities for their purposes. This refusal of supply is, in such a case, directed not against either incumbents or independent competitors that wish to use for their own benefit the legitimate advantages of the venture. It is an action against the so-called “free riders” that wish to reap trading benefits at the expense of the joint venture.

Restrictions of such kind may not automatically constitute an infringement of Article 101 *ad hoc*. It is the exclusive right of the owners and possessors of assets in question to manage them in an exclusive manner. The matters of refusal to supply and essential facilities were analysed originally in 1995 within *Magill*¹⁷⁵, as well as in 1998 and 2004 in three other cases (*European Night Services*¹⁷⁶ – case with transport significance – and in *Oscar Bronner*¹⁷⁷ and in *IMS Health*¹⁷⁸). The EC courts list the conditions designed to prevent the restrictions of competition by parent undertakings that are in possession of infrastructure, products or services which are *necessary*

¹⁷⁴ The matter is addressed by Pozdnakova (2008) op. cit. p 194

¹⁷⁵ *Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) vs. Commission* (“Magill”) [1995] ECR I-743 para 56

¹⁷⁶ ENS op.cit paras 168, 190, 200-212 et seq.

¹⁷⁷ *Oscar Bronner GmbH & Co KG vs. Mediaprint Zeitungs und Zeitschriftenverlag GmbH & Co KG* [1998] ECR I-7791 paras 41 and 45.

¹⁷⁸ *IMS Health GmbH & Co OHG vs. NDC Health GmbH & Co KG* [2004] ECR I0000 paras 51-52 whereby it was held: “...it is for the national court to examine, if appropriate, in light of the facts before it, whether the refusal of the request for a licence is justified by objective considerations”..

or *essential* and/or *indispensable*¹⁷⁹ for entry to the relevant market, and thus not interchangeable¹⁸⁰.

First, if the aforementioned restrictions are not ancillary, they may intend to limit market size by object. *Second*, should the assets controlled be limited and available only to the consortia members, they are considered to be “*essential*” and “*indispensable*” for effective competition. In such a case, if competitors are deprived from the use of such necessary and essential conditions, actual and potential competition is thus distorted. Here, the case shows that these restrictions affect actual and potential competition making competitors unable to either penetrate a market - or continue working in the relevant market.

Hovenkamp (2007)¹⁸¹ asserts three more parameters which need to be taken into account:

- i) If a network joint venture's exclusion policy is to be justified by claimed free riding, the claim must be substantiated. This means that the defendant must be able to assert the nature of the free riding and provide evidence to support the assertion.
- ii) claimed “*free riding*” must be distinguished from simple competition or product interchangeability, which is both ubiquitous and desirable.
- iii) merely taking advantage of economies of scale or scope are not free riding, for they reduce no one's investment incentives¹⁸².

¹⁷⁹ *Oscar Bronner* op. cit. para 45. See also: *IMS Health GmbH & Co OHG vs. NDC Health GmbH & Co KG* [2004] ECR I0000 paras 51-52 whereby it was held: “...it is for the national court to examine, if appropriate, in light of the facts before it, whether the refusal of the request for a licence is justified by objective considerations”..

¹⁸⁰ *European Night Services* op. cit. paras 151, 209, 212, 215 and 221

¹⁸¹ Hovenkamp Herbert “Exclusivity Rules in Network Joint Ventures” Federal Trade Commission Office of Policy and Planning, [2007] available on the website of the FTC <<http://www.ftc.gov/opp/global/hovenkamp.shtml>> accessed May 2012. See also: Hovenkamp Herbert, “Exclusive Joint Ventures and Antitrust Policy” *Columbia Business Law Review* [1995].

¹⁸² Hovenkamp (ibid. 2007) uses the example of joint use of envelopes by two different companies, Visa and Diners, that had a common retailer, Citibank. In a

- iv) once properly defined free riding is found, it must be controlled by the least harmful alternative.

2.2 Liner Consortia and Market Power

At the heart of EU competition law is the view that market power offers a helpful preliminary filter to identify sources of competition problems. In shipping, and notably in tramp shipping, the matter of market power remains elusive as there are still debates regarding the boundaries of the "relevant market". There are several ways to think about market power, as Monti (2007)¹⁸³ presents four theoretical approaches: the first equates market power with the ability to increase prices (i.e. the neoclassical approach); the second equates market power with commercial power; the third sees market power as the ability to exclude rivals, so as to gain the power to increase price; while the fourth sees market power as a kind of formal jurisdiction test.¹⁸⁴

The ability to increase prices draws upon economic considerations. To a shipping consortium, market power means the ability to price profitably above the competitive level¹⁸⁵. In order to achieve such

similar example in shipping business, if a shipper uses the services of an independent competitor or a consortium member who also retains share of his business outside the consortium, who in turn uses the cargo slot of a consortium as a basis for independent inland services, then this does not constitute a free riding; whereas the independent takes advantage of the economy of scale provided by the joint venture. It may be that the independent/or said consortium member passes part of its cost reduction on to joint venture by "stealing" market share from the potential clients of the venture. None of this would be free riding, because one would anticipate that the consortium sales would increase, overall, since they now charter the space in question to the independent to serve clients that the consortium does not currently have. The cost reduction works both ways: that is, the cost reduction benefits both the consortium (as they may access clientele they do not have) as a whole and the independent as a whole.

¹⁸³ Monti (2007) op. cit. p. 126

¹⁸⁴ Monti Giorgio, "The Concept of Dominance in article 82", *European Competition Journal* [2006 v2 (special issue)] p. 31

¹⁸⁵ Carlton D.W. and Perloff J.M., *Modern Industrial Organization* [Harper Collins, New York, 2nd edition 1994] p. 8

results, it may try to reduce its output and increase its prices when its power is both significant and durable¹⁸⁶.

Market power is also a relative concept: the greater the power, the more harm the firm can inflict. Certain infringements are penalised only when the firm in question has significant market power, while other kinds of infringements (like anticompetitive distribution agreements) may be penalised even if the firm has less market power, provided it is able to cause harm to competitors or consumers.¹⁸⁷ Different thresholds of market power apply depending on the infringement in question; the anticompetitive risk is increased with higher levels of market power.¹⁸⁸ A second way of defining market power is to enquire whether the firm has greater commercial power than others in the market. We can use this example in tramp shipping, especially during opportunistic negotiations of prices and terms. The matter is analysed *infra*¹⁸⁹.

The third, usually labelled “post Chicago”, holds that a firm has market power when it is able to devise strategies that can harm rivals and so give it the power to raise prices and reduce output in the future. This approach is wider than the neo-classical, but it has the same aim: to penalise firms whose strategies have undesirable economic effects, such as the harm to competitors.

A fourth approach is to interpret market power as a jurisdictional concept.¹⁹⁰ This has been applied in Article 101; for example, the Commission has stipulated that certain types of agreements are lawful provided the parties’ market shares are below the threshold.

2.2.1 Indicators of Dominance and Power

¹⁸⁶ Werden G, “Demand Elasticities in Antitrust Analysis”, *Antitrust Law Journal* [1998 issue 66] pp 373-383.

¹⁸⁷ Monti (2007) op. cit p. 126

¹⁸⁸ CEWAL (2000) op. cit. para 137

¹⁸⁹ *Infra* p. 239 et seq.

¹⁹⁰ Monti (2007) op. cit p. 127

An agreement on joint determination of commercial aspects may not be assessed without reference to market power in terms of both supply and demand in combination with market structure¹⁹¹. Market power in liner shipping is the ability, by a single firm or collectively, to raise the level of tariff rates and affect the range and quality of shipping services supplied to shippers (such as prices, schedule and innovation) for a significant period¹⁹². Evidences of market power can be assessed in the industry by various indicators, e.g. high fixed costs, high concentration, price transparency, collusion and tariff rates significantly higher than the marginal cost of production. The collective nature of market power allows liner shipping companies to reach a substantial degree of dominance without acquiring sufficient market shares individually, as well as to share losses of revenue incurred as a result of rate decreases. On this matter, the DG Competition of the Commission¹⁹³ noted:

“An example of such an exceptional situation is where companies in a collective dominant position apply a clear strategy to collectively exclude or discipline a competitor by selectively undercutting the competitor and thereby putting pressure on its margins, while collectively sharing the loss of revenues... If in such an exceptional case it can be shown that there is a clear strategy to exclude or discipline including the mechanism to share the sacrifice in lost revenues between the collectively dominant companies and that there are negative effects on competition in the market or that there is a high likelihood that such effects will materialize, then also selective price cuts above average total costs will be assessed as predatory”.

The ‘special responsibility’ of a company with a substantial degree of dominance is particularly strict. In *CEWAL I*, the ECJ drew attention

¹⁹¹ Athanassiou (2009) in Antapassis Antonis, Athanassiou Lia, Røsæg Erik (eds) op. cit. p. 90

¹⁹² Pozdnakova (2008) op. cit. p 251

¹⁹³ Discussion Paper on exclusionary practices, para 128. See *infra* §511

to the fact that the conduct at issue was ‘that of a conference having a share of over ninety per cent of the market in question and only one competitor’, which had recently entered the market with a marginal share¹⁹⁴. A carrier (or group of carriers) that is powerful by virtue of having a near-monopoly in a market may not be allowed to further impair the structure of existing competition by engaging in price competition with a new entrant in markets where no competition exists at all, even in response to aggressive price competition.

In principle the Commission correlates market shares with market power, it also takes into account other factors (that will be analysed below). This correlation does not have fixed criteria and is considered on a case by case basis. Authors like Chuah (2005),¹⁹⁵ Blanco (2007)¹⁹⁶, Giles (2010)¹⁹⁷ and Nazzini (2011)¹⁹⁸, criticise the Commission for inconsistency in its evaluation of concentration in liner shipping.

In order to provide clarity and predictability to stakeholders as to how the Commission will apply the competition rules, the special *Maritime Competition Guidelines* (2008)¹⁹⁹ followed a public consultation in

¹⁹⁴ CEWAL I, op. cit. para 119.

¹⁹⁵ Chuah (2005) op cit § 12 p. 208

¹⁹⁶ Blanco Luis Ortiz (2007) op. cit. pp. 362, 473.

¹⁹⁷ Giles Ian, "Competition law starts to bite", *Maritime Risk International*, Volume 24, [2010-2011] pp. 10-11. Giles, in view of responses to the Norton Rose transport survey 2010, examines investigation procedure and discusses potential pitfalls in the management of shipping pools and the practice of slow steaming to reduce excess capacity. Advises large organisations to introduce training and implement a policy of transparency about relations with competitors. See also: Norton Rose Group (Law Firm), "Transport Survey, the Way Ahead" Third Report [2010] pp. 39-40

¹⁹⁸ Nazzini Renato (2011) op. cit § 205

¹⁹⁹ Maritime Competition Guidelines op. cit. The Commission decided to limit the validity of the Guidelines to a period of five years – until 2013 – pointing out that the Maritime Guidelines overlap with a number of other Commission guidelines generally applicable to all industry sectors. In part, such general guidelines are now more up-to-date than the Maritime Guidelines. Letting the Maritime Guidelines lapse would, in the Commission’s view, increase clarity and legal certainty and result in simplification via the elimination of unnecessary duplication. In a further indication that the long-standing “special” treatment of maritime transport has come to an end, the Commission states that “all the legal materials necessary to conduct

2007. In practice, the issue of market power in liner shipping derives from the assessment of several factors other than the market share, which, taken separately, are not necessarily deterministic. Basically, the formula for liner shipping market power contains three elements: the market share, market demand elasticity, and supply elasticity of competing firms.²⁰⁰ I believe that the demand and supply conditions in liner shipping affecting the degree of a carrier's market power have to be assessed in light of the economic and structural condition of the liner market. For this purpose it is also of paramount importance to take into account other also parameters that are sector specific such as:

- Market Share
- Cost Structure
- Economies of Scale
- Access to Capital
- Risk and
- Time.

These conditions, which will be analysed below, determine the capacity of competitors to countervail each others' market power and the constraints that, if imposed, distort actual and potential competition.

2.2.1.1 Cost Structure and Economies of Scale

The EU Courts and the Commission often classify cost structure and economies of scale as barriers to entry and exit from the market. The ECJ²⁰¹ stated in several cases (*United Brands*²⁰², *Hoffmann Roche*²⁰³

antitrust self-assessments in the maritime transport sector today can be found in those general guidelines."

²⁰⁰ Pozdnakova (2008) op. cit. p. 258

²⁰¹ In fact, during the administrative procedure, the applicants (TACA) produced various articles from the specialist press stating that APL and COSCO intended to enter the market in the short term. This however did not constitute a convincing argument, as the Court's ratio was in favour of potential competition; should consolidation of market share (through joint ventures) become a defence mechanism against potential market share loss proves the (successful or unsuccessful) effort of the alliance to discourage potential competition. The CFI said: "...the fact that a

and *BPB Industries*²⁰⁴) that large capital investments and economies of scale are considered as barriers to entry. The matter is subject to debate among jurists and economists, thus it cannot be fully addressed on its merits within this section; however, I shall present how these barriers affect potential competition within a shipping market.

In practice, regardless of the degree of concentration that exists in a certain market, these factors are primarily taken into account by a potential ship-operator before deciding to join a consortium or a pool. The cost structure and the availability of capital constitute essential conditions to enter the market because of the great amount of investment and liquidity required in order to operate a vessel. Of course, economies of scale in themselves are not an *ad hoc* barrier to entry or a reason for dominance²⁰⁵. Economies of scale allow companies to achieve the lowest possible cost and capture shares of the market to the least efficient scale of production. Perhaps an economy of scale can be deemed as an achievement of efficient shipping entrepreneurship from which the consumer is directly benefited; an *altera pars* on behalf of consortium participants. They claim that even where large incumbents entered into widespread exclusivity agreements with independents and shippers, an entrant would be able to compete by incurring the same losses or offering the same or lower prices. This matter is analysed further below.²⁰⁶

number of shipping lines, in spite of their links with the TACA parties on other trades, entered the transatlantic trade outside the TACA between 1997 and 1998 does not necessarily show that those lines represented significant potential competition during the period covered by the contested decision”, TACA *ibid.* paras 1025 and 1026.

²⁰² United Brands *op. cit.* para 122

²⁰³ Hoffmann La Roche *op. cit.* para 49

²⁰⁴ BPB Industries *op. cit.* para 116. The issue of economies of scale has been partially addressed, since the key issue has been the fact that BPB Industries had 90% market share.

²⁰⁵ Nazzini Renato, *The Foundations of European Union Competition Law: The Objective and Principles of Article 102* [Oxford University Press, 2011] p. 347

²⁰⁶ See section 2.2.1.4 Relative Market Shares among Competing Shipping Companiesp.109

However, markets can be manipulated and legitimate benefits can become tools of exploitation; hence, economies of scale combined with additional factors may give rise to a dynamic barrier to entry. For example, in *INTEL* (2009)²⁰⁷ the Commission found that, in addition to the economies of scale, sunk costs have also been a decisive factor. Thus, a dominant undertaking could discourage entry by committing to, or establishing a reputation for, a practice that denies an entrant a minimum efficient scale. Nazzini (2009)²⁰⁸ considers that this can be materialised in two stages: “*Ex ante*”, where entry becomes too risky and “*ex post*”, where economies of scale may contribute to a dominant undertaking’s ability to foreclose competitors who face much higher costs by implementing exclusionary above-cost price cuts.

There is always a bundle of conditions that contribute to the distortion of competition and market power, though these conditions are not organized into a unified checklist.

As Nazzini (2009) observes, the case law and the Commission practice considered economies of scale contributors to a dominant position without an integrated analysis of all the other factors relevant to the

²⁰⁷ It was held: “Therefore, in the light of: (i) the significant sunk costs in research and development, (ii) the significant sunk costs in plant production and (iii) the resulting significant economies of scale which mean that the minimum efficient scale is high relative to overall market demand, it can be concluded that there are significant barriers to entry in the market.” See: Intel 2009, Commission Decision of relating to a proceeding under Article 82 of the EC Treaty and Article 54 of the EEA Agreement [2009, COMP/C-3 /37.990] para 866

²⁰⁸ See: Nazzini (2011) op. cit. p. 347, where he criticizes this inconsistent practice in determining the critical market share: “The case law and the Commission practice, however, have sometimes considered economies of scale as contributing to a dominant position without an integrated analysis of all the other factors relevant to the dominant undertakings ability to harm competition. The elements that contribute to a dominant position are simply listed almost as if it were possible to pick a number of factors at random as long as they are in the abstract capable of being barriers to entry and happen to be present on the facts of the case”.. However, one must also take into consideration that the ECJ does not confine itself to the specific wording of the Treaties, nor it is always bound by the legal precedents. Its reasoning is “teleological”, meaning it aims the goals of the Treaties by using every legal theory. So perhaps the references of ECJ may not be exhaustive enough, however they do not show a lack of legal reasoning. See also: Dabbah (2004) op.cit. p. 342.

dominant undertaking's ability to harm competition. In order to discover these conditions the correct approach would first be to assess the gravity of all the barriers in question, in the context of a maritime market; as regards the economies of scale, by determining the essential costs of setting up a service at a level comparable to that of the allegedly dominant carrier or carriers²⁰⁹.

In this context, the benefits that derive from the management of cost structure and economies of scale become relevant once they are combined with other indicators that contribute to market power. In *TACA*²¹⁰, the CFI examined whether the *TACA* Conference had abused its collective dominant position. The Court examined, among many issues, whether the element of economies of scale constituted a barrier to entry for potential entry. There have been two significant findings from their examination of the facts:

- i) The elements of cost and economy of scale are related more to the potential competition than to the actual. It is a pure barrier to entry that contributes to the dominance that acquires additional gravity according to the circumstances. For instance, in *TACA (conference)* the parties were found to hold a dominant position in the relevant market - that, in view of the links existing between the *TACA* parties on other trades, it was probable that if those shipping lines entered the transatlantic trade, they would do so by becoming members of the *TACA*²¹¹.

²⁰⁹ Atlantic Container Line AB (*TACA*) and Others vs Commission (*TACA* Judgment), Joined Cases T-191/98, T-212/98 to T-214/98, CFI [2003] ECR II-3275 *op. cit.* para 1017.

²¹⁰ *TACA* Judgment (2003) *ibid.* paras 1024-1026

²¹¹ *TACA* Judgment (2003) *ibid.* para 1006

- ii) The economies of scale benefit, in two ways, the dominant party: a) it allows it to pool and adjust transport capacity and b) its control over the market allows it to pass on these savings achieved by economies of scale and efficiency by granting rebates, in order to ensure further loyalty of its customers.²¹²
- iii) Dominance reduces not only internal competition but has an effect on the objectives of the economy of scale. This practically means that the cost and economy of scale are discouraging factors for potential entrants (in the form of original investment and the sunk costs involved in case of business failure).
- iv) What should be combined with other conditions may also drive existing competitors to enter the established joint venture agreements in order to effectively deal with the matter. It is on these grounds that the Commission in *TACA* held that the fact that all these entries [n.b. the new entrants into the market in question] took place after the period covered by the contested decision is irrelevant; deciding an abuse by effect.²¹³

2.2.1.2 Capital

Capital requirements to entry are certainly important for any entrant in shipping transport. In *United Brands*,²¹⁴ the ECJ held that the particular barriers to competitors entering the market are the exceptionally large capital investments required.

²¹² Hoffmann-La Roche paras 90 and 91, and Michelin (1983) para 71

²¹³ *TACA* (Judgment) (2003) op. cit. para 1026

²¹⁴ *United Brands* op. cit. para 122

In *TACA Decision*²¹⁵, the Commission found that the investment necessary to enter the market could vary between USD 400 million and USD 2 billion. The operating costs are also high. At paragraph 288 the Commission states that an investment in the region of USD 500 million is necessary in order to be able to provide a fixed-day weekly service calling at three or four ports in northern Europe and the same in the United States; “*such a service requires a fleet of five vessels of similar speed and capacity together with a complement of containers of three times the capacity of the fleet*”.

2.2.1.3 Market Share

Market concentration is another factor to consider in assessing the possibility of abuse. My findings confirm that market power is assessed in shipping as a result of combination of factors; moreover market share becomes less relevant over time, though it continues to be considered as an appropriate criterion for assessing market power in cases under Articles 101 and 102 TFEU.²¹⁶

In fact, a significant number of economists²¹⁷ have investigated whether liner conferences in ocean shipping act as effective cartels by empirically testing whether the rate structure in ocean shipping is consistent with cost-based factors, the exercise of market power by conferences, or the exercise of market power by liner firms in a manner unrelated to the conference system.

The results were *conclusive* that *no statistically significant relationship exists between freight rates and the market share* of the conference serving the route - which indicates that conferences do not act as

²¹⁵ TACA Decision op. cit. para 545

²¹⁶ Pozdnakova, 2008,, op. cit, p. 252

²¹⁷ Clyde, Paul S., Reitzes James D., “The Effectiveness of Collusion Under Antitrust Immunity, The Case of Liner Shipping Conference”, *Bureau of Economics Staff Report Federal Trade Commission Washington, D.C.*, (2005), p. 1 <http://www.ftc.gov/be/econrpt/232349.pdf> [accessed 2 April 2009]

perfect cartels maximizing the joint profits of their members. In any case, the frequent suggestion that liner conferences are long-lived and stable is misleading in two respects.²¹⁸ First, due to the fact that the conferences themselves typically lasted only a few years, and individual conference membership fluctuated along with carriers' business strategies and secondly, all the steps towards deregulation and the introduction of price competition through confidential, individual service contracts have hastened the virtual demise of the conference system in less than ten years.

It is worth noting that due to the new legislation²¹⁹ which abolishes conferences, there are no published rates available by freight-forwarders' associations.

To begin with, Article 5(1) of the Consortia Regulation²²⁰ clarifies that the market share of a consortium is the sum of the individual market shares of the consortium members. In fact, this merely codifies the Commission's reading of Regulation No 823/2000. The individual market share of a consortium member includes all volumes carried by that member, whether within the consortium in question or outside that consortium — be it on the member's own vessels or on its behalf on third party vessels on the basis of a slot charter agreement or any other cooperation agreement (Article 5(2) Consortia Regulation). The

²¹⁸ Sagers Chris, "The Demise of Regulation in Ocean Shipping: A Study in the Evolution of Competition Policy and the Predictive Power of Microeconomics", *Vanderbilt Journal of Transnational Law*, Volume 39 [2006] pp.779-818, in particular see p. 815 where

²¹⁹ Since there are no uniform rates published, and transport rates are negotiated in bilateral basis (shipper-shipowner), the only way that one can obtain freight statistics is by contacting individual shipping lines and asking for their rates. It comes as a natural consequence that now the market is absolutely fragmented. In addition, rates published by the shipping conference pre-October 2008 were 'notional' and not linked to any economic trends. Up until the 1980s there were rate differentials for commodity (goods) type but that has broken down since then, and shipping conferences set the rates in bilateral negotiations with the shippers and freight-forwarders. Source: Email exchange with UK Freight Transport Association (www.fta.co.uk). See supra footnote 321.

²²⁰ Consortia Regulation op. cit § 44

rationale behind this approach is that a consortium member cannot really be expected to compete with itself.²²¹

The above thresholds constitute indicators of dominance and a starting point for further investigation by the Commission; yet the 30% mark was not based on any defined concerns relating to consortia which have a market share in excess of 30%. In particular, the Commission did not refer to any case where a consortium with a market share of more than 30% had given rise to concerns; moreover the Commission did not report any case where it had thought it appropriate to withdraw the benefits of the block exemption from a consortium with a less than 30% market shares.²²²

In any event, market share size and/or thresholds continue to be an important indicator for the establishment of market power. Regardless of the exemption threshold, the more concentrated and stable²²³ a market is, the more likely it is to be uncompetitive²²⁴. The obverse is also true: the less concentrated the market, the less likely it suffers from collusion.²²⁵ I believe this is one of the most logical and crucial arguments. Despite its simplicity, the logic behind this argument is the practical inability of public enforcement institutions to measure the marginal costs and firms' elasticity of demand.²²⁶ As the great majority of authors and the European Commission opine, liner alliances have the tendency to constantly grow their market share until they turn the market into a (natural) oligopoly. This statement is proven by studies, surveys, or empirical evidence by observing the

²²¹ Prisker (2010) op. cit p.10

²²² Levitt (2010) in Wareham (ed) op.cit p. 46

²²³ Hoffmann-La Roche (1979), op. cit, p. 15-16

²²⁴ Whish (2005), op. cit. p. 44

²²⁵ Athanassiou (2009) in Antapassis Antonis, Athanassiou Lia, Røsæg Erik (eds) (2009) op. cit. p. 90

²²⁶ The economic test of product substitution is regarded to determine dominance in the relevant market, a test of cross-elasticity of demand to determine whether the characteristics are specific. Where the relevant product market is narrow, the relative dominance of the undertaking is enlarged, see United Brands case.

absolute and relative market shares of conferences. But perhaps the best way to corroborate the systematic and substantial market power²²⁷ of consortia is by reminding oneself of their nature and objectives vis-à-vis the role of their competitors²²⁸.

By juxtaposing this parameter with the conditions in tramp shipping (in relation to the high risk factor that exists in shipping) an essential difference is observed: the efforts to minimise risk and instability is a derivative of the pursuit of greater consolidation of market share. Here is where a paradox is created: it is the same purpose of rationalising services that turns the market into oligopoly as pursues durability and stability. To prove this, I refer to the example of (currently abolished) conferences. It is a fact that, with very few exceptions, conferences have lasted in all the trades where they were first established and they have maintained their market share positions until being abolished.

Normally, the Commission understands market share as an important factor to measure market dominance and uses *current* market shares in its competitive analysis²²⁹. In *Hoffman – La Roche* (1979) the ECJ established that “...very large market shares are in themselves, and save in exceptional circumstances, evidence of the existence of dominant position. An undertaking, which has a very large market share and holds it for some time ... is by virtue of that share in a position of strength.”

²²⁷ On the concept of market power and the link between market power and market structure in general. Bishop, S., M. Walker, *The Economics of EC Competition Law: Concepts Application and Measurement*, (Sweet & Maxwell, 2nd Edition 2002).

²²⁸ See also §

²²⁹ As to the calculation of market shares, see also Commission Notice on the definition of the relevant market for the purposes of Community competition law, [OJ C 372, 9.12.1997], paras 54-55. See also Hovenkamp (2005) p.82, “...a large market share functions not only as a surrogate for market power but has also an independent role, as size of market share determines whether particular market behaviour makes economic sense or not”.

The subject is raised again in many cases²³⁰ and EC texts. Changes in historic market shares may provide useful information about the competitive process and the likely future importance of the various competitors, for instance, by indicating whether firms have been gaining or losing market shares.

In any event, the Commission interprets market shares in the light of *likely* market conditions; for instance, if the market is highly dynamic in character and if the market structure is unstable due to innovation or growth.²³¹ Changes in historic market shares may provide useful information about the competitive process and the likely future importance of the various competitors, for instance, by indicating whether firms have been gaining or losing market shares. In Philips/Agilent and in HP/Compaq cases the ECJ explored whether a high market share might not have been a proxy for market power in the rapidly adapting markets of electronic goods, where the changes in the market as a result of innovation were set to a 4-5 year cycle.²³²

²³⁰ Hoffmann – La Roche & Co AG vs. Commission of the European Communities, ECJ Case 85/1976, ECR [1979] para 41. See also: *CEWAL*, Commission Decision 92/163/EEC, appeal before the CFI: *Compagnie Maritime Belge (CEWAL I)*, *Cowac and Ukwai*, OJ [1993] L34 para 76. See also *TACA Decision (Trans-Atlantic Conference Agreement)* 1999/243/EC of 16 September 1998 (Case IV/35.134) [OJ L 95, 1999] para 85. See also: *Revised TACA Decision*, Commission Decision 2003/68/EC of 14 November 2002 (Case COMP/37.396) [OJ L 26, 31.1.2003], para 85 and 86. See also the *TACA Judgment*, CFI Joined Cases T-191/98, T-212/98 to T-214/98, *Atlantic Container Line AB and Others v Commission (TACA Judgment)* [2003] ECR II-3275 paras 924, 925 and 927

²³¹ Guidelines on the assessment of horizontal mergers under the EC Council Regulation on the control of concentrations between undertakings"; (OJ, C 31/03, 2004] para 15

²³² Philips/Agilent Health Care Technologies [2001/C 9/05] paras 31-32, where the changes in the market, as a result of innovation are defined to a 4-5 years cycle. In particular the Court held: "...the cardiac ultrasound market is R&D intensive and largely driven by technological innovations which take place at relatively rapid pace, on average every 4-5 years". See also: *HP/Compaq*, [2001/C 374/10] where again the volatility in the market affects the degree of market power. In fact, even a high market share of may not signify any market power. The Court held: "...The market investigation has however indicated that such a high market share is not a proxy for market power in this technologically rapidly evolving server market. Over the past five years, HP's and Compaq's market shares have been highly volatile, whilst Dell has continuously gained market share and has doubled its sales over the past three years. Dell, which enjoys substantial cost advantages derived from its built-to-order direct distribution model, is considered by the market as a dynamic and price

In addition to the aforementioned trend, current market shares are adjusted to reflect reasonably certain future changes; exit, entry or expansion.²³³ For example, the *Maritime Competition Guidelines* (2008)²³⁴ states that “*market shares provide useful first indications of the market structure and of the competitive importance of the parties and their competitors*” and “*...the Commission interprets market shares in the light of the market conditions on a case-by-case basis.*” Especially for liner shipping, “*volume and/or capacity data have been identified as the basis for calculating market shares in several Commission decisions and Court judgments*”.

The matter is also referred to in the *Guidelines on the assessment of Horizontal mergers* (2004)²³⁵, whereby the issue of market share is understood as the “*aggregate of pre & post merger shares*”. In this context, any post-merger market shares have to be calculated on the assumption that the post-merger combined market share of the merging parties is the sum of their pre-merger market shares.²³⁶ Hence, in view of the particularities of a complex and dynamic maritime sector, it is not only the current size of the market share that must be taken into account. The other main issues, summarised by Pozdnakova (2008)²³⁷, are:

- i) stability of market share over a certain period of sufficient length;
- ii) its comparison to the competitors’ endurance;

aggressive competitor with reliable and technologically advanced offerings...” para 39.

²³³ Astra Zeneca/Novartis [OJ 2000 C53/04] paras 150, 415.

²³⁴ Maritime Competition Guidelines op. cit. para 33

²³⁵ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2004/C 31/03], paras 8, 15, 29 and 70.

²³⁶ When relevant, market shares may be adjusted, in particular, to account for controlling interests in other firms. See: Exxon/Mobil, [1999/C 127/03] paras 446-458; Boeing/Hughes, [2000/C 157/03] paras 60-79; Hutchison/RCPM/ECT, [2001/C76/10] paras 66-75

²³⁷ Pozdnakova (2008) op. cit. p 254

- iii) the collective or individual nature of the market share held by the carrier.

Basically, there is no rule to easily approximate the market share size. So far, economists have not developed simple and effective rules for controlling dominant firm conduct. Accordingly, the criterion of market share may be a helpful benchmark in the absence of a consolidated policy; the view of the Commission is more or less established. For shipping, the Commission correlates market share with other factors that may contribute to market power.

In the case of the liner conferences, the EU accepted that, although conferences have lost some of their share in recent years, they still have a strong position²³⁸ in the market - enjoying between 40 and 70 per cent of the market share in the main trades. In contrast to this view, other economists²³⁹ argue that a market share of between 40 and 60 per cent would not create a dominant position. Thus, it is left to economists to interpret the boundaries of a dominant position, while at the same time the legislators, i.e. the EU Commission and the Council, accept one position or another, as their own position (as discussed earlier) has varied over the years.²⁴⁰

²³⁸ Brooks, M. R., *Sea Change in Liner Shipping: Regulation and Managerial Decision-making in a Global Industry*, [Elsevier Science & Technology, 2000] pp. 3-4 and 206. Also see: EU Commission discussion paper of July 2005, European Commission, Paragraph 89, citing in support of the Erasmus report, see *supra* 3.3.7.2

²³⁹ Bonassies, P., *Le règlement sur les conditions d'application des article 85 et 86 du trait aux transports maritimes* in Bonassies et al, in *Shipping law Faces Europe: European Policy Competition and Environment*, International Colloquium [MAKLU, Brylant, Brussels, 1995], p. 189-210; and Blanco, 2007, *op. cit.*, p. 457.

²⁴⁰ In 1985, when the Block Exemption for Liner Conferences was first adopted, the Commission held that a 60-70 per cent market share is an acceptable percentage for a liner conference. The remaining 30-40 per cent was reserved for tramp maritime companies. See European Commission 1985 Report paragraph 63. In its early cases, the Commission dealt with extremely high market shares in markets that were largely closed to competition. In its Decision of French-West African Shipowners' Committees (with a market share of almost 100 per cent), the Commission found that the Committees created a true collective monopoly on top of the liner conferences in trades in question and had abused their dominant position according to article 102 TFEU; Commission Decision 92/262/EEC of French-West African Shipowners' Committees, OJ [1992] L134. See also AKZO below § 456. Hence, a limit of 50 per cent is thereafter considered as a sufficient platform, and that if it is exceeded it is highly probable to constitute dominance.

Those distinctive approaches are apparent again in *CEWAL* case. In *CEWAL*, the Commission established the existence of a dominant position with a market share of 90 per cent. Nevertheless, within *CEWAL*, a more compliant stance to the traditional aspect of competition law has been established. One could say that it is the first step toward the abolition of competition law immunity in shipping, completed in 2009.

Thus, in *CEWAL*, the Commission put the members of the conference in a collective position hence, declaring that the market share of 70 per cent is enough to establish a dominant position. In this way, the Commission has taken steps to align with the *acquis*. Blanco (2007)²⁴¹ refers to this *acquis* as an ‘orthodoxy’ that exists in the heavy industry and tertiary sector of the economy, converging the standards between maritime and inland companies and thus adopting the rules established earlier;

The cases mentioned exhibit a trend toward progressive reduction in the standards required for a dominant market share, and the introduction of other factors that contribute to market power. At first, this can logically be conceived by the progressive erosion of the market shares that had been observed in liner conferences where statistics had shown a reduction in market shares, as they are being substituted by independent liners or tramp services. This may apparently be connected to the volatility of the maritime cycles. Thus, unless a merger had occurred among liners that would strengthen their market share, their share would eventually decrease. This, however, does not signify that market power and shares are not correlated. Although the issue of effective competition has been raised by the liner companies, the EU Courts (the CFI followed by the ECJ) have held that a large market share *may* reveal a dominant position;

²⁴¹ Blanco (2007) op. cit. p. 458

in contrast, a reduction of even *very substantial market shares cannot, in itself, prove the absence of a dominant position*.²⁴²

In *P&O Royal Nedlloyd*,²⁴³ the Commission confirmed that actual competition did exist because the post merger share of 30 percent of the market was in the hands of two independents and cleared the merger between the parties. The Commission went on further to investigate the effect on that market by the combined share of P&O Nedlloyd on the trades in question. In the absence of a sizeable market share it emphasised the matter of the link between the merger and the conference of which the parties were members in order to confirm that effective competition could be also protected. In this case, again, the market share worked as a possible presumption of dominance and, because it was low, the merger was cleared. The cases of *EANZC* and *ANZELA* are important since the Commission evaluated the degree of effective and actual competition in a conference irrespective of their market share. The Commission examined common market shares of Nedlloyd in *EANZC*²⁴⁴ and *ANZELA*²⁴⁵, and recognised that there was only effective competition, and not actual competition, despite the fact that the routes covered only between 50 and 60 per cent of the market - while the independent operators had a combined market share between of 15 and 20 per cent.

The Commission has followed the *P&O Nedlloyd* methodology, studying the consequences of the notified operation for the market position of the conferences and consortia (in addition to that of the notifying shipowners), it has not deemed that market share is linked to possible dominance and its abuse. Also, in the *MAERSK* /

²⁴² *CEWAL I* (1996), op. cit. § 102 paras 77-81.

²⁴³ *P&O Royal Nedlloyd* op.cit paras 63 and 65

²⁴⁴ *EANZC* Conference (between Northern Europe, Australia and New Zealand), Nedlloyd (1996 case), op. cit, paras 88-101

²⁴⁵ *ANZELA* Conference (between the Mediterranean and Australia and New Zealand), Nedlloyd (1996 case), op. cit, paras 88-101

SAFMARINE case, despite the substantial market share which the shipowners possessed (55 - 65 per cent), they were found not to be reinforcing their market position.²⁴⁶

Moreover it was stated that market share was not enough for the proposed merger to enjoy a dominant position.²⁴⁷ Likewise, in *MAERSK SEA-LAND*, as regards the *TACA*, *USSEC*²⁴⁸ and *IPBCC*²⁴⁹ conferences, all of which had market shares of below 50 per cent, the Commission reached the same conclusion.²⁵⁰

In contrast to this, in the *EATA*²⁵¹ and *FETTSCA*²⁵² cases where the conferences in question held 86 and 80 per cent of the market shares respectively, the Commission refused to grant exemptions since they did not fulfil the first condition of Article 101(3). Yet again, the Commission did not take into account the arguments of the shipowners²⁵³ referring to the critical mass and sustainability of their

²⁴⁶ *MAERSK / SAFMARINE* Prior notification of a concentration, Case No IV/M.1474 (*MAERSK / SAFMARINE*) para 24 EMPTY REFERENCE

²⁴⁷ *ibid.*

²⁴⁸ United States South Europe Conference

²⁴⁹ The Indian subcontinent shipping consortium, known as the India Pakistan Bangladesh Ceylon Conference (IPBCC); it has also been referred to as the 'Karmoham Conference'.

²⁵⁰ *MAERSK SEA-LAND* (1999) case, *op. cit.*, Paragraph 21

²⁵¹ *Europe Asia Trades Agreement (EATA)*. See Commission decision *EATA* (1999) 99/485/EC. OJ [1999] L193 p. 23, paragraphs 80, 188 and 234. It is illustrative of the Commission's approach in this respect that it has never accepted the need for 'stabilisation agreements' or 'capacity management programmes'. Agreements of this kind, under which participating lines agree not to use a proportion of their capacity, are inimical to the basic aims of the EC competition rules. Their sole purpose is to increase prices by limiting output. As mentioned, such agreements have been condemned by the Commission in its TAA and EATA decisions. It should be emphasised that the fact that the guidelines adopted by the parties to the agreement are described as being purely 'voluntary' will not cause the Commission to view such guidelines in a more favourable light.

²⁵² Far East Trade Tariff Charges and Surcharges Agreement (*FETTCSA*). See Commission decision *FETTCSA* (2000) case 2000/627/EC, OJ [2000] L268, p. 1

²⁵³ *Ibid.* Paragraph 36. According to their position 'the share of the FEFC on the north Europe/Far East trades had by 1990 fallen to approximately 59 per cent and the market sharing agreement was terminated for the principal reason that the parties to it no longer had sufficient critical mass in the NE/FE trades to regulate reserve capacity in a way that would contribute the stabilisation of trades'. Likewise, in Wallenius Lines merger with Hyundai, the Commission examined the compatibility with EU competition law in a particular trade between the merged companies and a third party 'NYK'. The WALLNYK agreement had to be terminated, based again on the market power assumption: should Hyundai join, the trade would produce a significant change in the market shares (that would reach 80-85 per cent

dominant positions. In other words, the argument about the stability that conferences serve, i.e. the fundamental reason and justification for the block exemption under (the currently abolished) Regulation 4056/86²⁵⁴, has been repealed by the new law, Council Regulation 1419/2006. From the shipowners' point of view, this results in destructive competition on the already hard-pressed ocean shipping lines; from the EU Commission's point of view, it is a step towards actual and effective competition, better freight rates and a measure that responds well to the demands of the developing world.²⁵⁵

I deem that the stance of the Commission with regard to market share is governed by a degree of uncertainty due to the fact that its analysis has not focused on the exact definition of the dominant position *per se*. Instead, it valued only the level of actual competition; hence the criteria that constitute a dominant position have not been made clear in case law. Perhaps it would be also wise to consider market shares in relation to the extent of competitive rivalry over time, without disregarding the other surrounding factors, and examining the degree of contestability within a market.

Therefore, a large market share may not necessarily be indicative of an uncompetitive market as is evident generally within the shipping industry. We already know from the methodology that is followed by the Commission in Merger Control cases that market share plays an important role - but not a solely determining one - in the exercise for confirming post-merger actual and effective competition. For instance,

compared to the 55 per cent that was the pre-merger condition). Although the Commission in *ANZELA* and *EANZC* cases have introduced the concepts of actual competition, in *WALLNYK* the EC returns to the 'conservative' philosophy of evaluating a conference's compatibility with Article 101 based on the market share by establishing a platform of 50-65 per cent market share depending on the case.

²⁵⁴ The justification for the block exemption in essence assumes that conferences bring stability, ensuring exporters reliable services which cannot be achieved by less restrictive means. See: Council Regulation (EC) No 1419/2006 *op. cit.* para 3

²⁵⁵ Townley Chris, "The Liner Shipping Block Exemptions in European Law: Has the Tide Turned?", *World Competition* Volume 27(1) [2004] pp. 107-153

the endurance of the competitors and their inherent capacity to respond to the behaviour of the dominant firm, as per point (ii) above, is also a relevant concern. I agree with the CFI analysis made in *AIRTOURS*²⁵⁶ that the power of the competitors to respond to anti-competitive strategies of the dominant party is also an essential part of the analysis. Though the Court did not use the word “inherent”, it indirectly defined the actual abuse in relation to the capacity of the competitor to respond to the tactics of the dominant party (not objectively). An analysis, then, must determine whether the concentration alone generates enough market power to discourage (actual and potential) competitors from making an expansion; market power would be identified as the factor that renders expansion for competitors *intrinsically more risky* than the strategy of remaining small and buying capacity on competitive markets²⁵⁷. In other words, an analysis must investigate foreseeable reactions of current and future competitors, as well as of consumers, so as to not jeopardise the results expected from the large operator’s common policy – that, after all, aims to rationalise their economies of scale. This will allow us to confirm whether a consortium is abusing its dominant position or if its behaviour is merely a response to market trends.

Another example: a consortium may reduce available cargo capacity to a level below what is required to adjust to anticipated trends in demand. The question here is whether the competitors can respond effectively to such a reduction in capacity, put on to the market by the large operators to a level below estimated demand, by increasing their capacity to take advantage of the opportunities inherent in a situation

²⁵⁶ See supra § 149

²⁵⁷ *AIRTOURS* (2002) op. cit. para 212. “the package holiday industry is one in which alternative business strategies may produce good results and one in which there is little room for operators of intermediate size...undertakings may either operate on a small scale and buy on competitive markets the capacity which they need in order to supply package holidays (airline seats and hotel beds). Alternatively, they may decide to produce a large volume of package holidays. Those undertakings will nevertheless find it risky to buy in large quantities of capacity (particularly airline seats) on competitive markets, which is why it is necessary for them to become vertically integrated, at least in air transport services.”

of overall under-supply and thereby counteract the creation of a collective dominant position. An analysis must establish if competitors can actually counterbalance the dominant undertaking with services that shall fill in the gap in such a way as to render the dominant oligopoly unviable. In *AIRTOURS*²⁵⁸ what has also been demonstrated that a large market share, even combined with vertical integration, does not necessarily lead to viability and efficiency. Hence, a correct analysis would be to see whether the behaviour of the dominant undertaking is capable enough to impede competitors to invest and expand further²⁵⁹, and confirm to what degree the practices of the dominant firm make expansion intrinsically riskier for the competitors than the strategy of remaining small and buying capacity on other competitive markets.²⁶⁰

Once more I revert to the issue of time context as examined on page 126. For this reason, market share makes better sense in relation to its fluctuations over a period of time. Perhaps it is necessary to reconsider the conclusion that a reduced market share may not be equally important, in contrast to what was held in *CEWAL I*. temporal market share correlation may thus indicate that the market in question is in fact competitive, even though during the period in question it may have had a very high market share (exceeding the *de minimis* platform). A large market share may be quickly whittled down, due to the phenomenon of maritime cycles and the recession cycles of the global economy, even if a maritime firm makes excessive profits in an industry for a certain period; in consequence, other firms enter the market. Based on this, operators constantly review their schedules and services. It is a fact that shipping services are provided by means of a highly mobile factory, each unit of which supplies capacity in large discrete 'lumps' (e.g. cargo hulls/tanks or available container

²⁵⁸ Ibid para 212

²⁵⁹ Ibid para 212.

²⁶⁰ See also Munari Francesco (2012), op. cit. § 26 p. 23

capacity etc.) that can either accommodate cargo or remain empty, failing to pay the investment.

There is another aspect of concentration that should be considered: a consortium that includes small firms becomes the vehicle for them to access greater benefits, giving them the opportunity to acquire an indirect critical mass. Blitz (1993)²⁶¹ argues that conferences also help to coordinate their members' joint investments and thereby allow small firms in this industry to exploit vast network economies (akin to those in other transportation industries) that they could not capture on their own.

In the main, I am inclined to agree with the established view, however I also evaluate the importance of correlating the market share in a specific time context. The main meter of the market power of a liner shipping conference is its ability to deviate profitability from marginal cost pricing. Hence, measuring marginal cost level should be the most appropriate base assessing the market power of a given company.²⁶² At the moment, it is very difficult to effectively measure profit margin in shipping for reasons analysed²⁶³ in combination with the large market share and the capacity to withstand competitive pressure through the maritime cycles (statistical element of duration.)

²⁶¹ Blitz, David 'Ocean Shipping Economics: Free Trade and Antitrust Implications', *Contemporary Policy Issues*, Vol. 11 (1993), pp. 69-80. It is argued (by whom? If by Blitz, then why not cite him directly? Also, this footnote seems almost a direct repetition of the statements made in the text—why include both?) that conferences also help to coordinate their members' joint investments and thereby allow the historically small firms in this industry to exploit vast network economies (akin to those in other transportation industries) that small firms could not capture on their own. <www.accessmylibrary.com/coms2/summary_0286-9280363_ITM> [accessed 3 April 2009]

²⁶² Herbert Hovenkamp's hornbook, *Federal Antitrust Policy: The Law of Competition and its Practice*, (MN West, St Paul, 3rd Edition, 2005), pp. 80-81. Also see: TACA decision, *op. cit.*, § 920-921

²⁶³ *Infra* section 2.2.3.1 Unfair and Excessive High Freight Rates).

2.2.1.4 Relative Market Shares among Competing Shipping Companies

Relative market shares are just as important as absolute market shares; that is, the market shares of the closest competitors to the consortium in a dominant position. In the section above, the strength of dominance with regard to the actual market share held by the independents and other transport operators compared to those of the consortium. Relative market shares that are held by competitors of the liner conference operators may be affecting the competition conditions. The independent liner firms or firms that participate in a consortium negotiate their rates with shippers through the independent action provision. Since *CEWAL* (1992), "independents" are defined those that do not belong to a consortium (or a conference). This definition should be expanded to include tramp companies, as they successfully contribute to competition.

The *AIRTOURS* case sets interesting criteria, critically assessing combined transport and tourism services with a focus on effective competition. The Court examined, in the anti-competitive situation anticipated by the Commission, *whether the hundreds of small operators already present on the market, taken as a whole, can respond effectively to a reduction in capacity* put on the market by the large tour operators to a level below estimated demand by increasing their capacity to take advantage of the opportunities inherent in a situation of overall under-supply; and, whether they can thereby counteract the creation of a collective dominant position.²⁶⁴ The Court found that regardless the size of each of the competitors, the fact that the competitors are numerous signifies that there is actual and effective competition. I use the *AIRTOURS* case as a model, as I would like to diverge for a moment from the traditional perspective where a

²⁶⁴ op. cit. paras 213-214

confirmed abuse is a self-standing reason that distorts competition. Small operators, potential competitors, and consumers can counterbalance an oligopoly and their reactions are usually underestimated in study.

I argue that, in shipping, both abuse and market power must exist in order to cause distortion of competition and damage to the consumers. In *AIRTOURS*²⁶⁵, the Commission had to establish that smaller tour operators would be incapable of successfully countering the creation of a collective dominant position. In practice, the ECJ appreciated²⁶⁶ that the market in question featured several small operators which could increase their market share, suggesting they were “*extremely keen to make the most of any opportunities afforded as a result of the leading tour operators making capacity reductions unconnected with foreseeable trends in demand*”.

Competition from independents is the most important ‘limitation’ the development of market power that consortia face,²⁶⁷ and the most necessary for the fulfilment of the fourth condition of the exemption in Article 101(3). The market shares of independents (in the liner shipping sector) have gradually increased since the introduction of containers at roughly the same time as the UNCTAD Code was adopted. From 10 per cent in 1979 (when the Regulation 4056/86 was being debated), the independent market share had reached 22-40 per cent by 1983²⁶⁸; exceptionally, independents enjoyed market shares reaching 70 per cent²⁶⁹ in Canadian trades. Hypothetically, an independent which controlled 20 percent of the market would not be adhering to its traditional role. Based on this evidence, one can assume that a liner outside a consortium would find it difficult to

²⁶⁵ *AIRTOURS* (2002) op.cit. para 208

²⁶⁶ Ibid. para 220

²⁶⁷ Blanco, 2007, op. cit, p. 463

²⁶⁸ House of Lords (1983): Competition Policy: Shipping, (House of Lords. Select Committee on the European Communities, Session 1985-86, 3rd Report), [HMSO, London 1983], Paragraphs 18-19

²⁶⁹ Also see: Sletmo and Holste, op. cit, p. 257

survive unless it completely changed its organisational structure and shareholders' profiles. On the contrary, belonging to a consortium is in a large liner company's interests, should the principals wish to maintain their market position and minimise market erosion.

Progressively, in EC competition law, the market share held by independents has evolved to be a criterion (though not an important one) in determining the dominance of the bigger service providers. In various cases, the EU Commission has emphasised the factor of market share dominance and, for ancillary reasons, only has relied on the share of independents²⁷⁰ *per se*.

Until their abolition, conferences could impose direct or indirect control over the trades; consequently, they had access to capital with good terms (low interest rates) and introduced new and better vessels.²⁷¹ In practice, every shipowner secures access to capital by providing creditors only with a charterparty. Better finance brought

²⁷⁰ In *CEWAL I* (1992) case, 'Grimaldi' and 'Cobelfret' (the competitors of Compagnie Maritime Belge) were found to hold only 2(should this say 20?) per cent of the market. Though this number is reasonable, the Commission decided to put forward the argument that market share of the independents and that of the conference was enormous. See in *CEWAL I* paragraphs 57 and 59. Likewise in *TAA*, where the five most important independent shipowners held around 20 percent of the market, the decisive factor behind the decision was the extent of collusive agreements between the conference members. Evergreen Marine Corp, the main competitor, held a noticeable market share - but was deemed incapable of exerting pressure on the conference. See Commission Decision *TAA* (1994) paragraphs 146, 148 and 427. In *P&O Nedlloyd* (1996) though the share of the conference had a 35-40 per cent, none of the independents' share exceeded 5 percent. See Commission Decision *P&O/Royal Nedlloyd* (1996) paragraphs 68-69 and 73. In *TACA Decision* (1998), despite the large market share of the independents that was around 30 percent, the conference was found to hold a dominant position in the market. See Commission Decision *TACA Decision* (1998) paragraphs 244-266. Finally in *FETTCSA*, though the independent liner companies did not disclose their exact market share (it is estimated that together they make up some 20 percent of the market), the Commission overcame the lack of evidence and reached a decision without them. The major criterion of market dominance has been the merger of the *FEFC* and *EATA* conferences into a greater association, the *FETTCSA*.

²⁷¹ The argument of quality, as expressed by the *ELAA*, is supportive of the argument that the liner shipping market is not homogeneous. The *ELAA* contests the view that liner shipping services are all the same. The level of quality of service differs. Shippers have described as their most critical performance factors network and delivery, followed by price. See: *ELAA Response to Issues Paper*, [30 October 2006], p. 6 <<http://www.elaa.net/files/pdf/ELAAResponseIssuesPaper.pdf>> [accessed 20 January 2009]

better ships; better ships brought better quality and longer COAs. The rule with the established consortia, however, is that they enjoy better access to capital compared to the independents and this works as a barrier to entry. In contrast, independents and new entrants settle for the confined part of the market allowed to them by the conferences, affecting their capacity to raise capital. This works as a residual barrier to entry for any smaller competitor; should it be combined with practices and intent to eliminate competition by the dominant consortium, then it is an aggravating factor for the consortium. Historically, the independents' market share was minimal, in both collective and individual terms. This, however, has changed recently, as independent companies establish themselves in certain trades.

Though there is no balance between consortia and independents, the situation becomes evidently more unbalanced as soon as market entrants arrive in the market in question, increasing the cargo carrying capacity.

Nonetheless, one must recall that the revenues of independent carriers always exceed those of the conference carriers due to flexibility of operation. Therefore, it is possible that the following situation arises:

- A carrier currently operating outside the said geographical market would like to enter the market as an independent;
- If it can afford to cover its low operational cost, it will negotiate for a lower price, deducting revenues from the consortium below their operating cost; the consortium would have to exit the market;
- This may cause the voluntary exit of one or some of the incumbents;
- Once a new entrant is established, the competing independent carrier could find it profitable to join the consortium, since a

gap would have been created by the withdrawal of a conference member;

- This would consequently reduce the number of independents by one, and the profit of all carriers would once again increase.

The above hypothesis was first raised as a possibility by Blanco (2007)²⁷². Although Blanco (examining the matter of block exemption in liner conferences) considers it very unlikely that free competition will encourage single undertaking monopolies, he acknowledges that an immediate prohibition of conferences may ultimately have no practical effect if the oligopolies are not tackled head on by competent authorities.²⁷³

Conversely, Bredima (2010)²⁷⁴, in her plea for global governance competition rules appropriate to a global industry, disagrees [with emphasis] with the view of those who believe that the abolition of protective regimes will be beneficial for the industry as well as the consumer. She supports that any effort of unilateral deregulation in the EU, without consultation with the rest of the world, may not bring about the intended (competitive) effects; she holds that the abolition of conferences will certainly lead to oligopoly in the market. Wareham²⁷⁵ believes that the EU reforms on the rules governing maritime transport may turn out to have disastrous implications for liner trades, finally leading to the shrinking of the industry, creating oligopolies *in lieu* of free competition. I also take into account the opinion of Allsop (2009)²⁷⁶ that denotes the importance of uniform

²⁷² Blanco (2007) op. cit. pp. 552,582-589

²⁷³ Ibid. p. 589

²⁷⁴ Bredima Anna, "Shoot first, ask questions later: International implications resulting from the unilateral abolitions of liner conferences in the EU" in Wareham (ed) 2010 op. cit. p. 64

²⁷⁵ Wareham (2010) in Wareham (ed) op. cit. p. 65

²⁷⁶ Allsop James, "Maritime Law-The Nature and Importance of Its International Character", *Tulane Maritime Law Journal*, Volume 34, [2009-2010] pp. 555-590. He supports (p. 586) that: "...it was the threat of impending fragmentation of international sea commerce by inconsistent and idiosyncratic national legislation that led even the imperial power of Great Britain to recognise its national interests in a coherent international bargain. The appreciation of this background should then inform the interpretation of the Hague Rules as a balanced attempt as

rules in the maritime industry, given its global character. I observe that the authors above do not object to the mindset of free competition that the EU wishes to promote in liner shipping. I would say that their concern is concentrated on three issues:

- A global industry must not be legislatively fragmented, in contrast to the pioneering jurisdictional intervention made by the EU;
- The true properties of the sector have to be taken in to account, dismissing thus strict interpretation of article 101 TFEU as simplistic.
- The potential risk that a unilateral change could create to the stability of the transport system must be considered in legislation/judicial findings etc.

I agree with the concerns of the aforementioned authors and their views are perhaps confirmed by the current slump in the freight market and the world recession that has plunged several container companies into severe financial difficulties²⁷⁷. Both authors, supported by economists, suggest that mergers, acquisitions and joint ventures in shipping “do not, in principle, create monopoly or market power or restrict competition”.²⁷⁸ Recently, the FMC in its recent liner transport Report confirms the assumptions of the critics, as it shows that the freight rates have fallen, whereas concentration in the market has increased.²⁷⁹

far as they went to compromise these differences, with due recognition of the contours and context of particular compromises”.

²⁷⁷ I believe that the opinion of Bredima (2010) has special significance given her professional and academic status. Dr Anna Bredima is the acting head of EU Affairs at the Union of Greek Shipowners (UGS). As it is known, the UGS, in their overwhelming majority, are dry-liquid bulk tramp carriers, which, logically, would have every interest for liner conferences to be abolished. Nevertheless, a criticism of the EU regulatory effort arrives from an unexpected source; we thus receive a legal risk assessment that disagrees with the official EU Commission competitiveness prediction.

²⁷⁸ Panayides, Photis, Stephen Gong, ‘Consolidation, mergers and acquisitions, in the shipping industry’ in Handbook of the Maritime Economics and Business, ed. by Costas Grammenos, (London: Lloyds of London Press, 2002) p. 603

²⁷⁹ Federal Maritime Commission, Bureau Of Trade Analysis, *Study of the 2008 Repeal of the Liner Conference Exemption from European Union Competition Law* [January 2012, uploaded in February 2013, accessed in 20 Feb 2013], para 17. The

I investigate the matter further in this paper, and attempt to explain the pattern that could lead to unintended concentration in the shipping markets. I examine the matter from the economic point view, borrowing elements from the equilibrium theories of Pareto and Nash.

Bearing in mind Nash's theory on actors' strategies, if certain conditions are satisfied, then equilibrium²⁸⁰ could exist in the strategies among the Consortium / Independents actors; however, a substitution of equilibrium in mixed strategies is observed. In such equilibrium, firms constantly try to take each other by surprise, in ways similar to circling behaviour, so that no stable number of carriers exists. In a simplified approach, the market could then be described as circling dynamic behaviour among a few firms.²⁸¹

2.2.1.5 Relative Market Shares of Independents and the Exogenous Shock of Global Recession.

Nowadays, independent liner companies offer high quality services with adequate modern vessels, and have eroded the oligopoly of the traditional liner companies by matching their levels of service.²⁸² They

Report examines the post repeal market effects. From the findings it appears to have been a small increase in market concentration– a result that suggests that, in the absence of a forum for carrier discussions and information sharing, market concentration may increase slightly more rapidly. Moreover, the Report denotes a relative decline in market share stability that may be related to rate volatility and market concentration. Market share stability noticeably declined in the Far East/North Europe trade in the post-repeal period. That was also the trade in which relative rate volatility and market concentration appeared to have increased. In contrast, there was increased market share stability in the Far East/US trade.

²⁸⁰ *Infra* § Nash

²⁸¹ *Ibid.*, p. 174

²⁸² Independents' market policies have changed in the last decade. It may be wrongly deemed that the traditional structure of a dominant conference service and a small contingent of opportunistic outsiders (attracting a comparatively small market share by offering an inferior service at discounted prices) still represent the situation. However, this model is no longer applicable. As already mentioned above, though conferences remain an important factor in many trades, a decline in conference share (and a corresponding rise in non-conference market share) does not necessarily translate into appreciably greater competition since many

have undermined the capacity of the traditional liner companies to collude and generally challenged the role of the traditional liner companies as undisputed leaders in the liner market.²⁸³ They have, however, paid a price to do so.

The general principles of maritime economics and, in particular, of the freight and newbuilding markets are relevant to understanding how independent liner companies have managed to increase their own market share over time. The main issue for an independent operator is providing a service that is of equal or higher quality than that offered by other liner companies. In order to achieve this, independent operators must offer bigger and faster vessels and attempt to realise economies of scale. This results primarily in borrowing for the renewal and the expansion of the fleet, or for meeting demands.

In reality, however, even this argument is weakened by the economic evidence. The fact that almost all shipowners are flexible enough to manage their fleet, either as members of a joint venture or as independents, is often overlooked.²⁸⁴

Within the *OECD Report (2002)*²⁸⁵ it is mentioned that – in contrast to what is believed by theoreticians of neo-classical competition law

independent operators have every incentive to price off conference rates rather than competing vigorously and independently with conferences on price. Furthermore, many smaller independent operator services may be inferior to those offered by Conference lines in terms of geographic scope and frequency of service. See: Meyrick & Associates, 'Economics of Liner Shipping Conferences: A Critical Review of the Literature and its Implications for Australian Policy'. *Australian Productivity Commission Inquiry into International Liner Cargo Shipping* (A review of Part X of the Trade Practices Act) [April 1999], p. 239

<http://papers.ssrn.com/sol3/papers.cfm?abstract_id=281755> [accessed 20 May 2009]; Also see: OECD Report (2002), op. cit, pp. 22-23, 65 and Figure 4.6

²⁸³ OECD (2002), op. cit, pp. 20, 44

²⁸⁴ Blanco, 2007, op. cit, p. 467

²⁸⁵ OECD Report (2002), op. cit, pp. 31-32. As mentioned in the report, Asia-US eastbound rates in 2001 were almost 12% lower than the 1993 levels and rates in the opposite direction (US-Asia westbound) were nearly 46% lower. Corresponding figures for the Europe-Asia-Europe and Europe-US-Europe trades were -35% (eastbound)/-23% (westbound) and -42% (eastbound)/-12% (westbound), respectively. In contrast, rates for the commodities carried in 2002 are significantly lower than those in 1993. With regard to mega-container vessels (economy of grand scale) another study shows that both Asia-Europe and Asia-North America routes

concerning dominance and price policy – freight rates clearly follow a deflationary course. This volatility could be a natural result of changing trading patterns between the regions involved, and a consequence of changing *equilibria* in world trade – subsequently, the demand for maritime transport from these areas fluctuates.²⁸⁶ Thus, the particular drop in rates was aggravated by competition from many independents that faced the same need to fill their ships with cargo in these unbalanced trades at the same time freights were battered by deflationary trends in contrast to the inflation that prevailed that period.²⁸⁷

A set of conclusions can be drawn from this: independents (tramp and liner) were subject to higher pressure than their consortia competitors, and had to lower their tariffs for reasons of preservation; competition since has been effective, since all parties were forced to proceed to mass discounts in order to defend themselves against market uncertainty; finally, when this crisis passed and the global economy emerged out of the recession, the share of the independents

were competitive in all scenarios, while it was viable for North American trade only if the feeder and freight costs were low. See: Akio Imai, Etsuko Nishimura, Stratos Papadimitriou, Miaojia Liu 'The economic viability of container mega-ships' Transportation Research Part E (Logistics and Transport), [Electronic Article Elsevier Ltd 2009], p. 20

<<http://www.lib.kobe-u.ac.jp/repository/90000084.pdf>> [accessed 20 August 2009]

²⁸⁶ OECD (2002), op. cit, p. 31. Accordingly, the Asian economic crisis of 1997 caused demand for US and European exports to drop, freeing up capacity on Asian in-bound routes. At the same time, as a result of currency devaluation and competitive advantage due to lower production costs, Asian exports towards the United States and Europe were buoyed by growth. Carriers, in order to supply the capacity necessary to carry Asian exports, were faced with excess capacity on the return leg (and a corresponding need to reposition empty containers). The overall capacity was also growing over this period, as liner operators were receiving delivery of larger ships ordered on the premise of continued steady economic growth in Asia. The result was that carriers slashed prices in an effort to attract and/or retain steadily dwindling cargo.

²⁸⁷ One has to take into account that the real income from the freight rates have been reduced, since, according to the International Monetary Fund (IMF), global inflation levels between 2000-2008 produced an aggregate of 20-30% within the period mentioned (the annual average was 2%-3%). See: IMF, World Economic Outlook Globalization and Inflation, [2006] and [2008], pp. 10 and 5 respectively. <www.imf.org/external/pubs/ft/weo/2006/01/pdf/weo0406.pdf> and <www.imf.org/external/pubs/ft/weo/2008/02/pdf/text.pdf> [accessed 23 March 2009]

had not been reduced.²⁸⁸ The said crisis led to another phenomenon: after 2001, South-East, East and Far East Asia witnessed an unprecedented growth explosion. The Asian economies have managed to penetrate the Western markets with products based, in part, on a combination of cheap production and low transport costs.

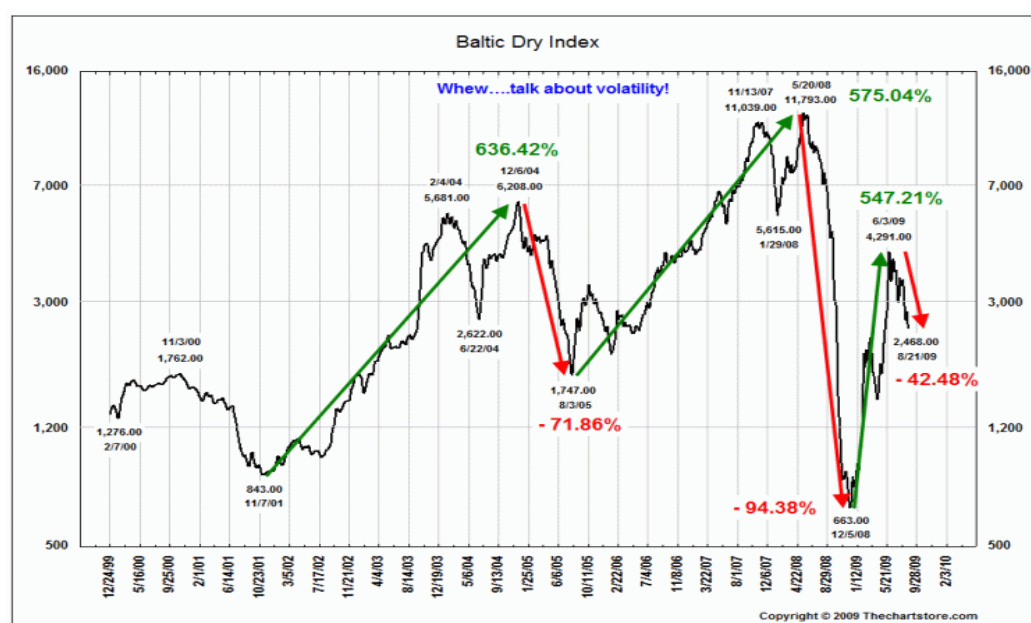
Facts have proven that the question mentioned above can create only false dilemmas. Based on the UNCTAD (2004) Report,²⁸⁹ the market had recovered rapidly, and in the second quarter of 2004, the freight rates surged. The cause of the surge in freight rates was a shortage of vessels and containers, caused by the previous recession phase.

Relatively inelastic demand-and-supply reflected the rapid recovery of the global economy. It is apparent that this shortage directly led to increased prices as the shipowners had to offset the investment in new vessels (by building, purchasing or leasing containers or vessels). It is also evident that the shortage of supply forced conferences to rearrange vessels, a fact that led to the further reduction of services.

²⁸⁸ See Maersk/Safmarine (1999) where Maersk, an independent ship owner, purchased Safmarine, member of the Europe South Africa Conference (ESAC). See: Commission Decision Maersk/Safmarine (1999), op.cit. para 28

²⁸⁹ UNCTAD, Transport Newsletter no 24, Q2 [2004], pp. 11-14. It (by whom? Same as earlier note) is reported that 'a severe shortage of containerships is forcing a group of major carriers to plan a new Asia-Europe service deploying just seven vessels rather than the usual eight. The unusual configuration is a direct reflection of an unprecedented squeeze on tonnage availability, with the carriers in question unable to find enough ships to meet their preferred requirements. Between March and April 2004, the index rose another 5.4 per cent. The annual increase up to that month varied between +54% and +95%, depending on vessel types.

Figure 5 Baltic Dry Index Volatility 1999-2012



This kind of “correlation effect” resulted in the rise of rates within a very short period of time.

For example, demand did not grow in 2001 although 2001 was followed by an extraordinary boom - significantly higher than the expectations of most industry experts, in following the global recession. In 2012 demand has collapsed²⁹⁰, and in September 2012 the Baltic Dry Index (BDIY)²⁹¹ was at an all time low.

As a policy statement, I believe the EU Policy must focus on how to support the European fleet against natural and inherent market threats that work as self-regulating properties; dominant position when the index has reached 662 points is difficult to be established.²⁹²

²⁹⁰ Baltic Dry Index Chart. See figure 5.

²⁹¹ The index provides an assessment of the price of moving the major raw materials by sea. Taking in 23 shipping routes measured on a timecharter basis, the index covers Handysize, Supramax, Panamax, and Capesize dry bulk carriers carrying a range of commodities including coal, iron ore and grain. Stopford Martin (1997) op. cit. p. 93

²⁹² Figure 2 Ibid.

The HARPEX²⁹³ shows a similar image; the 10 year index of freight rates in container shipping presents significant volatility. In September 2012, the market is at its lowest levels.

Figure 6 HARPEX 10y Index



Against this
collapse
managerial
stance taken
by
shipowners
has been

radically different from trends followed by the inland enterprises; liner companies preferred to dock their vessels empty of cargo rather than demolishing them. Had the maritime industry followed the views of independent industry experts, the world would have suffered from undersupply during the last few years, as there is a very long lead time between investment and capacity entering the market.²⁹⁴

This is another paradox in comparison to inland companies: price coordination occurs indirectly. An independent in the shadow of a conference or a consortium is also benefited by price planning. Accordingly, the 'outsiders' lower their prices slightly (say, by about 10 to 15 per cent),²⁹⁵ a calculated risk, and this differential is proportionally maintained even when conferences decide to modify their own rates. This proves that independents systematically follow

²⁹³ The HARPEX Shipping Index tracks weekly container shipping rate changes in the timecharter market for eight classes of all-container ships. The index was compiled in 2004, but by using a database of 10,000 records, can be calculated retrospectively back to 1986.

²⁹⁴ ELAA Response to Issues Paper (2006), op. cit, p. 6

²⁹⁵ Global Insight Report (2005), op. cit, pp. 152-153.

conference policies²⁹⁶ and adjust their pricing policy accordingly. Dual synchronisation is henceforth the key element that governs shipping markets: between trade flows and freight, between consortia and independents. So far, there is no international coordination that would suggest the opposite. In any event, it is within independents' business discretion whether to become a consortium member or continue to operate independently.

2.2.1.6 Effective Competition by Non-Vessel Operators (NVOs). Issues of Horizontal and Vertical Synergy.

The maritime market serves transnational transport of goods on a large scale. The task of transfer is achieved by non-vessel operators, such as shippers and freightforwarders who operate vehicles, locomotives and airplanes. Looking first at forwarders, their role is to organise the transport of goods for other clients. The practice resembles the multiple charter policy as applied by certain shipowners, where the commercial management and operation of the vessels is the responsibility of the charterer. The charterer, who may be a freight forwarder, is accountable to the owners for the usual charter hire provided for in the charterparty.

Until the 1980's, liner shipping was characterised by an oligopolistic supply in collusion, confronted with a competitive demand side: small, sometimes ill-informed shippers who were unable to exercise any influence on liner rates and conditions. Nowadays, the situation has been absolutely reversed. Today's shippers and freightforwarders, i.e. the Demand Side (DS) of transport, may be considered part of an oligopoly. They have been developed into large associations, and often possess a more relevant market share and more information than

²⁹⁶ CFI TACA (2003), op. cit, Para 1074. See TACA Decision (1998) paras 534-537. See declarations of French shipowners (Armateurs de France) in the review process of 4056/86. Also see: Blanco (2007) op. cit. p. 467

most shipping lines²⁹⁷ with regard to the particular mode of transport they operate. This is mainly due to the controllable size of the market in which they operate. For instance, inland transport is fragmented into localised cartels of small size, underpinned in specialised and narrow markets. On many occasions, consortia of lorry transporters may control 100 percent of a market to/from a port terminal. NVO's are not only confined to the goods carrying and distribution roles by inland transport mode; it is essential to look into the operational nature of NVOs and investigate their relation with maritime transport. *Do NVO's successfully compete with shipowners and carriers, and how do the two systems interact?* I shall examine the subject firstly from the NVO and secondly from the carrier's perspective.

Starting with Article 1(3) of the abolished Regulation 4056/86, shippers and consignees are grouped together as users of maritime transport.²⁹⁸ A shipper is any person who places goods in a vessel, whether or not he owns them and chooses the method of transportation, the route, their storage and the procedure of handling them;²⁹⁹ therefore, forwarders are generally considered to be intermediates between the shipowner and the shipper-carrier,³⁰⁰ as opposed to shipper-producers who own the goods in question (consignors).³⁰¹ In this context, a freight-forwarder may be a *principal*³⁰² for the liner company or an *agent*³⁰³ vis-à-vis the shipper.

²⁹⁷ It is implied in that NVOs usually have much smaller market size to control. Blauwens, Gust, Peter De Baere, Eddy Van de Voorde, Transport Economics, (Uitgeverij De Boeck, Antwerpen, 3rd Edition 2007), p. 325

²⁹⁸ The matter is also analysed *infra* in section 2.2.1.6 Effective Competition by Non-Vessel Operators (NVOs). Issues of Horizontal and Vertical Synergy.

²⁹⁹ Carr Indira, International Trade Law, (Routledge Cavendish, 3rd Edition, 2005), p. 411

³⁰⁰ In UNCTAD/ICC Rules for Multimodal Transport Documents, a freight forwarder is deemed as intermediate, in the strict sense of the word, and terminology wise, is called 'non-vessel owning carrier' (NVOC) See: UNCTAD/ICC Rules for Multimodal Transport Documents, [ICC Publication No. 481, 1992], p. 5

³⁰¹ Blanco, 2007, op. cit, p. 470

³⁰² That is to carry out the task of the shipper itself, giving undertaking to the consignors or consignees of the goods to guarantee their delivery to the agreed destination, even becoming a combined transport operator (CTO). See: Goode, Roy, Commercial Law, (Penguin Books, 2nd Edition, 1995) pp. 922-923

Furthermore, the two types of NVOs should be differentiated: some operators, *'although they do not have their own vessels on the routes in question, do have them in other routes'*³⁰⁴ and hire out cargo capacity in a bilateral long-term manner. Others *'have no vessels on any route'*.³⁰⁵ The latter, in addition to undertaking to carry cargo, offer forwarding services such as documentation, customs clearance and storage.³⁰⁶ Like any shipper, these operators undertake tasks from liner conference members and almost always through a service contract with one or more liner companies.

In view of this, the possibility of and manner in which NVOs may compete with shipping operators in terms of quality, price and geographical cargo forwarding ability should be examined. As far as quality is concerned, leaving aside the view of the EU Commission,³⁰⁷ it is possible to empirically demonstrate that there is no significant difference in the quality of the services offered. This narrows down the list of reasons why a shipper would choose a shipowner instead of an NVO. In terms of geographical cargo forwarding ability, a shipper is more or less satisfied by both operators; shipowners are in a disadvantageous position, since NVOs have access to multiple modes of transport. As far as price is concerned, shippers generally select the most economical mode, unless they demand regular service for large volumes of cargo. As far as price competition is concerned, NVOs with vessels on other routes may compete in rates, but this greatly depends

³⁰³ That is to deal and contract with the carriers for substantial amount of cargo, delivered by shippers of all types. See: UNCTAD/ICC Rules for Multimodal Transport Documents, op. cit, p. 14

³⁰⁴ This practise is followed by many carriers like 'Hanjin Shipping' and 'Hyundai Merchant Marine Co.', which charter container slots in other shipowners' vessels. See: TACA (1998) decision, op. cit, para 158. The slot capacity sharing is similar to 'coach' flights within airline alliances. See: Angela Cheng-Jui Lu, International Airline Alliances [Kluwer Law International 2003], p. 65

³⁰⁵ The Commission gave the examples of international freightforwarder companies like 'Kühne and Nagel Inc', 'Danzas International', 'Schenker International' and 'Panalpina Welttransport AG'. See: TACA (1998) decision, op. cit, Paragraph 159

³⁰⁶ TACA (1998) decision, op. cit, para 159

³⁰⁷ TACA (1998), op. cit, par 160

on the underlying carrier - with whose pricing policy it will be necessary to align.³⁰⁸ Competing is difficult for two reasons: mutual interdependence in slot availability, and the fact that the companies in question do not belong to the same market. The shipper may be a connecting factor, but it is impossible to define certain market boundaries or expand EU jurisdiction to a clustered market that is situated within a third country.

NVOs that do not operate any vessel on any route and the freight forwarders belong to the same category of transport. Blanco³⁰⁹ *et al* argue that NVOs do not compete effectively with shipowners, while others³¹⁰ hold that size and risk factors of the investments committed by NVOs are smaller and of lower risk compared to shipping firms, giving them an advantage with regard to required costs.

In general, one must acknowledge that NVOs live off the excess capacity of the underlying transporters, without which they would not exist³¹¹. NVOs may contribute to the existence of the excess capacity *ad hoc*, as they represent potential customers for shipowners. This may explain how conferences have repeatedly argued that NVOs compete effectively with their members and limit their joint market power³¹². Moreover, it is striking how cooperation is not restricted to the shipping lines themselves; in fact, virtually all market players in the logistics chain are involved. The interests and intentions of each of the players tend to develop rapidly, especially in the case of those who

³⁰⁸ Blanco, 2007, op. cit, p. 471

³⁰⁹ Blanco, 2007, op. cit, pp. 471, 472

³¹⁰ Michael-Garrett, Graham, David Owain Hughes, *Containerisation in the 80s* [Lloyd's of London Press, London 1985], pp. 38-39. They hold that since NVOs do not invest in carriage and capacity, they tend to offer their services at marginal costs.

³¹¹ Graham, Hughes, *ibid.*, pp. 38, 212

³¹² See: TACA decision (1998), op. cit, para 156. Shipowners have advocated this point of view in the discussions with the EU. OECD (2002)

are constantly trying to gain direct control over an ever-greater share of the logistics chain.³¹³

The trend of expanding the logistics chain usually constitutes a motive for further vertical integration that may extend to sea transport and *vice versa*, in a shift towards more pronounced vertical integration within this chain. However, this integration has not been expanded beyond NVOs and the shipowners, and has limited itself only to the services related to freightforwarding. The reasons that demand complementarity³¹⁴ between shipping and freightforwarding are weak and apply only on limited occasions; they appear to be related to managerial problems that such integration creates. Benefits are clearly not strong enough to overcome the disadvantages that may arise from the diversity of managerial skills and strategies that different business may require. The opinion of the shipowners that NVOs constitute a competitor, which deserves to be taken into account in the relevant market³¹⁵, appears to be incorrect.

On the contrary, it appears that the former view is accurate - although NVOs are in a less risky business position overall (as regards ROI) than shipping firms. On many occasions they may even improve their position, since they enjoy a degree of purchasing power by establishing freight-forwarding consortia. NVOs frequently form groups and horizontal and/or vertical (including carriers) alliances, which aim at achieving better slots in container allocation and management. However, the restrictions that exist in the EU and US,³¹⁶

³¹³ Blauwens, De Baere, Van de Voorde, 2007, op. cit, p. 342

³¹⁴ Heaver, T. D., Responding to Shippers' supply chain requirements in J. McConville, Alfonso Morvillo, Heather Leggate, Routledge advances in maritime research: International Maritime Transport, [Routledge, 2004], pp. 204-206

³¹⁵ See TACA Decision (1998), op. cit, Paragraph 156 where the TACA parties consider that the provision of multimodal transport service by the TACA parties is substitutable with the provision of such services by NVOs.

³¹⁶ See Article 1(3)(b) of the EU Regulation 4056/85. See also US Shipping Act 1984, 46 U.S.C, app 1702(24) dated 1/3/07, §B7 (A)-(B), where it stipulates that carrier means an association of ocean common carriers permitted, pursuant to an approved or effective agreement, to engage in concerted activity and to use a

and the actual market size that the NVOs hold, dictates that NVOs do not really constitute an important competitors to shipping companies³¹⁷. The fundamental criterion is the power to control and manage shipping operations, and this is something that NVOs do not currently possess.

Yet carriers would enter into multiyear agreements, usually tied to productivity and guaranteed slots for vessel berthing, in order to minimize the time spent in ports. Moreover, carriers also realised that terminal operations could be highly profitable and they began investing in the landside operations. As mentioned in the European Commission Report on Terminal Handling Charges 2009,³¹⁸ global operators could structure their pricing completely differently than local, national or regional operators. This included, for example, P&O Ports, APM Terminals and Terminal Link (CMA CGM), in addition to large, global terminal operators such as Hutchison Port Holdings, SSA Marine, DP World and ICTSI. The competition between terminal operators and ports, especially in Europe, resulted in a periodic shifting of carriers to different terminals or ports in order to maintain cost control, achievement of higher productivity and guaranteed berthing and services. What is remarkable in this Report is the finding is that: *"...THCs have remained very stable since their introduction with few increases despite the changes in the sea freight rates and surcharges over time. This is probably due to lower costs achieved*

common tariff; but (B) does not include a joint service, consortium, pooling, sailing, or transshipment agreement. < uscode.house.gov/download/pls/46C401.txt> [accessed 10 April 2009]

³¹⁷ Actually, it appears that shipping lines have been most actively involved in the drive towards closer cooperation. As a result, they have acquired a stronger negotiating position vis-à-vis the other market players (e.g. port authorities, stevedores, inland transportation firms etc). Stevedores have responded in a variety of ways, ranging from joint ventures for establishing dedicated terminals to attracting fresh capital from international groups (e.g. Hutchinson Wampoa at KCT in Rotterdam), but this can be classified as defensive strategy rather than market dominance. Thus, shipping companies remain dominant in the area of sea transport; a fact that we accept as natural.

³¹⁸ European Commission, Competition DG Report "Terminal handling charges during and after the liner conference era", [October 2009] p. 7

through higher levels of productivity and better contract terms from terminal operators".³¹⁹ The Report was ordered by the Commission in order to also examine possible impact from the abolition of liner conferences to the THC. What is also worth quoting from this report is the finding that while the terminal handling charges that had remained virtually unchanged for nearly 15 years in Europe changed almost overnight, carriers abandoned the differential pricing by trade route and terminals within a port and switched to a single charge by country, irrespective of which terminal was called at by services on differing trade routes. The repeal of the block exemption for conferences caused a major change in the pricing strategy of terminal handling costs by the shipping lines³²⁰; an unintended consequence of the repeal of block exemption in liner conferences.

A negative consequence also may be the fact that larger carriers are certainly able to negotiate with terminal operators to achieve a better contract deal than small carriers, particularly if they are also willing to sign up for a long term contract. As suggested by the aforementioned Report, the matter requires further research: terminal handling charges appear to be negotiable between shippers and carriers, particularly with "all-in" freight rates that obscure the level of individual charges. In this context, the level of THCs is likely to change annually as cost recovery needs shift and larger shippers' negotiating powers evolve. It may be an effect of liberalisation in the market, which I would suggest is "over-liberalisation".³²¹

2.2.1.7 Time and Risk Parameters

In this section, I explore the nature of the temporal (seasonal) or cyclical factor that exists within a shipping market, and how this

³¹⁹ Ibid. p. 7

³²⁰ Ibid. p. 28

³²¹ See also *supra* §§ 274, 275

affects market definition and dominance. In this context, I investigate whether the boundaries of temporal capacity changes and their influence on actual as well as potential competition. With the term “*potential competition*” I understand the competitive pressure which has not materialised at the time of the events in question, but which may be seen in the *short or medium term*, on the basis of precise and consistent *indicia*, with some degree of certainty at the time of those events.³²² Potential competition is not usually taken into account when defining relevant market. A relevant market analysis that would include the matter of potential competition would have relevance for shipping as it is a capital intensive market with important costs and risks that may discourage either incumbents to continue or potential competitors to enter. Thus, it is in the best interests of the incumbents to limit the market players to a convenient number so that they preserve their market shares. Furthermore, potential competition must not be confused with actual external competition.

2.2.1.7.1 Capacity Changes and Adjustments in Relation to Time

Within Article 5 of the Liner Consortia Regulation³²³ *capacity adjustments* are allowed within the list of exempted activities. The Regulation clearly recognises the necessity of these adjustments in response to fluctuations in supply and demand. A doubt emerges, however, as to the frequency and intensity of these fluctuations. Logically, this matter is subject to interpretation by the competent bodies. Levitt (2011)³²⁴ discusses this matter supporting the view that the wording covers capacity adjustments *whether or not they are temporary*. I believe this uncertainty is an important issue that needs further exploration. For example, an uncertainty of such kind would

³²² TACA Judgment (2003) op.cit. para 1025

³²³ Op. cit

³²⁴ Levitt Matthew, ‘Liner Consortia, Liner Mergers and individual exemption’ in Wareham (ed) (2010) op.cit. p.51

likewise apply to co-ordinated vessel withdrawals and lay-ups in response to the recession in the world trade and the collapse of freight rates.³²⁵

The most recent case in which the ECJ has considered a co-ordinated capacity withdrawal scheme is in the *Irish Beef* case³²⁶. The Court has been very sceptical about capacity arrangements. In assessing the goal of the scheme, the ECJ deemed the subjective intention of the parties as “irrelevant”.³²⁷ It restates the principle that an *object restriction* can be found even if the agreement does not have the restriction of competition as its sole aim but also pursues other legitimate objectives.³²⁸ Not surprisingly, the ECJ rejected the submission that the arrangements do not fall foul of article 101(1)(b), which prohibits the limiting of production. Moreover, the ECJ firmly stated that the types of agreements listed in article 101(1)(a)-(e) “do not constitute an exhaustive list of prohibited collusion”.³²⁹

In the same spirit, the Commission investigated two cases of similar relevance: the “Baltic Max Feeder”³³⁰ scheme, “European Minibulk eG and Container Feeder eG”³³¹. In the former case, vessel owners agreed to jointly cover the costs of removing vessels from service. In the latter, maritime cooperatives established in Germany aimed to coordinate certain activities of the owners of minibulk and container feeder vessels, mainly in Northern Europe. By consolidating joint purchases of inputs such as fuel, and setting an information exchange system for this purpose, the Commission was concerned that, through this compensation and/or particular information exchange system,

³²⁵ Ibid. p. 51

³²⁶ Irish Beef, Case C-209/07, Irish Competition Authority vs Beef Industry Development Society Ltd and Barry Brothers (Carrigmore) Meats Ltd (Reference for a preliminary ruling from the Supreme Court) [2009 4 C.M.L.R. 6].

³²⁷ Ibid para 21

³²⁸ See: General Motors BV (formerly General Motors Nederland BV) vs Commission, Case C-551/03P [2006 ECR I-3173] para 64.

³²⁹ Irish Beef (2009) op. cit. para 2

³³⁰ IP/10/21 of 15th January 2010

³³¹ IP/13/82, of 31st January 2012

the maritime cooperatives would provide an incentive to withdraw capacity from the market, resulting in charter rate increases. In both cases, the cooperatives agreed to abandon these two aspects of their cooperation before they had been implemented.

In view of the above, two kinds of arguments can be supported: One could argue that these cases demonstrate the wish of the ECJ to discover the existence of restrictions even being subsequent to the true contractual will of the parties. An *altera pars* could argue that the observed paradox (i.e. between the article within the block exemption on liner consortia vis-à-vis and the Court's interpretation in Irish Beef) signifies that anti-competitive behaviour is decided on a case-by-case basis. I believe the latter argument to be more valid as regards the competition law trends. In any event, the purpose of competition law should be to safeguard the good operation of the market and maintain benefits to the consumer. Although sometimes this approach may not be flexible enough to anticipate every case that emerges, it can be adjusted according to the specific case in question. Levitt (2011)³³² observes that, in commenting on the Irish Beef case, the Commission noted that the ECJ did not expressly exclude that a reduction of overcapacity could result in the preservation of the economies of scale by the operators which stay in the industry; nor did it rule out that the article 101(3) could apply if it could be proven that these positive effects outweigh the negative effects associated with reductions of capacity. I agree with the observation of Levitt and below adapt this legal aspect in relation to liner shipping realities that drive synergy: defensive concentration between liner operators and less permanent structures for co-operation in the operation of services in order to reduce costs.

³³² Levitt (2010) in Wareham (ed) (2010) op.cit. p. 52

2.2.1.7.2 Dominance in Relation to Time and Risk Exposure

So far, I explored the concepts of market share as dominance can be established taking into consideration by various factors . I presented the case that capital intensive element of shipping can we establish market power without the above elements, and what would be its duration? The answer to the first part of the question is “affirmative”; the answer to the second part is “short”.

In particular, as mentioned above maritime cycles and market volatility affect the return of investment (ROI), both profitability and liquidity. It is of paramount importance for shipping companies to have tight finance and budget control, as any unfortunate move might have an irreversible impact on the future of a company. The latter parameter is indicative of the inherent inflexibility of a maritime company to respond to market trends, since any changes are not cost effective in view of the investment required. This particular argument can be best illustrated with the following figure that shows the ROI among various investments. In its extreme, Bulk shipping produces the highest standard deviation per annum and average yield³³³:

Figure 7 Volatility of Bulk Shipping and other types of investment

Investment Portfolio	Period	Average ROI % per annum	Standard Deviation % per annum
Treasury Bills	1926-1985	3.5	3.4
Long-term govt bonds	1926-1985	4.4	8.2
Corporate bonds	1926-1985	5.1	8.3
Common Stocks FTSE 100	1971-1990	11.0	17.0
Dry Bulk Shipping (bulk carrier)	1971-1990	9.0	35.0
Liquid Bulk Shipping (tanker)	1980-1994	5.2	30.0

³³³ Brealey Richard A., Stewart Myers, and Brattle Group, *Capital investment and valuation on Corporate Finance Series*, [McGraw-Hill Professional, NY, 2003], p. 135p.

In particular, the issue of market cycles vividly presents the argument of unpredictable risk that weakens market dominance. In comparison with the industrial sector, or other companies from the services sector, shipping companies are faced with the same amount of deviation in predicting investment yields as the stockbrokers are with high risk funds. Nonetheless, there is a significant difference: in the stock market, the investor can minimise their losses and withdraw, or move the capital to another investment. Diversification of investment is essential for minimising losses; ultimately, it is the only thing that guarantees stability. In shipping, however, diversification is difficult to achieve, and if it is achieved, it acquires a different meaning—as to modify strategies and re-organise staff. In spite of this possibility, risk factors are equally high for reasons of inherent inflexibility in modifying the core targets of the investment.

The reason for this inflexibility relates to the financing conditions and financial intensity of the industry, as well as its inflexibility. Though the industry is capital intensive, few financial institutions have available portfolios to cover its needs. On many occasions finance is secured through syndicated resources: loans (solo or syndicated), bonds, stocks, shares, equity. As mentioned, personal equity covers a considerable amount of financing needs and often exceeds the ten per cent of a project. Should a project not produce the expected results, sunk costs are a significant factor. In this context, a shipping market is never a fully contestable market due to the sunk costs involved.

The above comparison between the stock exchange and shipping, offers another conclusion: shipping and financial services have similar high risk profiles. In reality, shipowners undertake higher risks, since fluctuation in the freight rates, the perils and unforeseen costs that may occur in the sea are significantly higher and can affect the liquidity and reserves of a small and medium shipping company. From the business point of view, fleet management has to be

productive, since it is impossible to relocate or liquidate the assets (vessels) easily. Furthermore, practice shows that the aforementioned proposal suggesting risk management options by allocating capital and assets of the company from sea carriage operations to the other shipping markets is never effortless or inexpensive.

Therefore, a third possible dimension to market definition (and consequently crucial for the determination of market power) is *time*. To some extent, the *time dimension* is simply an extension of the product dimension: i.e. the product can be defined as the supply of services at a certain period of time. Examples of how the timing of production and purchasing can affect markets are found within the OFT's Market Definition Guidelines³³⁴. A time dimension might be appropriate where it is not possible for customers to substitute between time periods³³⁵. For example, peak shippers might not view peak and off peak freight rates as substitutes, and accordingly ship operators cannot substitute between time periods.

In particular, the Guidelines refer to:

- i) Peak and off peak services. This can be a factor in transport services with regard to the concept of the maritime cycles;
- ii) Seasonal variations, such as summer versus winter months. This again has relevance, but more for tramp service and less for liner service. Again we have to distinguish between container service and break-bulk liner, as the former may not be affected at all, while the latter may be aligned with seasonal variations;
- iii) Innovation/inter-generational products. Customers may defer expenditure on present products because they believe innovation will soon produce better products, or because they own an earlier version of the product which they consider to be

³³⁴ Office of Fair Trading, Market Definition, Understanding Competition Law [2004] p 18, paras 5.1-5.3

³³⁵ Ibid. para 5.2

a close substitute for the current generation. Again, this has significance for shipping, as carriage accommodates two types of consumers that benefit from the service itself: the users (the shippers), and the sequence connected with the consignment note, i.e. gross retailers, the retailers and final consumers of goods. In the ECJ's analysis of the intergenerational element, it supports that, “*It is the beneficial nature of the effect on all consumers in the relevant markets that must be taken into consideration, not the effect on each member of that category of consumers*”³³⁶. The price for goods transported to the country of destination may indicate the extent to which a shipping service is valuable for a concrete shipper. For any shipper, the relationship between the tariff rate and price of goods at destination is essential for its choice whether to ship goods or not. Where the tariff rate is such that it will exceed the final price at which goods can be sold at destination, the shipper will choose not to ship the goods at all. Therefore, price still remains the dominant factor in the shipper's choice of service³³⁷.

2.2.1.7.2.1 Peak, Off-Peak and Seasonable Variations

With regard to peak and off-peak services, we know that the subject has been dealt with in many cases. For example, in *Horizontal Merger Guidelines* (2004)³³⁸, the issue of volatility versus stability is effectively dealt with as a factor that can significantly change the market dynamics.

In particular it is acknowledged that the less complex and the more stable the economic environment, the easier it is for the firms to reach a common understanding on the terms of co-ordination. For instance, it is easier to co-ordinate among a few players than among many. It is

³³⁶ ASNEF (2006) para 70, See also Shaw and Falla vs EC Commission (*SHAW*), Case T-131/99, [2002 ECR II-2023] (2002) para 163

³³⁷ Stopford (1997) op. cit. p 363 *et seq*

³³⁸ Guidelines on the assessment of horizontal mergers (2004) op. cit. paras 18 and 45.

also easier to co-ordinate on a price for a single, homogeneous product, than on several prices in a market with many differentiated products. Similarly, the issue of stability versus volatility and unstable markets was dealt within *SCA/METSA*³³⁹. Conversely, unstable demand, substantial internal growth by some firms in the market or frequent entry by new firms may indicate that the current situation is not sufficiently stable to make co-ordination likely³⁴⁰, especially when prices decrease. In markets where innovation is important, co-ordination may be more difficult since innovations – particularly significant ones – may allow one firm to gain a major advantage over its rivals. The subject is presented in Ritter & Braun (2005)³⁴¹ and notably in the *AIRTOURS* (2002) case³⁴². In *AIRTOURS* the issue of the duration of the dominance vis-à-vis the seasonal and temporal element of the market was examined by the CFI. On the occasion of the merger among three operators, the new entity *AIRTOURS/First Choice*, Thomson and Thomas Cook, “*would have had the ability, which they did not previously have, to adopt a common policy on the market*”, and therefore the transaction did not give rise to the creation (rather than the strengthening) of a dominant position. The Court identified the following conditions necessary for finding of a “*collective dominance*”:

- i. Each member of the dominant position must have the ability to know how the other members are behaving in order to monitor whether or not they are adopting the common policy;

³³⁹ Commission Decision 2002/156/EC in *SCA/Metsä Tissue*, [OJ L 57, 27.2.2002] para 45. The Commission held that “...it also easier to coordinate on a price for a single, homogeneous product, than on hundreds of prices in a market with many differentiated products. Similarly, it is easier to coordinate on a price when demand and supply conditions are relatively stable than when they are continuously changing”.

³⁴⁰ *Kodak/Imation*, [Case IV/M.1298 – 1998] para 60

³⁴¹ Ritter Lennart, Braun W. David, *European Competition Law: A Practitioner's Guide* [Kluwer Law International 3rd edition 2005] p.580-581 and 606-608

³⁴² *AIRTOURS* op cit para 62

- ii. The situation of tacit co-ordination must be sustained over time.
 - i.e. there must be an incentive not to depart from the common policy) on the market (credible threat of retaliation).

Moreover, with regard to the issue of potential consumers that could benefit from the existence (in other words the preservation) of a liner trade, the ECJ, in *Compagnie Générale Maritime*,³⁴³ held that “*regard should naturally be had to the advantages arising from the agreement in question, not only for the relevant market ... but also, in appropriate cases, for every other market on which the agreement in question might have beneficial effects, and even, in a more general sense, for any service the quality or efficiency of which might be improved by the existence of that agreement.*” This element has a particular significance vis-à-vis the argument of destructive competition usually presented by the consortia as a defence. Basically, consortia aim to achieve economic efficiency through actions on cost.³⁴⁴ Their main objective would be joint control (ideally 100 per cent) of scheduled shipping markets.³⁴⁵ The principal activity of consortia is to meet frequently in order to influence freight rates through control in the supply/demand equilibrium. Freight rates are typically set by commodity, with the highest value commodities being charged higher rates than lower value commodities. Of course, the process of achieving this can be immensely complicated, because the consortium has to evolve to a size and type of cartel. For example, carriers might all wish to rationalise service by scheduling the vessels so that they carry at full capacity.

³⁴³ *Compagnie Générale Maritime* (2002) para 343

³⁴⁴ Blanco, 2007, op. cit, p. 461

³⁴⁵ Scott Morton, Fiona, ‘Social Status, Entry and Predation: The Case British Shipping Cartels 1879-1929’, *Journal of Economics and Management Strategy*, Vol. 47 [1997], pp. 41-49

<<http://www.som.yale.edu/faculty/fms8/papers/shippingcartels.pdf>>
[accessed 02 April 2009]

Accordingly, the main argument of liner consortia could be based on the quality and consistency of service that may also be a good reason for an intergenerational benefit: firms that do not compete on price (hence, without being preoccupied by destructive competition), may have an incentive to invest in higher quality vessels, subsequently providing higher quality of service³⁴⁶ so as to attract more customers.

Moreover, the stability of the market could allow them to carry on their business across the seasonal instability of the maritime cycles and thus reduce the risk caused by, for example, the current global economic situation. Finally, the co-ordination on prices, tacit or explicit, direct or indirect (with the use of the information exchange³⁴⁷ on supply between incumbents) could be accepted only in the name of the intergenerational benefit, allowing potential shippers to benefit from stable freight market conditions and draft their business projections accordingly. In fact, these are the arguments in favour of the liner conferences: price fixing, in contrast to the free market, brings stability in the market while the rates remain stable and low.

However, the option of controlled stability of the market through price fixing has been ruled out with the abolition of the liner conferences. The idea behind the abolition has been that the risk against effective

³⁴⁶ Devanney, III J. W., V. M. Livanos, R. J. Stewart, 'Conference Ratemaking and the West Coast of South America', *Journal of Transport Economics and Policy*, [1975 Vol. 9] pp. 154-177. The authors analyse the issue of price fixing – that conferences once enjoyed – as a guarantee to quality of service. The limitation of price competition enabled conference members to compete on 'quality of service'. A good insight into the role of the 'quality' variable in liner shipping can be found in Devanney et al (1975). These authors observe that conferences, while often being considered as monopolists, *do not actually earn the corresponding monopoly profits*. For this issue the analysis continues *infra* in page 155. They explain this by pointing at the strong competition among conference members on the quality of service. When pricing is fixed, differentiation on quality is the only way a conference member can increase his own revenue at the cost of other members. As derived from empirical data, the criteria associated with quality variables are considered to be the provision of information and Electronic Data Interchange (EDI) systems; logistical services; better coordination and integration with inland transport companies; ownership and management of terminals and equipment; frequency of service; and geographical coverage and efficient response to the particular requirements of customers.

³⁴⁷ Pozdnakova Alla, 'Information Exchange Agreements between Liner shipping companies under EC Competition law', in Antapassis Antonis, Athanassiou Lia, Røsæg Erik (eds), *op. cit.* p. 376

competition in the future could be greater should the conferences continue to operate. The Commission decided that the self-awareness obligation of the conferences has been a weak measure. The assumption of competitiveness for a liner consortium largely depends on its desire to maintain effective competition. It is possible for an alliance to detect and then deter member firms from secretly cutting rates (thus becoming more competitive overall) in order to maintain its market position; evolving thus from a partial function joint venture to a full function cartel. Experience shows that the greater the dominance is, the more probable it is for the firm to abuse its position.

Taking also into account the established view of Community law, I believe that the temporal element has to be always incorporated in the market definition analysis, in a way to include the dynamic and changing element of the liner, as well as tramp and maritime market.

In an analogous condition with the temporal markets, the introduction of the temporal element in the market definition analysis facilitates us in producing the following findings:

- i) Tonnage capacity is supplied by the carrier(s) as a response to an uncertain demand by the shipper, in the context of a temporal period in which the demand appears and then disappears. The degree of uncertainty of demand results from the cyclical behaviour of the business. This cyclical demand, which is at the same time difficult to predict, is the key element that both makes the market volatile and self-regulates, in the mid-term, any imbalances in the supply/demand equilibrium. So, the temporal element becomes a substantial factor that affects the stability and the length of the demand; in other words, uncertainty is met by instability (the volatility) within a certain trade. The cycle of the season in liner shipping could be determined with the help of maritime economics and can

theoretically be determined in accordance with the theory of the maritime cycles;³⁴⁸

- ii) Transport service accommodates a certain pattern of demand. Carriers respond to the demand of shippers for a certain service. They simply adapt to the need for transport that could be of a long-term or short-term nature; moreover they manage their assets trying to predict their future value. Whether it is a container vessel or a bulk, it is a response to the shipper's demands. Thus, the market cannot simply be determined by the narrow route and the vessels, *per se*, but by the need of the shippers for vessels for their patronage, i.e. the container vessels for ready goods and break-bulk for resources. It is the shippers that demand the quality of service (expressed in terms of liner scheduled services) in an non-predictive pattern;
- iii) Tramp shipping and other modes substitute liner service only to a marginal degree, mainly in cases of over-demand, simply due to the fact they satisfy different consumer needs;
- iv) In contrast, liner service can substitute tramp shipping to a great degree.

Disregarding any "lazy monopoly" conditions that may exist in a conference or a consortium, one can claim that a reason behind possible inefficiencies consists of the lack of flexibility to increase prices, hence to heal its inefficiencies through profit. In liner shipping, however, the issue of profitability has been partly dealt with through measures of naval engineering innovation and IT systems that have been developed by ship operators (and partially with the alliances). Through rationalisation of service and reduction of costs, carriers avoid inefficiencies due to oversupply over time, while at the same time the freight rates remain reasonably fair.

³⁴⁸ Stopford Martin (2009) op. cit. p 36 et. seq.

In view of the above I summarise with the following findings:

- i) It is not possible for customers to substitute service between time periods; peak shippers might not view peak and off peak liner service equally as substitutes. For example, capacity to produce crops may vary between time periods and it may not be possible to store fruit from one period to another. Containerisation, however, is a recent phenomenon in the history of maritime trade (the last 50 years only). The fact of economies of scale that is a characteristic feature of liner shipping may actually turn into disadvantage as economy of scale is connected with the supply of vessels.
- ii) Whereas current liner fleets have managed to provide quality of service and relatively low freight rates by incorporating economies of scale, they also constitute a frequent and serious risk exposure on their own: larger vessels require larger expenditure and provide the management with less flexibility.

2.2.2 Non-Pricing Exclusionary Abuses

Once it is established that a liner shipping company or group of companies is dominant, their market conduct becomes potentially subject to prohibition of the abuse of dominant position laid down in Article 102 TFEU. The starting point for considering an abuse must be in the context of Article 102, before the conditions that contribute to the abuse can be derived by the Commission's decisional practice and the Community Courts.³⁴⁹ In the sections below we will analyse the circumstances whereby the dominant players' market conduct effects the exclusion of actual and potential rivals from the market.

³⁴⁹ Dabbah (2004) op. cit. p342

2.2.2.1 Requirement, Tying and Rebate Arrangements

Usually, arrangements stem from a dominant firm, where it may impose an obligation on one or more of its customers to agree and/or purchase their requirements from it. In shipping, this is usually put in practice through loyalty and rebate arrangements whereby a shipper is granted benefits for choosing designated vessels, as per the consortium's requests. This sort of tying is caught by Article 102 TFEU. In *Hoffmann La Roche*³⁵⁰ the ECJ refers to an obligation on customers to purchase "all" or "most" of "*their requirement from the said undertaking whether the obligation in question is stipulated without further qualification or whether it is undertaken in consideration of the grant or a rebate*". It is important to consider the expected benefits.

Second, it is important to distinguish rebates and related loyalty agreements that are conditional on shipper's loyalty to the carrier from rebates, such as volume rebates and other discounts, granted by the carrier *on the basis of cost savings and other efficiencies achieved*. There are two basic variables set above: First, the *cost savings* and second, the *efficiencies*. Applying the cost-based method of assessing tariff rate levels requires the identification of the relevant cost structure and efficiencies produced of the dominant liner shipping company, as well as that of its competitors. Notably, both cost expenditure and savings can occur by the larger volume of cargo sent by shippers, i.e. by increased operation and by large market share. Hence, expenses incur due to increased operation in the second case, paradoxically due to the achievement of economies of scale³⁵¹.

³⁵⁰ Hoffmann La Roche para 89

³⁵¹ *Infra* p. 158

In view of the argument above, a rebate from the standard tariff granted to shippers of larger quantities of cargo can, as a principle, be considered non-discriminatory. The rebate practice, however, requires more detailed analysis under Article 102(2)(c) when cost savings achieved by the dominant carrier are granted to some shippers as justification of volume discounts. In particular, it is necessary to clarify whether any relevant cost savings actually do flow from sending larger consignments. In addition, I believe that it would be wise to take into account matters of equality – with regard to amount and quality - in the way of calculating and applying volume rebates to shippers. Deviations from the rule of equality may lead to discriminatory behaviour, as competition law relates the rebates with the scope of their use.

2.2.2.1.1 Types of Rebates

With reference to the above, we have to distinguish between the various types of rebates that are granted to shippers in order to consider their importance and their impact as possible reasons for discrimination. Moreover, types of rebates in shipping are grouped and described within certain *loyalty contracts*. In *TACA Decision*³⁵², the Commission analysed the rebates with reference to the *loyalty contract* the parties agree to observe listing the three most common categories of loyalty agreements.

2.2.2.1.1.1 Conditional and Volume Rebates

First, *conditional or volume rebates* are granted to customers to reward certain (purchasing) behaviour of these customers in a particular period of time. The usual form is that customers are rewarded if their purchases exceed a certain threshold during a defined reference

³⁵² TACA Decision op.cit. paras 116-119

period. In *Michelin*³⁵³, *Portuguese Airports*³⁵⁴ and *Zaventem*³⁵⁵ the court held that an undertaking occupying a dominant position is entitled to offer its customers quantity discounts linked solely to the volume of purchases made from it. However, the rules for calculating such discounts must not result in the application of dissimilar conditions to equivalent transactions with other trading parties within the meaning of Article 102 TFEU.

In practice, this means that the conditions based on inequality and dissimilarities with the intention of elimination of competition and/or with the intention of favouring one shipper against another are duly caught under Article 102. For example, a high threshold in the system which can only be met by a few particularly large partners of the undertaking occupying a dominant position, these discounts may constitute evidence of discriminatory treatment.³⁵⁶ It is apparent that, in order to justify the system in question, the *PORTUGUESE REPUBLIC* has submitted only general arguments relating to the advantage to airports of operating a system of quantity discounts on landing charges and has done no more than claim that the system was open to all airlines.

2.2.2.1.1.2 Unconditional Rebates

Second, *unconditional* rebates, granted to certain shippers and not to others, are granted for every purchase of these particular customers, independently of their purchasing behaviour.³⁵⁷

³⁵³ *Michelin* (1983) op. cit. para 71

³⁵⁴ *Portuguese Republic vs Commission (Portuguese Airports)* Case C-163/99 [2001 ECR I-2613] para 50

³⁵⁵ *Brussels National Airport (Zaventem)*, Commission Decision [OJ 1995 L 216/8] para 16

³⁵⁶ Jones, A, Suffrin, B (2007) p. 596

³⁵⁷ DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses [Brussels, December 2005]

found: <ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf>, accessed May 2012, p 43

2.2.2.1.1.3 Rebates on Incremental Purchases

Third, we have to distinguish between conditional rebates that are granted on all purchases, and conditional rebates on *incremental purchases* above the threshold. The former are granted on all purchases in the reference period once a certain threshold is exceeded, and can have a strong foreclosure effect. Whether the conditional rebate is available to all purchases below and above the threshold once it is exceeded or only to incremental purchases above the threshold makes an important difference to the way possible loyalty-enhancing effects are induced and how they are assessed.

2.2.2.1.1.4 Loyalty Contract

The “*Loyalty Contract*” is an agreement between the liner and the shipper whereby the shipper obtains lower rates by committing its patronage to that carrier; the contract provides for a deferred rebate to be arranged in favour of the shipper. The nature of this arrangement is binding for the carrier who is obliged to honour the terms of this agreement.

2.2.2.1.1.5 Dual Rate Contract

The “*Dual Rate Contract*” is a contract available to all shippers by providing immediate discounts – not in the form of rebates – to the shipper that sends its cargo exclusively on the consortium’s vessels.

2.2.2.1.1.6 Deferred Rebate System

In contrast to these immediately requiring arrangements, the “*Deferred Rebate System*” consists of non-immediate rebate systems without the presence of a written agreement; these are mutual promises rather than binding agreements, since there is no contract covering its realisation.³⁵⁸ The shipper promises to send its patronage to the designated vessels, and the carrier *ex ante* promises to rebate the former with a *post ante* discount. It is implied that the carrier may seize the opportunity to forfeit the rebate if the shipper breaches the loyalty obligation and the burden of proof that no such breach occurred lies on the shipper³⁵⁹. In general, these three categories of loyalty agreements can be further categorised as fidelity rebates, target rebates and across the board rebates.

2.2.2.1.2 Remarks

In particular, the legal issues worth mentioning in relation to this state of affairs are:

- i) Restriction by object that is considered within the mischief of Article 101; achieved by offering various kinds of rebates. It may be objectionable where it acts as an incentive to customers to become tied to the dominant firm in terms of obtaining their requirements exclusively from the latter.³⁶⁰ Such rebates cannot be associated with volume rebates and other discounts granted by the carrier purely on the basis of cost savings and other efficiencies achieved (i.e. a correction in the profit margin). In this manner they achieve, directly or indirectly, a restriction in actual and potential competition. It is thus made progressively difficult

³⁵⁸ Ibid. paras 117-119

³⁵⁹ Herman Amos, Shipping Conferences [Deverter: Kluwer law and Taxation Publishers 1983] p. 60 apud. Pozdnakova (2008) p.75

³⁶⁰ Dabbah (2004) op. cit. p 360

for shippers to select alternative carriers.³⁶¹ In *Hoffmann La Roche*³⁶² it was stated that “...unless there exceptional circumstances... are incompatible with the objective of undistorted competition...the fidelity rebate is designed through the grant of financial advantage to prevent customers from obtaining their supplies from competing producers”.

ii) Upstream control to be considered within the mischief of Article 102: This can be achieved not only by exclusively tying the shippers to a dominant carrier in two ways: (a), with regard to some types of cargo for which the consortium is specialised (e.g. containers and/or break bulk liners); (b) to all types of cargo sent by the shipper. This can result in substantial exclusion from the market for actual and potential competitors. This affects practically everyone involved: independent liner companies, tramp carriers, even incumbent competing carriers, and exceeds the scope of the usual fidelity rebate - it resembles *across the board rebates*³⁶³ as they are mentioned in *Hoffmann La Roche*³⁶⁴ and *Michelin*³⁶⁵. Particularly in *CEWAL II*³⁶⁶ the conference had been found to be imposing a 100% loyalty agreement and using blacklists to enable reprisals against users; hence, shippers had no alternative, nor were outsiders allowed to compete.

iii) Adherence of a shipper to the dominant liner shipping company may follow not from a policy of loyalty but merely from the position of dominance as such³⁶⁷. A dominant position is always associated with greater ability of a liner shipping company to

³⁶¹ See: Dansk Pelsdyravlerforening [1992],

³⁶² See: *Hoffmann La Roche* [1979] para 90

³⁶³ Dabbah (2004) op. cit. pp. 362-363

³⁶⁴ See: *Hoffmann La Roche* [1979] para 109-111

³⁶⁵ *Manufacture Française de pneumatiques Michelin vs Commission* [2003 ECR I-837]

³⁶⁶ See *CEWAL II* para 10. *CEWAL II Compagnie Maritime Belge SA*, Commission Decision of 30 April 2004, cases COMP/D2/32448 and 32450 [OJ 2005 L 171/28]

³⁶⁷ Pozdnakova (2008) p. 404

satisfy shipper demands, and the presence of a dominant company presupposes that smaller carriers could face capacity constraints. Therefore, in view of the case (1) above, it is highly probable that a combination of progressive consolidation of loyalty with high market shares will eventually result in further oligopolistic conditions in the market. A reliable indicator would be to detect when the threshold for the shipper's portion of "loyal" cargo is set so low that it would anyhow be obtained from the dominant carrier; this will not have a loyalty enhancing effect, and this situation is irreversible.

- iv) Once it is established that the dominant company grants conditional rebates only on incremental purchases, such behaviour constitutes an abuse only if the resulting price for these incremental purchases is a predatory price, provided the threshold is set in terms of a percentage of total requirements of the buyer or an individualised volume target. In that context, the leveraging between the "*non-contestable*" and the "*contestable*" portion of demand allows the rebate system to operate without a profit sacrifice - and thus to operate for a long time. Abuse is considered likely if the resulting price does not cover average total cost and the part of demand to which the rebate is applied is important enough to create a foreclosure effect.³⁶⁸

The duration of this loyalty is also essential. A rebate, granted annually, representing a percentage of the overall turnover achieved, is more restraining than a narrower arrangement as regards the period or the market involved.³⁶⁹ Nonetheless, rebates linked to annual target purchases of capacity can also function as loyalty-inducing rebates. In this situation, the amount of rebate will not be linked to capacity as such and it is possible that a shipper that leases

³⁶⁸ DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses op. cit. p. 51

³⁶⁹ Michelin (2003) *ibid.*

lesser capacity will be rewarded disproportionately higher rebates. This practice constitutes an abuse of a dominant position which may consist, for example, in applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage³⁷⁰.

2.2.2.2 Single Branding Obligation

Exclusionary abuses may be both price based and non-price based. Examples of non-price based abuses are contractual tying, single branding contracts and “naked” refusals to supply. In these situations it is clear that foreclosure may take place; the question is whether this foreclosure may be characterised as anticompetitive. The “English Clause” refers to situations in which a dominant firm requires a customer to report better offers it obtained from competitors.³⁷¹ The Commission explains in its *Guidelines on Vertical Restraints*³⁷² that such a clause can have the same effect as a non-compete obligation. Basically, the possible competition risks of single branding are foreclosure of the market to competing suppliers and potential suppliers. Such restrictive effects also have a direct impact on inter-consortium competition, as incumbents must be free to compete with each other, in any event.

Another issue that we have to consider is the effect that an English clause may have on shipbrokers’ actions, as they are, on many occasions, the intermediaries between shippers and shipowners. The problem exists with work of the chartering broker who is compensated with commission payments upon successful fixing of a charter. Then, restraints of competition create a serious consequence to the good operation of the market. Here a distinction must be made between

³⁷⁰ British Airways PLC vs Commission of the European Communities (ECJ) [2007 ECR I-2331] para 58

³⁷¹ Dabbah op. cit. p. 363

³⁷² Guidelines on Vertical Restraints [OJ 2010/C 130/01] para 129 et seq.

exclusive and non-exclusive (inclusive) brokers. In the *Vertical Guidelines* (2009)³⁷³ it is stipulated that, in general, single branding and post-term non-compete provisions may lead to anti-competitive effects and may infringe Article 101(1), especially if they lead to or contribute to a (cumulative) foreclosure effect on the relevant market where the contract goods or services are sold or purchased.

2.2.2.3 Refusal to Supply under Article 102

The principle that private parties are themselves free to decide whether to contract with each other and to define the content of their contracts is fundamental to contract law. First, it is necessary to distinguish among the concerted practices between incumbents³⁷⁴ and refusals of dominant carrier to supply service. The former is caught under Article 101 as concerted practice that may arise even out of co-ordination, which become apparent from the behaviour of the participants and the refusals. The latter, under certain conditions, amounts to abuse based on Article 102 TFEU. Below we shall analyse the unilateral or multilateral concurrent refusal of the dominant carrier to supply capacity; a behaviour that exceeds the freedom of a dominant carrier to choose contracting parties.³⁷⁵

In general, imposing an obligation on a carrier (dominant or not) to supply shipping services to a *shipper* can amount to restricting its contractual freedom.³⁷⁶ However, liner shipping services are noticeably defined as a *service available to any transport user* against payment

³⁷³ Ibid. para 19

³⁷⁴ ICI (Dyestuffs) vs Commission 48/69 [1972 ECR 619] paras 64-65. See also Coöperative Verening “Suiker Unie” UA (SUGAR CARTEL) and others vs Commission, Joined Cases 40-48/73, 50, 54-56/73, 11/73 and 114/73 [1975 ECR 1663] paras 173-174, Azienda Colori Nazionali - ACNA S.p.A. vs. Commission Case 57-69 [ECR 1972 00933] para 50.

³⁷⁵ Bayer AG vs Commission [2000 ECR II-3383] paras 66-72, Volkswagen AG vs Commission [2003 ECR II-0000] para 32. See also Pozdnakova (2008) op. cit. p 323

³⁷⁶ Tassel, Yves, ‘Freedom of Contract and Public Order relative to the legal effect of the Hague Visby Rules: Prospects of English law and of French law’, in Antapassis Antonis, Athanassiou Lia, Røsæg Erik (eds), op. cit. p. 376

even on an occasional basis. It is an extensive and paramount obligation of service that is clearly mentioned, *inter alia*, within *Liner Consortia Regulation* (2009)³⁷⁷, and it is on those grounds only that liner shipping companies enjoy, as an exchange, the aforementioned consortia exemption.³⁷⁸ A refusal to a shipper or a competing carrier is allowed unless the objective justification for such a refusal amounts to an abuse, therefore the first condition of compliance with competition rules relates to the said obligation; deviation is only allowed for well grounded reasons. Moreover, the fact of dominance *per se* has an aggravating effect in itself on the actual circumstances of the case. A dominant undertaking is found unable to give a valid explanation about refusal to supply when it infringes Article 102, as its behaviour constitutes an *essential* indication for abuse of its dominance.

For example *Irish Continental Group*³⁷⁹ (a passenger service operating ferries between Brittany and Ireland) was denied service by the Roscoff Port Authority, *CCI Morlaix*.

The Commission decided that, *prima facie*, the behaviour of *CCI Morlaix* amounted to a refusal to supply services and given the dominant position that it enjoyed constituted an abuse that was caught by Article 102.

In addition to the above, *Pozdnakova* (2008)³⁸⁰ links the refusal of supply with the “*unfair or unfavourable*” *conditions* to shippers as additional reasons for abuse, in an analogy to the use of the “unfair”

³⁷⁷ See definition of Liner Services in Commission Regulation 906/2009 on the application of Article 101(3) of the Treaty to certain categories of agreements, decisions and concerted practices between liner shipping companies (consortia) [OJ L 256/31 2009] article 2(2).

³⁷⁸ In the Scope of the Consortia Regulation (2009) it is stipulated: “This Regulation shall apply to consortia only in so far as they provide international liner shipping services from or to one or more Community ports”. See Pozdnakova (2008) p 325

³⁷⁹ *Irish Continental Group vs CCI Morlaix*, interim measures before Commission [1995 5 CMLR 77] para 59. In this case the Commission held: “...CCI Morlaix détient une position dominante, pour la mise a disposition d'une installation essentielle. Son refus constitue un abus de sa position dominante...”. See also : XXVth REPORT on Competition Policy 1995 [1996] p. 120

³⁸⁰ Pozdnakova (2008) op. cit. p. 323

element that describes excessive pricing, i.e. where a shipper is faced with either an *outright* refusal to supply a shipping service, or on terms unacceptable to the shipper. Such behaviour is caught expressly by Article 102(a) and can also amount to discrimination within the meaning of Article 102(c), as the shipper is subject to abusive practices that place it in clear competitive disadvantage.

2.2.3 Exploitative Pricing Practices

2.2.3.1 Unfair and Excessive High Freight Rates

Article 102(2)(a) gives as an illustration of abuse:

“Directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions.”

There are three elements to this provision:

- (i) Direct or indirect;
- (ii) unfair
- (iii) prices or trading conditions.

Though elements (i) and (iii) are clear, the provision does not clarify the concept of “unfair”. The matter was first dealt with in the *General Motors*³⁸¹ decision, wherein the Commission condemned the excessive pricing of a dominant firm and imposed a fine on the firm for that practice. Its decision was quashed by the ECJ, which held, later, in the *United Brands*³⁸² case:

³⁸¹ General Motors Decision (1975) op.cit. para
³⁸² United Brands, op.cit. para 250

“...charging a price which is excessive because it has no reasonable relation to the economic value of the product supplied is...an abuse”. Clearly therefore, excessive pricing can amount to an abuse of a dominant position. The difficulty is to know at what point a price is abusive (because it bears no relation to the ‘economic value’ of the product). Various methodologies have been used, but none is free from difficulty.³⁸³ In practice, the most logical one is to compare production cost with profit margin.

An aspect that is worth mentioning is that excessive pricing policy and other exploitative conduct by dominant liner shipping companies does not infringe Article 102 TFEU if it can be justified by objective reasons.³⁸⁴ An important question is raised here: are the grounds for objective justification under Article 102 the same as for the purposes of exemption under Article 101(3)? The answer is negative: in *Tetra Pak*³⁸⁵ the CFI has emphasized that imposition of unfair prices is an abuse to which no exception can be made under Article 102 TFEU of the Treaty. The concept of objective justification of abuse is limited and does not operate as an exemption for abusive behaviour. Yet, as to the exact meaning of “objective justification” in liner shipping, we can mention the following: it is necessary to identify the grounds and the scope of the objective justification defence of tariff rate decreases. As a starting point, dominant carriers are not precluded from engaging in price competition in order to protect their commercial interests when they are attacked.³⁸⁶ Tariff rate decreases applied by dominant carriers will not infringe Article 102 EC if they both protect the legitimate interests of the carrier and are proportionate to the threat the carrier faces.

³⁸³ Whish and Bailey (2012) p. 720

³⁸⁴ TACA Judgment op. cit. para 1113; United Brands op. cit. p. 219

³⁸⁵ *Tetra Pak Rausing SA vs Commission (Tetra Pak I)*, Case No. T-51/89 [1990 ECR II- 309] paras 28-29

³⁸⁶ United Brands op.cit. para 189

Another aspect is the relationship between excessive price and profitability. Though the Commission and the ECJ agree that the establishment of dominant position is unrelated to profitability, a price may infringe Article 102 where the difference between the price that is charged and the costs incurred is excessive. The ability to increase prices over the period in question is considered to be a more decisive criterion than the actual accumulation of profits. This has been established in *United Brands*³⁸⁷ and in *TACA Decision*³⁸⁸ where the lack of profitability has not been a determinative factor in establishing a dominant position. In *TACA Decision (para 543)* the Commission examined regular, albeit modest, price increases over the period 1994 to 1996, in stark contrast to the two other world's arterial trades. The Commission decided that: *"The ability of the TACA parties to impose regular, albeit modest, price increases over the period 1994 to 1996, in stark contrast to the two other world arterial trades...demonstrates that the TACA parties have been able to maintain or increase prices. This has been made possible because of the elimination of effective competition.... in any event, it is clear that lack of profitability is not a determinative factor in establishing a dominant position"*.

Several issues are raised here: What can be considered as excessive or unfair in a free market where profit is a legitimate goal? How can we assess excessive pricing and what are the boundaries between excessive and unfair? How can we protect competition and benefit consumers without harming the essentials of the free market that presupposes free and unimpeded competition; thus to frame the "natural desire"³⁸⁹ of firms to maximise profits? Is it possible to assess an economic value in liner shipping, notably the value of a company or the excessive amount based on global freight rates?

³⁸⁷ United Brands, op.cit. paras 125-128

³⁸⁸ TACA Decision op. cit. para 543

³⁸⁹ Dabbah op. cit. p. 359

Whish & Bailey (2012)³⁹⁰ analyse the issue and the effect of these exploitative and exclusionary practices; moreover they provide us with *altera pars* arguments against direct control of the market. Arguments against direct control support that normal market forces have their way: the fact that a dominant party is able to earn large profits in the absence of barriers to expansion and entry, attracts -“by nature as well”- new entrants in the market. However, one cannot neglect that the exploitative and exclusionary elements in a trading practice can appear at any time, as they exploit the core *per se* of the free market, which is the freedom of the parties to negotiate a price. In other words, agreed and negotiated prices may be different prices and may not be discriminatory unless there is no objective justification for the difference. In practice, different customers often pay different prices for the same product as a result of main market factors. For the dominant firm, however, an allegation of price discrimination is likely to raise difficulties under Article 102 if third parties are placed at a real economic disadvantage as a result of the policy followed.³⁹¹ I shall adapt *Whish & Bailey’s* methodology to the case of shipping accordingly:

In order to establish a case of unfair excessive the following conditions must apply:

- i) High level of dominance: oligopoly or monopoly
- ii) Limited interchangeability and supply substitutability. In order for these conditions to be realised we must first have a central (not peripheral) port with limited access (due to its geography and facilities) that allows few and specific vessels to service the area;

³⁹⁰ Whish Richard, Bailey David, *Competition Law* [Oxford University Press, 7th edition 2012] pp.718-725.

³⁹¹ Hildebrand Doris, *The Role of Economic Analysis in the EC Competition Rules* [Kluwer Law International 2009] p. 58.

- iii) High cost of investment and effort required to attract alternative suppliers to the point that the current supplier becomes a (natural) monopoly;
- iv) Narrow market. For a narrow market to exist, there must be either specialised cargo and/or limited port slots allocated to the dominant carriers;
- v) Elimination of competition. This means that the competition has been eliminated by the dominant carrier. Yet, given conditions (i) and (ii) require cooperation with the port authority that can be achieved either by collusion or by vertical integration.
- vi) Prior elimination of competition. With the exception of case (iii) elimination of competition can be achieved by preceding abusive practices that eliminated competition and led to the current imperfect competition therefore,
- vii) A monopsony. Where the seller is alone and faces many buyers; the former may dictate terms to its suppliers in the same manner that a monopolist controls the market for its buyers.
- viii) Natural absence of tramp competitors; something that is very rare to occur. Despite the fact that EU Bodies have repeatedly stated that in the majority of cases liner service cannot be substituted by tramp service³⁹², I am convinced that when freight rates are low, like it is currently, (the BDIY at 662 points the presumption of non-substitutability between liner and tramp shipping set by the EU competition law may not be entirely accurate. Tramp operators are more willing nowadays to call at any port where there is charter.

2.2.3.1.1 A Reasonable Relation to the Economic Value

³⁹² See Atlantic Container case § 90

The matter was first dealt with in *Deutsche Grammophon*³⁹³, *Sirena*³⁹⁴ and *General Motors*³⁹⁵, though it was the case of the *United Brands*³⁹⁶ that established the theoretical basis for excessive pricing. The ECJ held that “*price which is excessive because it has no reasonable relation to the economic value of the product supplied would be such an abuse*”. The key phrase used in this explanation is “reasonable relation”. The ECJ did not expressly define the exact boundaries of what may be considered as “*reasonable*” or “*excessive*”;

Usually, an analysis to define concepts as such must take into consideration the value of the assets in the current market, the cost levels and external conditions in comparison to the profit margin of the dominant carriers, vis-à-vis the delivered and/or required quality of service. Therefore, an excessive pricing analysis consists of two stages: determining the charged rate in relation to the costs incurred, and, most importantly, determining whether this price, regardless of the amount, is unfair. The ECJ and the Commission started their analysis based on the above hypothesis: difference between price and cost incurred. Nonetheless, they have not limited their analysis only within the above; they employ all possible methods to discover whether there is a case of abuse.

Admittedly the ECJ endorses a more teleological approach and describes profit as derivate of the relation between economic value of a product or a service and the sale price. In *United Brands*³⁹⁷ for example, in order to prove any lack of reasonable relation, the Court invited the Commission to calculate “*if by making a comparison between the selling price of the product in question and its cost of production, which should disclose the amount of the profit margin*”. In this case the Commission had at least to “*require United Brands Co to*

³⁹³ *Deutsche Grammophon GmbH vs Metro – SB – Grossmärkte GmbH* [1971 ECR 487] para 19.

³⁹⁴ *Sirena SRL vs Eda SRL* [1971 ECR 69] para 17.

³⁹⁵ *General Motors*, Commission Decision [OJ 1975 L29/14] para 12.

³⁹⁶ *United Brands* op.cit. para 250.

³⁹⁷ *United Brands* op.cit. para 251.

*produce particulars of all the constituent elements of its production costs*³⁹⁸. The *United Brands* decision is also important as the ECJ invited the Commission to use every means possible to discover similar phenomena in the EC markets³⁹⁹. That means that the role of economists to support the Commission has been established. In similar cases (e.g. *British Leyland*⁴⁰⁰ and *Volvo*⁴⁰¹), the Court suggested that the main transgression of the ‘excessive’ fees was that they served as a device to interfere with market integration, not that they interfered (which they in fact did) with allocative efficiency.

In both the *Leyland* and *Volvo* cases, the Court indicated a link between dominant position that was established by certain rights not necessarily from the held market share; de-associating thus the requirement of a market share from excessive pricing. It concluded that the abuse derives from the very subject matter of an exclusive right that a holder of such right is entitled to prevent third parties from manufacturing or selling the products concerned.⁴⁰²

2.2.3.1.2 The “Fair” Rate Requirement

The economic value of a liner shipping service is determined by a variety of factors other than costs of supply and cannot, therefore, be determined simply by adding to the costs incurred in providing the service a profit margin as a pre-determined percentage of production costs. Whether a tariff rate is unfair in itself can be determined by taking into account additional factors but not exclusively the profit margin of the dominant earner in question. First, apart from the costs incurred in supplying the service, the earner also faces other costs

³⁹⁸ Ibid. para 256.

³⁹⁹ The Court said: “Other ways may be devised - and economic theorists have not failed to think up several - of selecting the rules for determining whether the price of a product is unfair”. Ibid. para 253.

⁴⁰⁰ *British Leyland PLC vs Commission*, Case 226/84 [1986 ECR 3263] para 39.

⁴⁰¹ *AB Volvo vs Erik Veng (UK) Ltd*, Case 238/87 [ECR 1988 06211] para 5.

⁴⁰² Hildebrand (2009) op. cit. pp.53-58

which need to be covered by the shipper. Second, the economic value of a shipping service is influenced by factors relating to conditions of demand and shipper preferences.

Another question also arises as to whether losses incurred by the carrier in conditions of seasonal, directional or cyclical overcapacity can be recovered from tariff rates charged to shippers in periods of excess demand: to *'survive in a volatile market with prices determined by competition, the liner company must make enough profit during the good years to subsidize its operations during the bad years'*⁴⁰³. I follow the ECJ approach to the *Ahmed Saeed*⁴⁰⁴ case whereby a precedent of long running cost calculation is established (across different periods) in combination with other notable indicators.

2.2.3.1.3 Cost Levels in Liner Shipping

If it is accepted that price related abuse occurs, then the problem is to identify and quantify it. The basic level of comparison is the cost of production. The difficulty in this is that these costs are generally difficult to assess in shipping. The cost-based method of assessing tariff rate levels implies that it is necessary to first identify the relevant cost structure of the dominant liner shipping company before examining that of its competitors. With regard to the former, cost expenditure and savings occur by the larger volume of cargo sent by shippers. In the first case, expenses incur due to the increased operation; in the second case, paradoxically due to the achievement of economies of scale.

In addition to the above, competitors' cost is relevant where the fairness of the level of rate is to be tested by comparison of the

⁴⁰³ Stopford (1997) op. cit. p. 346
⁴⁰⁴ *Infra* § 417

dominant and its competitors' rates. Pozdnakova (2008)⁴⁰⁵ clearly analyses this case of relative cost allocation in liner shipping.

Likewise, identifying and measuring relevant costs can be complicated because liner shipping is characterized by joint (common) costs, which are not attributable to carriage of a specific commodity or unit of shipment. So far, no mathematic tool has been capable of producing a definite benchmark for determining profit earned by a dominant carrier as excessive, *per se*. In principle, some sectors may be structurally more profitable than others.

The problem of joint costs arises because of the high fixed costs of liner carriers and the large number of separate shipments that make joint use of a vehicle's transport capacity on each voyage. As per Lim's analysis (1994)⁴⁰⁶, these joint costs are the following:

- i) Variable Costs: Cargo related (Cargo expenses, Terminal Handling Charges and Haulages) and Navigation expenses.
- ii) Fixed Costs: Crew expenses, Vessel expenses, depreciations and amortization (leaseholds)⁴⁰⁷
- iii) Overheads: Administrative Expenses, Non-operating revenues and non-operating expenses.

⁴⁰⁵ Pozdnakova (2008) op. cit pp. 303-305

⁴⁰⁶ Lim Seok Min, "Economies of container ship size: a new evaluation", *Maritime Policy & Management* [1994 vol 21 no 2] pp. 149-160

⁴⁰⁷ Fixed costs in liner shipping are associated with ownership of the entire fleet, costs incurred for soliciting and handling cargo, general overheads, terminal costs and operating costs of vessels already scheduled for sailing. Fixed costs tend to remain unchanged over a period of one year or longer, while variation in fixed costs normally takes place only in cases of major schedule revisions. See also: Stopford (1997) op. cit. p 358. He proves that economies of scale are important in relation to the fixed costs of the ship. He also demonstrates the importance of economies of scale to liner operators. The *total cost* of the 6,500 TEU ship is almost three times the cost of the 1,200 ship, but the cargo volume is almost six times as great. As the size of ship increases, the fixed cost component falls from 42 per cent to 26 per cent. In contrast, the *fixed cost* of the containers does not benefit from economies of scale, so its share increases from 14 per cent of total cost for the 1,200 TEU ship to 19 per cent for the 6,500 TEU ship. Likewise, the various cargo handling and distribution costs (section 4 of Table 10.4) do not benefit from economies of scale, with the result that their share of the budget increases from 37 percent for the 1,200 TEU ship to 51 percent for the 6,500 TEU ship.

Stopford (1997)⁴⁰⁸, Davies (1983)⁴⁰⁹, Gkonis and Psaraftis (2009)⁴¹⁰ and Grammenos⁴¹¹ analyse the subject thoroughly. In fact, Davies (1983) notes that in liner shipping the short-run period may be defined as the time within which it is not possible to vary either the size of the fleet operated by a company or the frequency of service. Once a schedule has been agreed upon, cost items such as fuel, wages, maintenance and repair (regarded as variable costs in other industries) become fixed, which cannot be avoided in the short-run planning horizon. Variable costs that change directly with the magnitude of cargo carried are associated with handling, loading and stowing cargo.⁴¹²

With regard to point (ii), the problem of cost allocation can also arise if a carrier is engaged in a range of different activities, not all of which directly relate to the supply of a liner shipping service. For example, liner shipping companies, which traditionally were exclusively in the transportation business with their assets limited to vessels, have increasingly become involved in supply of inland distribution services, which are particularly important for container transport.⁴¹³

Furthermore, carriers can also incur costs from supply of maritime carriage services other than scheduled transportation, such as tramp shipping, or costs which do not relate to supply of the given liner shipping service (for example, costs of operating a container terminal,

⁴⁰⁸ Ibid. pp. 351-357. Stopford identifies six components of liner service costs: service schedule, ship costs, port charges, container operations, container costs, and administration.

⁴⁰⁹ Davies J.E. "An Analysis of Cost and Supply Conditions in the Liner Shipping Industry", *Journal of Industrial Economics*, [1983 Vol. 31, No. 4] pp. 417-435.

⁴¹⁰ Gkonis Konstantinos & Psaraftis Harilaos, "Some key variables affecting liner shipping costs", working paper of the *Laboratory for Maritime Transport School of Naval Architecture and Marine Engineering National Technical University of Athens* [2009] available in:

<www.martrans.org/documents/2009/prt/TRB_paper%2010_3188_Gkonis_Psaraftis_revised.pdf> accessed 4th July 2012

⁴¹¹ Grammenos Costas, (2010).

⁴¹² Gkonis & Psaraftis (2009) op. cit. p 3

⁴¹³ Pozdnakova (2008) op. cit. p 304

where the service in question is that of conventional liner shipping). Costs arising from such activities have to be covered from tariff rates paid by shippers but it is necessary to decide the extent to which shippers should contribute to the range of carrier costs. The extent to which the shipper can be forced to participate in covering the common cost should generally be limited by a 'fair share' of common costs.

The case law does not specify whether individual cost levels of a dominant undertaking or the general level of costs in the relevant market is to be considered as a threshold for measuring whether rates are excessive.

Pozdnakova (2009)⁴¹⁴ supports as a possible reliable indicator the individual cost levels of a dominant undertaking compared with the general level of costs for the relevant market (costs of competitors) in order to establish whether the former's costs are disproportionate. However, there are three cases, *Sundbusserne*⁴¹⁵, *SCANDLINES Sverige*⁴¹⁶ and *Ahmed Saeed*⁴¹⁷, brought before the Commission and the ECJ, respectively, which provide further evidence that should be taken into account. In all three, the Commission and the ECJ found it significantly difficult to determine costs and reasonable fares. Notably, in *Sundbusserne* the Commission did not accept ten percent as a reasonable limit for profit in the absence of justification of such a threshold, nor has the ECJ been able to set any alternative benchmark. Yet it was the logical decision, in view of the absence of a credible fixed limit that defines permissible profitability. Hence, though an investigation can identify the violation (i.e. the intent to use

⁴¹⁴ Pozdnakova (2008) op. cit. p 309

⁴¹⁵ Sundbusserne vs Port of Helsingborg, Case COMP/36.570 [2004]

⁴¹⁶ Scandlines Sverige AB vs Port of Helsingborg, Case: COMP/A.36.568/D, Commission decision [2006] 4 CMLR 1224. Available from <http://ec.europa.eu/competition/antitrust/cases/dec_docs/36568/36568_44_4.pdf> accessed January 2012. paras 157, 234

⁴¹⁷ Ahmed Saeed Flugreisen and Silver Line Reisebüro GmbH vs. Zentrale zur Bekämpfung Unlauteren Wettbewerbs e.V, (Ahmed Saeed) ECJ [1990 4 CMLR] para 102

price in order to eliminate competition), it is difficult to quantify exactly the actual damage incurred, and, consequently, to establish the causation between the intention, the action and the actual damage.

In order to effectively deal with the issue, the Commission implemented a methodology based on circumstantial evidence that could constitute an abuse. Thus, in *SCANDLINES SVERIGE* the Commission expanded its *ratio* and presented the prerequisites that add to excessive profit following a comparison analysis of rates between different ports. In particular:

- i) The individual cost structure of the companies, i.e. possible economies of scale; sailing distance, scope, existence of cost efficiencies;
- ii) Historical values of assets;
- iii) Level of investments committed;
- iv) Type of finance;
- v) Internal decision as regards the remuneration of the share holders.

In *Ahmed Saeed* the ECJ separated short run costs from long run costs. In a sense, the Court, based on the EC Directive on Fares⁴¹⁸, has distinguished long term costs as a reliable indicator and referred to the “*long-term fully allocated costs of the carrier*” as one of the tariff rate's determinants.⁴¹⁹ In this case, it is recognised that tariffs must be reasonably related to the long-term fully allocated costs of the air carrier, while taking into account the *needs of consumers*, the need for a satisfactory *return on capital*, the *competitive market situation*, including the *comparison of fares* of the other air carriers operating on the route, and the need to prevent dumping. In this way, I contend that it is convenient and methodologically correct to use longer cycles

⁴¹⁸ Council Directive 87/601/EEC On fares for scheduled air services between Member States [OJ 1987, L 374] Article 3, p . 12

⁴¹⁹ Ahmed Saeed op. cit para 43

in order to circumvent⁴²⁰ the actual impossibility of calculating short run expenses, achieving henceforth a reliable estimation. In particular, there are four elements that can be used out of the *Ahmed Saeed* case :

- i) It is impossible to rely entirely on the short run results of a shipping company.
- ii) We have to distinguish between short run and long run costs. Long run may be useful to compare with the maritime cycles, as per *Ahmed Saeed's* precedent.⁴²¹
- iii) Fully allocated costs of a dominant liner shipping company include direct fixed, variable costs and overheads incurred in supplying a specific shipping service and a share in the common costs associated with supply by the carrier of a range of services.
- iv) Historical values of assets are an important consideration as well, and it can be compiled with the *needs of consumers*, the need for a satisfactory *return on capital*, the *competitive market situation*, including the *comparison of fares* of the other air carriers operating on the route, and the need to *prevent dumping*. This is very important, as assets become factors that can be correlated with the ROI;
- v) With reference to the above, the level of investment committed is an appreciable factor, which again can be correlated with the ROI;
- vi) Equally significant is the analysis of the “cost of capital”. Here we can see a clear divergence in the methodology followed by the Commission in accounting the cost of capital. In particular, the Commission rejected the arguments about the nature of the “cost of capital” submitted by *SCANDLINES*. Should the dominant firm want to justify the charged price as necessary, it

⁴²⁰ Davies (1983) op. cit. *supra*
⁴²¹ *Supra* § 417

has to prove that the said revenue scheme intends, on one hand, to remunerate the bond holders (i.e. the banks in general) and, on the other hand, to serve dividends to the shareholders (i.e. the “equity” holders). Accordingly, *SCANDLINES* supported that “*in the language of finance and economics, cost of capital refers, in broad terms, to the minimum return the capital market would expect a company (or project) to generate if the market is to invest in that company, due allowance being made for any specific risk associated with the company’s activities*”⁴²². I agree with the above approach and would add the terms of “interest” or perhaps “consideration” in order to determine the essence of borrowing, i.e. the Return of the (Borrowed) Capital (ROC) in form of the original capital plus the interest. While the Commission endorsed⁴²³ a totally different approach with regard to the issue of Expected Remuneration of the Equity Capital, it agreed that the charged price corresponds to the financial costs which notably include the interest charges paid on net outstanding debts. These costs are costs accounted for, which appear as such in the audited annual financial reports. I believe the above is a kind of paradox. Whereas we know that the Commission does not take into account the degree of profitability in assessing dominant position⁴²⁴, it takes into account the profit excess in determining abuse of the dominant position.

vii) In addition to the Commission’s approximate cost allocation, depreciation costs are based on the *historical values of the assets*. This allows us to estimate a ship’s value through the period of market cycles in relation to the subsequent maritime markets of the transport service (the S&P and the Demolition⁴²⁵). However, a company that sets its prices on the

⁴²² Scandlines Sverige op.cit Appendix 3.1. para 64

⁴²³ Scandlines Sverige op.cit Appendix 3.1. para 66

⁴²⁴ See TACA supra § 388

⁴²⁵ Supra p. 54

basis of depreciated historical costs may well find itself in a position that its return does not continue to finance future capital expenditures for the replacement of existing assets.

2.2.3.1.3.1 Marginal Costs (MC) Benchmark

I agree with Hovenkamp (2005), especially with his opinion that the main criterion for the market power of a liner shipping conference relates to its ability to deviate profitability from marginal cost pricing.

Hence, measuring marginal cost level⁴²⁶ should be the most appropriate base from which we can assume the market power of a given company.⁴²⁷ Views about the actual boundaries of *market share* and *higher than the marginal cost pricing* vary and the subject remains controversial among researchers. The reason is due to the complex nature of the maritime transport sector that allows limited generalisations; each case has to be considered separately.

2.2.3.1.3.2 Average Avoidable Costs (AAC) Benchmark

The pricing benchmark of AAC does not substantially depart from the one of average variable costs, since it also targets below-cost rates. At the same time, it takes into consideration the strategic aspect of rate cuts made by a liner shipping company.

⁴²⁶ In economics, marginal cost pricing is the practice of setting the price of a product or a service to equal the production of an extra unit of output. In ideal circumstances, economic efficiency or social optimality involves the market price being equal to the marginal cost. This is also called “*the marginal cost pricing*” principle. It can be justified by another concept in economic welfare analysis, Pareto optimality. The question arises here is whether the marginal cost could be a reliable base for the EU Competition to calculate market power, given the cyclical and temporal elements that exists within shipping markets.

⁴²⁷ Hovenkamp Herbert (2005) op. cit. pp. 80-81. Also see: TACA Decision II, op. cit, § 920-921

The AAC can be the same as the average variable cost, since in many cases only variable costs can be avoided. However, if a dominant company, had to expand its capacity in order to be able to predate, then the fixed or sunk investments made for this extra capacity will also have to be taken into account and will filter into the average avoidable cost benchmark.⁴²⁸ Given the high proportion of fixed costs in liner shipping, avoidable costs of the dominant carrier would include some of the fixed costs associated with sailing the vessel. This hypothetical situation outlines why this consideration is relevant.

A dominant carrier which charges a lower tariff rate for all or a particular part of capacity supplied on the market over the relevant period incurred or incurs losses that could have been *avoided* if that (particular) part of its capacity was not supplied; if, for example, the vessel did not sail. It is, at least in the short run, not minimizing its losses. In general, this is sufficient to presume that it makes a sacrifice in order to exclude the targeted competitor. In liner shipping, application of the average avoidable cost concept as a relevant cost benchmark is particularly appropriate in cases where a dominant carrier releases excess capacity with a view to achieving rate decreases and to eliminating or discouraging a rival carrier.

A large complement of costs in liner shipping, including fixed costs⁴²⁹, are not incurred until a voyage is embarked upon - although carriers face significant limitations in their ability to cut such costs, even when they do so under pressure of price competition. These include substantial maintenance, insurance, operational, administrative and marketing organizational costs necessary for running a liner fleet, which, given the committed nature of scheduled transport services, are largely fixed in the short run. Application of the avoidable cost

⁴²⁸ Discussion paper on the application of Article 82 of the Treaty to exclusionary abuses op. cit. para 64.

⁴²⁹ *Supra* p. 158 et seq

benchmark in liner shipping also requires accurate assessment of the length of the below-cost pricing period: when a carrier decides not to withdraw a vessel from service and charge below-avoidable-cost rates on an individual sailing, this may have been done with the aim of maintaining a reliable scheduled service.

2.2.3.1.3.3 Average Variable Costs (AVC) Benchmark

Variable cost is the sum of marginal costs incurred from the provision of the service. It is possible that the principle, based on the AVC rule, will not be appropriate in other predatory pricing cases: in *AKZO*, the ECJ referred to the situation of the subject case and applied the criterion of the average variable cost as basis for comparison⁴³⁰. Prices below AVC, by means of which a dominant undertaking seeks to eliminate a competitor, must be regarded as abusive. By referring to the elimination of an efficient competitor by pricing below the average total cost but above average variable cost, the ECJ may have indicated that Article 102 EC will generally apply only to such exclusionary pricing conduct that is capable of excluding competitors as efficient as the dominant liner carrier.

Thus, a dominant undertaking has no interest in applying such prices except that of eliminating competitors so as to enable it to raise its prices by taking advantage of its monopolistic position - since each sale generates a loss, namely the total amount of the fixed costs (that is to say, those which remain constant regardless of the quantities produced) and at least part of the variable costs relating to the unit produced. The criterion for legitimacy of pricing behaviour can be based on costs and the strategy of the dominant undertaking.⁴³¹

⁴³⁰ *AKZO* op. cit para 71

⁴³¹ *Ibid.* para 74.

2.2.3.1.3.4 Other Benchmarks

The *AKZO* judgment opens the possibility of identifying the abusive nature of tariff rate cuts by considering cost categories other than variable or avoidable costs. It may be reasonable to use a cost benchmark which would include a larger proportion of carrier costs related to supply of a shipping service. This can be taken as a starting point from which the tariff rate levels to be applied over time by a carrier form the basis of that carrier's decisions to invest, and the costs considered in predatory pricing analysis include the total costs which are 'incremental' to provision of the shipping service. In *Deutsche Post*⁴³², the Commission introduced a test based on the *long-run average incremental cost* of the dominant undertaking as a threshold below which prices charged are considered predatory.

The long run average incremental cost takes into account both fixed and variable costs, which are incurred by a liner shipping company from supplying an *additional* unit of service but *excluding common fixed costs*, which are not incurred solely as a result of this service (for example, those relating to the maintenance of terminals or equipment utilized for all activities).

An incremental cost can relate to, *inter alia*, carriage of an additional consignment, bringing a new vessel into service, setting up an additional sailing, or opening a new route, i.e., costs incurred in supplying an additional product, referred to as an 'increment', over and above the cost of the existing activities of that firm. Long-run average incremental cost is the average of all variable and fixed costs that a carrier incurs from supplying an additional shipping service in the long run.⁴³³

⁴³² *Deutsche Post AG* op. cit. § 118

⁴³³ Jones, Sufrin, op. cit. pp. 457-458

2.2.3.1.3.5 Average Total Cost (ATC) Benchmark

Average Total Cost (ATC) is the sum of Average Variable Cost (AVC) and Average Fixed Costs.⁴³⁴

In the absence of a clear formula for determining the price cap between cost and sale of the service, Competition Law relies on the identification of the intent of the dominant carrier. A consortium's intent to eliminate smaller (and perhaps weaker) new entrants and/or potential competitors by using its competitive advantages is accordingly caught under Article 102 TFEU. So, tariff rate cuts that are above average total costs may be caught due to the fact that the liner shipping market is characterised by significant economies of scale and the incumbent dominant carrier may also possess certain non-replicable advantages. Pozdnakova (2008)⁴³⁵ mentions, as possible non-replicable advantages, the ownership of container terminals or inland facilities essential for integrated container shipping door-to-door (emphasising upstream and downstream factors).

I would also add the access to capital⁴³⁶ as another non-replicable advantage. Where this is the case, entrants may have to operate for an initial period at a significant cost disadvantage because entry can practically take place only below the minimum efficient scale. This condition requires special liquidity capacity (usually in the form of an overdraft that is usually a high interest loan).

2.2.3.1.4 Different Policies within the Company

In *Deutsche Post*⁴³⁷ the Commission established the abuse by using as a benchmark the prices for cross border mail with its domestic tariff and decided that there was indeed an abuse. In *SCANDLINES*

⁴³⁴ $AVC + AFC = ATC$

⁴³⁵ Pozdnakova (2008) op. cit. p. 362

⁴³⁶ See *supra* p. 94.

⁴³⁷ Deutsche Post AG op. cit. paras 160-166.

*Sverige*⁴³⁸ the Commission did not depend on the cost analysis. Showing a similar degree of flexibility as in *Deutsche Post*, it looked to see if the charges were unfair and attempted to compare them with prices charged for other services provided in the same port, and with prices charged to ferry operators in other ports.

2.2.3.1.5 Yardstick Competition

In *Bodson*⁴³⁹ and *Lucazeau*⁴⁴⁰ the ECJ implemented the technique described as “yardstick” competition: suggesting that a comparison should be made with the level of fees charged in other member states. When an undertaking holding a dominant position imposes scales of fees for its services which are appreciably higher than those charged in other Member States, and where a comparison of the fee levels has been made on a consistent basis, that difference must be regarded as indicative of an abuse of a dominant position. In such a case it is for the undertaking in question to justify the difference by reference to objective dissimilarities between the situation in the Member State concerned and the situation prevailing in all the other Member States. Similarly, the Commission in *Standard & Poor*⁴⁴¹ investigated whether the practice of S&P to apply a licensing fee vis-à-vis indirect users, which is not in line with the ISO standard 6166 charge principles, constituted an abuse.⁴⁴² The Commission found that *inter alia* the company had infringed Article 102 of the Treaty by setting unfairly

⁴³⁸ Scandlines Sverige op.cit *supra* § 416.

⁴³⁹ *Corinne Bodson vs Pompes Funèbres des Régions Libérées SA*, case 30/87 [1988 ECR 2479]. The Court held: “in particular where the monopoly over the provision of certain services established by an undertaking or by a group of undertakings leads to discrimination against imported products as opposed to products of domestic origin”.

⁴⁴⁰ *François Lucazeau and others vs Société des Auteurs, Compositeurs et Editeurs de Musique (SACEM) and others*, case 110/88 [1989 ECR 2811 para 25]

⁴⁴¹ Standard and Poor, Summary of Commission Decision of 15 November 2011 Case: (COMP/39.592 — Standard & Poor's) [OJ 2012 C 31/8] para

⁴⁴² The S&P demanded extra fees from the direct users that significantly exceed the costs incurred for that activity.

high fees for the supply of US International Securities Identification Numbers (ISINs) in comparison to the existing ISO system.

As mentioned in *Deutsche Post*⁴⁴³, an analysis of excessive pricing of a consortium can focus on identifying whether the set price is unfair in itself or in comparison to competing products. Adequate results can be rendered in liner shipping by the “*yardstick competition*” method on two conditions: if services provided by a dominant liner carrier are comparable to those of other carriers and if competition between the dominant carrier in question and its competitors is effective.

Should the evidence allow a yardstick competition analysis, the conditions that determine whether a high tariff rate level is justified must depend on:

- i) The objective factors, such as differences in service supply costs;
- ii) Other factors such as density of competition, which can be considered at the stage when ‘fairness’ of the tariff rate is assessed.

Nevertheless, the above requires a certain degree of homogeneity. An undertaking’s *competing services* can be defined by reference to the relevant market, or perhaps more broadly. Perhaps, it may be necessary to avoid comparison among liner shipping companies and tramp (non-scheduled) vessel operators or between container vessels and conventional liner shipping or NVOs.

To this end, it is not sufficient to establish whether a shipper enjoys identical use of services supplied by the carriers under comparison. It is required that comparison is made on a consistent basis; meaning, first, that services provided must be comparable and, second, that charging systems must allow for meaningful comparison. Yet, it is

⁴⁴³ Deutsche Post op. cit. para 159

again difficult to have an accurate measurement in shipping as the market is dynamic enough to create confusion in the analysis.

For example, where competing carriers are merely price followers, the 'yardstick competition' approach will not produce adequate results. This relates to the effective but not actual (lazy) competition among the conference and the competing independents; another paradox of the liner shipping business.

In spite of the dynamic features of the market and the effective competition, price coordination does occur indirectly. An independent, being in the shadow of a conference (and currently of a consortium), is also benefited by consortium price planning. Accordingly, the practice is that the competitors lower their prices slightly, say by about 10 to 15 per cent (10-15%),⁴⁴⁴ a calculated risk that is proportionally maintained even when conferences decide to modify their own rates.

This proves that independents were systematically following conference policies⁴⁴⁵ and adjusting their pricing policy accordingly. A tacit coordination between competitors produced an effective but non-actual competition between consortia and independents. It is the independents' decision whether to be subject to the price policies of a consortium or to continue to operate independently. As a result of this, independents have established their own marketing standards in parallel to conferences⁴⁴⁶, though individual carriers and/or alliances presently make their own decisions on capacity and service. However,

⁴⁴⁴ *Global Insight Report (2005)*, *op. cit.*, pp. 152-153 Though there are no regular or formal meetings on capacity management by known routes, it is reported that there are regular meetings of the 'Box Club', a group that consists of the Liner companies that includes the ELAA members as well as other independent liners that do not however call in Europe. This organisation has been known to carry out studies on supply/demand issues and one can contemplate that there must be regular discussions on capacity matters This footnote has been made before.

⁴⁴⁵ *TACA Judgment (2003)*, *op. cit.*, para 1074. See Commission Decision *TACA* (1998) paras 534-537. See declarations of French shipowners (Armateurs de France) in the review process of Regulation 4056/86. Also see: Blanco (2007), *op. cit.*, p. 467

⁴⁴⁶ See also *supra* §282

empirical evidence has suggested that the independents' access to Information Exchange Systems (IES) allows them to adapt their strategy in correlation with the discussions held in the conferences based on the prices posted in the IES.

In view of the above I attempt to expand the concept of yardstick competition analysis in an effort to make the comparison more effective.

2.2.3.1.5.1 Aggregating Across Markets

In view of the difficulty in establishing a credible dominance criterion, I use an analogue methodology developed by the ECJ in order to define the aggregation of benefits in multiple markets. The matter of aggregation across markets is analysed above⁴⁴⁷, where I discuss the natural difficulty in practically enclosing an anti-competitive behaviour within a framework of a certain market.

2.2.3.2 Exclusionary Excessive Pricing

Excessive prices which are exploitative to the actual competition in a market may be also exclusionary for potential competition. I use as an obvious example the situation in which the owner of an essential facility (e.g. port cranes, port slots or warehousing and stevedoring facilities) charges an excessive or discriminatory price for granting access to it.

Firstly, Article 3 of Consortia Regulation (2009) provides that the joint operation or use of port terminals and related services (such as lighterage between vessels or stevedoring services) or any other activities ancillary to transport are subject to exemption. Ancillary charges represent the additional increase in charges that are triggered

⁴⁴⁷ *Supra* pp 55 - 60 et seq

by or associated with the operation of shifting and operating containers - i.e., they are ancillary to the service provided by the shipping lines. They include extra charges for terminal handling (THCs), less-than-container-load-service charges (LCLSCs), detention charges, demurrage costs, change of destination, special equipment and handling goods needing special care and service (e.g., dangerous goods, refrigerated goods etc.). An issue can be raised here with regard to the connection of these charges with the rate offered by the carrier. It is thus necessary to examine whether the carrier has control of the ancillary services of the port, incorporating them into the rate. Since 1995, the ECJ in *Centro Servizi Spediporto*⁴⁴⁸ held that that in the context of Regulation 4055/86 “*maritime transport services ceased on arrival at the port or offshore installation and do not therefore extend to road transport of cargo unloaded from the vessel*”. I believe that maritime transport has evolved considerably and vertical alliances are always susceptible to infringement. So, I agree with Chuah (2005)⁴⁴⁹ who supports that such surcharges, although itemised separately from the ocean tariff, may form part of the “rate” as long as they relate to “maritime transport”.

Whish and Bailey (2012)⁴⁵⁰ consider this practice a kind of constructive refusal to supply that constitutes an abuse of dominant position. Therefore, identifying exclusionary intent becomes the central element of analysis where the rate is increased to a level beyond average. Subsequent increase of tariff rates can only be used as evidence of exclusionary intent in combination with other factors; it is not an independent element of predatory pricing analysis. To repeat: application of Article 102 TFEU to tariff rate decreases below cost is not conditional on the actual effects of the conduct in

⁴⁴⁸ *Centro Servizi Spediporto Srl v Spedizioni Marittima del Golfo Srl*. - Reference for a preliminary ruling: Tribunale di Genova - Italy. [1995] I ECR 2883, para 239

⁴⁴⁹ Chuah (2005) op. cit § 12 pp. 216-219

⁴⁵⁰ Whish and Bailey (2012) op. cit. p. 724

question, and it may not be even necessary to establish that the conduct is capable of producing such effects.

2.2.3.3 Price Discrimination

In general, lawful price differentiation is an acceptable practice in liner shipping. In a sense, standard tariffs are followed only on low volume clients. Instead, there are standard tariff deviations, structured in such a way that shippers are organised in different categories (classes) according to the conditions existing in each route i.e. the shipper's cargo volume, charter negotiation, loyalty and rebates, port particularities etc.

Article 102(2)(c) TFEU prohibits a dominant undertaking from applying '*dissimilar conditions to equivalent transactions*' with other trading parties, thereby placing them at a competitive disadvantage. Whereas a differentiated tariff structure does not automatically result in discrimination against transport users, it infringes Article 102(2)(c). Additionally, charging the same tariff rate for services based on different cost levels for the carrier is also discriminatory.

The intention from and the injury caused by the dominant undertaking has to be clear: placing the parties in competitive disadvantage, moreover to harm competition. Therefore, price discrimination is generally classified according to the primary or secondary line injury it produces.⁴⁵¹ *Primary* line injury is recognisable in loyalty rebates which result in the market being foreclosed for other competitors because shippers are attracted by lower rates offered by the dominant carrier.⁴⁵² The *secondary* line injury concerns the discrimination among shippers; it produces direct harm for transport users as the discriminatory conditions of shipping service place them in a less favourable position on the market in

⁴⁵¹ Pozdnakova op. cit. p. 371-372
⁴⁵² *Supra* p. 141

comparison to other transport users. Below we shall analyse the elements of the tariff discriminatory policy by liner operators.

2.2.3.3.1 Application of Dissimilar Tariff to Equivalent Services

The key elements described in 102(2)(c) TFEU are the “dissimilar” tariff to “equivalent” services. These concepts need to be analysed within the liner shipping context in order to measure what are the conditions and standards attached to them before we proceed to the quantify the degree of damage inflicted in the competition by the discriminatory price policy of the dominant undertaking.

First, the definition of price discrimination given in the paragraph above suggests that “equivalence” of shipping service can be measured on the basis of marginal cost (MC)⁴⁵³ of supply. Pozdnakova (2008)⁴⁵⁴ is correct to suggest that “*where the costs of supply of two shipping services differ, the two services are not equivalent*”. Application of the MC as the only basis for determining the discriminatory nature is a parochial methodology, however. It is desirable that other cost benchmarks be taken under consideration as well⁴⁵⁵.

⁴⁵³ *Supra* p. 165

⁴⁵⁴ Pozdnakova (2008) op. cit. p. 373

⁴⁵⁵ See analysis of Cost Benchmarks, *supra* at section 2.2.3.1.3 Cost Levels in Liner Shipping

If it is accepted that price related abuse occurs, then the problem is to identify and quantify it. The basic level of comparison is the cost of production. The difficulty in this is that these costs are generally difficult to assess in shipping. The cost-based method of assessing tariff rate levels implies that it is necessary to first identify the relevant cost structure of the dominant liner shipping company before examining that of its competitors. With regard to the former, cost expenditure and savings occur by the larger volume of cargo sent by shippers. In the first case, expenses incur due to the increased operation; in the second case, paradoxically due to the achievement of economies of scale.

In *AKZO*⁴⁵⁶ the matter of dissimilar tariffs was raised by the Commission. The Court found that, in addition to the large market share of 55% that proved a dominant position, *AKZO*'s policy of offering lower prices to some customers disadvantaged those still paying the higher prices vis-à-vis their competitors who were benefiting from the lower price.

Comparable to fidelity rebates where customers paying the lower price have an unjustified advantage over customers not receiving the rebate, such instances of price discrimination have been held to be abusive. As already mentioned, however, it is not yet clear whether there is any general principle deriving from Article 102 TFEU that requires that - in all circumstances - a dominant firm must sell on non-discriminatory terms to all consumers.⁴⁵⁷

2.2.3.3.2 Discounts based on Carrier's Cost Savings

Liner shipping companies offer discounts from the standard tariff for shipments of larger volumes of cargo under '*time and volume*' arrangements and service contracts. As previously discussed⁴⁵⁸, a carrier in a dominant position is entitled to grant quantity discounts,

In addition to the above, competitors' cost is relevant where the fairness of the level of rate is to be tested by comparison of the dominant and its competitors' rates. et seq. Cost Levels in Liner Shipping If it is accepted that price related abuse occurs, then the problem is to identify and quantify it. The basic level of comparison is the cost of production. The difficulty in this is that these costs are generally difficult to assess in shipping. The cost-based method of assessing tariff rate levels implies that it is necessary to first identify the relevant cost structure of the dominant liner shipping company before examining that of its competitors. With regard to the former, cost expenditure and savings occur by the larger volume of cargo sent by shippers. In the first case, expenses incur due to the increased operation; in the second case, paradoxically due to the achievement of economies of scale. In addition to the above, competitors' costs are relevant where the fairness of the level of rate is to be tested by comparison of the dominant and its competitors' rates.

⁴⁵⁶ *AKZO Chemie BV vs Commission*, Case 62/86 R [ECR 1991 I-3359]

⁴⁵⁷ Hildebrand (2009) op. cit. p. 58

⁴⁵⁸ *Supra* in 2.2.2.1 Requirement, Tying and Rebate Arrangements p. 141

which are justified by cost savings or economies of scale⁴⁵⁹ achieved by the carrier due to consignment size.

Analogous to *Portuguese Airports*⁴⁶⁰ and *Zaventem*⁴⁶¹, a carrier is entitled to grant quantity discounts which are justified *by cost savings or economies of scale achieved by the carrier due to consignment size*. In principle, it is acceptable that shippers of larger volumes enjoy a proportionately larger discount in comparison to those who ship smaller volumes of cargo.

While the carrier may save administrative costs and cargo handling costs, potentially justifying differences in tariff rates charged to bigger and smaller shippers, I believe that the above justification remains unclear. I deem that in shipping it is nearly impossible to quantify discounts, especially given the different sizes and weights of the products.

Beginning with fixed costs Herman (1983)⁴⁶² argues that administrative costs remain the same in many cases regardless of the volume of shipment. This cancels any effort of calculation from the start, as the element of proportional discount based on volumes transported. Moreover, the exact cost of carriage of each ton or unit of cargo cannot be determined due to the joint cost structure in liner shipping.⁴⁶³

Another option is to rely upon gross average turnover made per customer; this could be a reliable first indication, as it does not require that cost savings be fully identified. Yet this option would require considerable investment (in terms of IT and administration) in

⁴⁵⁹ Note that in *Virgin/British Airways* op. cit §114 para 101 the Commission discuss about efficiencies.

⁴⁶⁰ *Supra* § 354

⁴⁶¹ *Supra* § 355

⁴⁶² Herman (1983) op. cit. pp 33-34

⁴⁶³ See Lim Seok Min op. cit. § 406

order to calculate the exact amount of rebate per customer – avoiding thus discriminations and replacing them with an inefficient process.

Continuing with the concepts of *economies of scale* and/or *efficiencies*, there is another particularity in liner shipping that is less complicated than cost allocation. Economies of scale can be achieved by larger volumes of transported goods within the same fixed cost framework. A sophisticated container placement on board is required in order to achieve this, yet this economy of scale is achieved not only by the carrier; the shipper's assistance is also needed. For example, a proper practice by freight forwarders, which purchase vessel space from liner shipping companies, is to perform cargo consolidation to increase density by arranging goods in full-container-loads. Efficient consolidation of cargo is particularly important in container shipping, where it minimizes transportation of less-than-full container loads but is also important in conventional scheduled transport because it directly contributes to more efficient use of vessel space and economies of scale for the carrier. In this way, freight forwarders perform a service for the carrier and this can reasonably be taken into account when relevant tariff rates are assessed in the context of Article 102(2)(c).

Pozdnakova (2008)⁴⁶⁴ and Ridyard (2002)⁴⁶⁵ are correct to argue that there is almost no plausible cost function that would make any discount scheme cost-related in the sense that differences in price would be explained by differences in the costs of supply.

Yet again, according to the ECJ,⁴⁶⁶ the amount of volume rebate does not need to be proportionately equal for any volume shipped. It should also be noted that inconsistency between the volume and discounts

⁴⁶⁴ Pozdnakova (2008) op. cit p. 374

⁴⁶⁵ Ridyard Derek, "Exclusionary Pricing and Price Discrimination Abuses under Article 82 - An Economic Analysis", [*European Competition Law Review* 2002] pages 288-290

⁴⁶⁶ *Portuguese Airports* op. cit. para 51

awarded the aggregated average stabilises at or near the maximum discount rate. The mere fact that the result of quantity discounts is that some customers enjoy, in respect of specific quantities, a proportionally higher average reduction than others in relation to the difference in their respective volumes of purchase is inherent in this type of system, but it cannot be inferred from that alone that the system is discriminatory.

Therefore, I agree with the *ratio* of the Court in *Portuguese Airports*⁴⁶⁷ which sets the *intent* as a key criterion that can replace the exact calculation, if the latter cannot be precisely achieved. Where discounts are enjoyed by only some trading parties, giving them an economic advantage which is not justified by the volume of business they bring or by any economies of scale they allow the supplier to make compared with their competitors, a system of quantity discounts leads to the application of dissimilar conditions to equivalent transactions.

2.2.3.3.3 Price Discrimination Resulting in Disadvantage

Article 102(2)(c) refers generally to secondary line injury, as it catches discrimination which places *trading parties of a dominant undertaking at a competitive disadvantage*. First, it is necessary to establish the meaning of ‘*competitive disadvantage*’ in liner shipping and clarify in which cases it can be caused by a discriminatory tariff system.⁴⁶⁸ Second, it is essential to examine whether this requirement must be construed as a conceptual limitation on the applicability of Article 102 TFEU to a discriminatory tariff system of dominant liner carriers.⁴⁶⁹

⁴⁶⁷ Ibid. paras 52-53

⁴⁶⁸ Pozdnakova (2008) *ibid.* p. 379

⁴⁶⁹ Ibid. p. 380

On the one hand, we know that any price policy targets the transport users: the freight forwarders that obtain vessel space from the carrier as agents for the shipper, and the shippers which use the service of the dominant carrier and can trade in competing commodities.

On the other hand, competitive disadvantage emerges whenever a user falls behind its competitors in its ability to supply goods or services at competitive prices. Moreover, a disadvantage may also arise if a user is refused a shipping service or offered less favourable terms and conditions of service than its competitors.

Based on the findings of the section above, I consider it appropriate to rely on the criteria of intention and consequences as result of the inequality implemented by the operator to the shippers; a causation has to be established, however, by the action and the damage in a similar case as tort - the discriminatory pricing in turn must be a source of positive advantage to another shipper. In *Virgin/British Airways*,⁴⁷⁰ the Commission applied Article 82 EC to performance reward schemes of British Airways, which discriminated between travel agents and thus placed some of them at a disadvantage in relation to others in the acute competition between them.

Transferring this decision to shipping, as far as the freight forwarders are concerned, we can assume the following: those freight forwarders that pay higher costs to the carriers than their competitors will have to charge more their customers, a fact that places them at a competitive disadvantage. Likewise, shippers can suffer damage in terms of economic loss. A peculiarity of competition law, however, is that damage is not required for the application of Article 102 TFEU; it is the “object and effect” of excluding competitors from the market

⁴⁷⁰ *Virgin/British Airways* op. cit. para 111

that is more important.⁴⁷¹ Notably in *Clearstream*⁴⁷², the ECJ concluded that the discrimination alone against a trading partner continuously over a period of years “*could not fail*” to cause that partner a competitive disadvantage.

2.2.3.4 Predatory Pricing

Generally, predatory prices must be decreased below the cost of the predating carrier to be capable of producing exclusionary and eliminatory effects⁴⁷³. To win competition on rates so that competitors may have to exit the market, a dominant company does not necessarily have to supply a shipping service below cost and at a loss.

In *AKZO*⁴⁷⁴ the ECJ concluded that Article 102 TFEU does not allow a dominant undertaking to compete by “*using methods other than those which come within the scope of competition on the basis of quality*”. The concept of such legitimate price competition is focused on the cost level of a dominant carrier and prohibits, in particular, charging rates below the average variable cost incurred by the carrier in supplying a shipping service.

A dominant carrier may reduce tariff rates in response to a new entry to a level below the rival’s rates, so that no losses will actually be incurred but profit will be decreased.⁴⁷⁵ A finding of predation would,

⁴⁷¹ *Virgin/British Airways* paras 115 and 120. See also *Corsica Ferries Italia vs Corporazione dei Piloti del Porto di Genova* [1994 ECR I-1783] para 34. See also *Clearstream vs Commission* (Clearstream) [2009 ECR II-3155] paras 67-68.

⁴⁷² *Ibid.*

⁴⁷³ *AKZO op. cit.* para 72: “*if they are determined as part of a plan for eliminating a competitor. Such prices can drive from the market undertakings which are perhaps as efficient as the dominant undertaking but which, because of their smaller financial resources, are incapable of withstanding the competition waged against them.*”

⁴⁷⁴ *AKZO op. cit.* para 70

⁴⁷⁵ *Pozdnakova* (2008) *op. cit.* p. 339

in the case of such sustainable pricing strategy, be quite controversial. In this section I discuss the applicability of Article 102 TFEU to tariff policies of the dominant carriers which do not involve supplying a shipping service below cost. This affects both actual and potential competition.

Thus, predatory pricing differs from lawful competition because lower tariff rates are not explained by a lower level of costs, but by the loss-making strategy of the predating carrier. Calculating the margin between average variable cost and the tariff rate, which discloses whether the carrier incurs short-run losses when it supplies a shipping service, is not the only method for assessing the reasonableness of a dominant carrier's pricing strategy. When a dominant carrier faces increased competition, it must operate in such a way as to stay on the market, preferably without losing any or much of its current market share. This can be achieved by reducing costs so that it is able to offer lower rates. The key criterion is to identify whether the dominant carrier chooses to suffer losses rather than to avoid them; such pricing behaviour should be examined in more detail because it does not, at face value, appear to be consistent with competition on its merits permitted by Article 102 TFEU.⁴⁷⁶

The definition of predatory pricing is focused on the distinction between price competition based on efficiency, which is lawful, and price competition based on the exercise of market power, which infringes Article 102 TFEU.

2.2.3.4.1 Pricing below Total Cost (TC)

Due to the importance of fixed costs in liner shipping, a predatory pricing rule limited strictly to the criterion based on average variable

⁴⁷⁶ Ibid. p. 345

cost may not be fully appropriate for assessing the predatory nature of pricing strategies in this market.⁴⁷⁷

For a liner shipping service to be profitable in the long run, the carrier needs to earn net voyage revenue over a period to cover both variable and fixed costs as well as an adequate rate of return on capital.⁴⁷⁸ The policy of charging rates above the variable cost level but below the total cost level of the carrier in question can be explained by a variety of reasons, not necessarily by a predatory objective. By covering costs related to carriage of a specific consignment, the carrier does not increase its economic losses, although it foregoes recovering costs related to operation of the shipping service as a whole. Furthermore, a rate above the average variable cost still covers at least a part of the carrier's fixed costs. Given that tariff rate decreases to a level exceeding the average variable cost of the shipping service may be commercially justified, it is not sufficient to rely solely on the cost test to establish abusiveness of pricing conduct.

2.2.3.4.2 Pricing below Average Total Cost (ATC)

Tariff rates below the total and average total cost (ATC) but above the average variable cost of the shipping service are abusive if eliminatory intent of the allegedly predatory carrier can be shown. Average total costs consist of average variable costs and average fixed costs⁴⁷⁹ of the carrier. Where a dominant carrier charges tariff rates below the average total cost associated with maintaining and operating a scheduled shipping service as a whole, such discounts are very suspicious; particularly where the dominant undertaking does not compete on the basis of better efficiency and lower costs but on the

⁴⁷⁷ Pozdnakova (2008) op. cit p.347

⁴⁷⁸ Stopford (1997) op. cit. *supra*

⁴⁷⁹ Ibid. *supra* § 407

basis of its higher degree of market power and stronger financial position, which allows it to endure losses of profit longer than its competitors. It is necessary to distinguish, however, between efficient and non-efficient competitors. The former operate on the same cost levels as the dominant carrier, but this does not mean that predatory pricing targeted against less efficient rivals will, for this reason, always fall outside Article 102 TFEU.⁴⁸⁰ Such an interpretation would operate as an exemption for dominant carriers who attempt to eliminate or discipline newly-established suppliers, which may have higher cost levels at first. This could, additionally, prevent new entry; notwithstanding, members of collectively dominant liner cartels can be even less efficient than independent carriers.⁴⁸¹

2.2.3.4.3 Recouping of Losses

The predator's intent is to charge a below-cost price, in a sense investing in self-subsidies; once competitors are eliminated then it achieves a return on its investment. However, it has been argued that predatory pricing will not always be a plausible market strategy even for a dominant undertaking because it may not necessarily be able to regain its losses. A dominant carrier may not have the possibility to recoup losses from predation if the competitor is not eliminated or disciplined, or if new entry takes place. The probability and the form of recoupment in liner shipping depends on a variety of conditions such as market structure, degree of potential competition, market share of the predatory carrier, as well as the individual or collective nature of its dominant position. The ECJ in *Tetra Pack II*⁴⁸² held that it would not be appropriate to require a recouping of losses. The Court

⁴⁸⁰ Discussion paper on the application of Article 82 of the Treaty to exclusionary abuses, op. cit para 63

⁴⁸¹ Pozdnakova (2008) op.cit p. 349

⁴⁸² Tetra Pak International SA vs Commission (*TETRA PAK II*), ECJ [ECR 1996 Page I-05951] para 44

established further that it must be possible to penalize predatory pricing whenever there is a risk that competitors will be eliminated—as the aim pursued, which is to maintain undistorted competition, rules out waiting until such a strategy leads to the actual elimination of competitors.

Furthermore, the collective nature of dominance held by the liner shipping consortium may influence and affect its ability to recoup profit lost in rate wars against outsiders. In *CEWAL I*⁴⁸³ the Court found that sharing losses among the members of a dominant cartel reduced the financial burden faced by individual participants. Where the beneficiary of predation is a dominant liner cartel rather than a single carrier, the recoupment of losses incurred in the course of predation must be distributed among the members of the group; this presupposes at least an effective discussion and supervisory mechanism to negotiate and enforce recoupment.

2.2.3.4.4 Above Cost Pricing with Fighting - Ship

Consortia may reduce rates or increase the capacity or frequency of their members' services to eliminate less powerful competition. The practice of "fighting ships" – offering selectively lower rates, different from those contained in the tariff, to coincide with the presence of an independent in a port where the conference operates - has been roundly criticised as an abusive practice. A 'fighting ship' is a vessel placed on berth by a liner conference to sail in competition with a non-conference carrier. The purpose of this practice is to persuade shippers, with various inducements, to dispatch their cargo on board the fighting ship in preference to the competitor's vessel. In order to achieve this, the fighting ship would be scheduled to sail on the same

⁴⁸³ *CEWAL I* op. cit. §102 paras 90, 91 and 101.

day as the competitor's vessel, or several fighting ships would bracket the competitor's sailings. The fighting ship would call at the same ports as the nonconference competitor, and it would charge the same or lower rates as this outsider, even if such rates were well below the conference tariff. Financial losses of the fighting vessel would be distributed over the members of the conference, who would each suffer proportionately less than the outsider. Furthermore, the conference members would often have the advantage of obtaining higher rates on their other sailings.⁴⁸⁴ However, as Chuah (2005) well observes⁴⁸⁵, such practice is in present day circumstances not likely to occur as the system of pre-booking containers for loading cargo would effectively prevent last minute attempts.

In *CEWAL I* ⁴⁸⁶, selective lowering of tariff rates by a collectively dominant liner conference as a part of its 'fighting ships' strategy against its only competitor was found to be unlawful within the meaning of Article 102 EC. Shippers who were likely to switch to the competitor were offered discount rates, whereas others were charged normal or higher rates. Members of *CEWAL* designated as fighting ships those conference vessels whose sailing dates were closest to the sailings of the competitor's ship without actually altering its scheduled timetables; the jointly fixed fighting rates differed from the rates normally charged by the conference lines so that they were the same or lower than their competitor's advertised rates. The resulting decrease in profit was jointly borne by the *CEWAL* members; in this context they were collectively sharing the losses⁴⁸⁷.

By contrast to the case of *AKZO* on below-cost selling, the fighting rates applied by *CEWAL* were above costs and simply resulted in a decrease in earnings for the conference members. *CEWAL* lines, in

⁴⁸⁴ Discussion Paper on Exclusionary Practices op. cit. para 128

⁴⁸⁵ Chuah (2005) op. cit. § 12 p. 231

⁴⁸⁶ *CEWAL I* op. cit. §102 paras 89 *et seq.*

⁴⁸⁷ See also *supra* section 2.2.3.4.3 Recouping of Losses p.185

principle, merely matched competitor's rates without ever trying to offer prices lower than those of the independent shipping operation.

The finding of exclusionary intent was a central element of assessing pricing practices in this case. Eliminary intent was primarily shown by the selective nature of rate decreases below the rates normally applied. The essence of abusive conduct by the *CEWAL* conference resided in a strategy of selective and targeted application of lower rates in response to the fresh competitive threat posed by the competing carrier.

In *Arkin vs. Borchard Lines*⁴⁸⁸, Arkin sought damages from Borchard in the English courts, alleging that Borchard had breached ex Article 82 EC, alternatively ex Article 81 EC. Although the claimant failed to establish a case on merits, the case is significant in that this is the first time that an English court has considered an action for damages arising from an alleged breach of ex Article 82 EC'. The Court referred to the judgment in *Courage Ltd. vs Crehan*⁴⁸⁹, which considered liability for breach of Article ex 81 EC. Although it did not address the point directly, the Court proceeded on the basis that an action for damages was also available for breach of ex Article 82 EC (thereby implicitly upholding the general private enforcement principle set out in *Garden Cottage Foods vs Milk Marketing Board*⁴⁹⁰).

The claimant, a shipping group, asserted that the defendant shipping conferences had engaged in predatory pricing, had used so-called 'fighting ships' to win business, and had spread rumours of the claimant's insolvency in order to drive business to the conferences.

⁴⁸⁸ *Yeheskel Arkin vs Borchard Lines Limited & Ors, Borchard Lines Limited and Zim Israel Navigation Company Ltd & Ors* [2003] EWHC 687 (Comm Court)

⁴⁸⁹ *Courage Ltd v Crehan*, Case C-453/99 [2001] ECR I 6297; *Crehan vs Innpreneur Pub Company* [2003] EWHC 1510 (Chancery Division); [2003] ALL ER (D) 354 (Jun); CA, [2004] EWCA Civ 637, 21 May 2004

⁴⁹⁰ *Garden Cottage Foods Ltd vs Milk Marketing Board* [1984] 1 AC 130; [1983] 2 All ER 770, HL.

Alternatively, the claimant argued that the agreements between the conferences during the relevant period in 1991 fell outside the ex Article 81(3) EC shipping conference block exemption regulation (Regulation 4056/86). The judge found that as the prices charged by the conferences during the alleged price war were above average variable cost, and as there was no evidence that the conferences' price reductions were implemented with the intention of eliminating the claimant from the market, they were not predatory. The judge confirmed, however, that had prices been below such average variable cost, proof of exclusionary intent would not have been necessary. Further, there was no evidence to substantiate the use of fighting ships or that any rumours were spread by the defendants. The defendants' behaviour during the relevant period did not fall outside of the block exemption regulation. What is most important about this case is that Justice Colman recognised that a dominant undertaking was entitled to take part in ordinary competition by reasonable and proportionate rate reductions without having to worry that its competitive measures may actually succeed, thereby restoring at least some part of its recently lost market share and so, at least in theory, reducing the market share and therefore the market strengths of its competitor. Holmes and Lennon⁴⁹¹ and Chuah (2005)⁴⁹² agree that the judgment set an important precedent; the latter also argues that the application of a less than cost price and the use of fighting ships, which could not be considered as intrinsically abnormal market behaviour must be assessed subjectively.⁴⁹³

2.2.3.4.5 Limit Pricing

A similar phenomenon to the fighting ships that relates to intentionally created "excess capacity," is limit pricing. It is a form of

⁴⁹¹ Holmes Marjorie, Lennon Paula, "Competition: Damages - Standard of Proof", *International Business Lawyer*, [2003] pp. 259-263.

⁴⁹² Chuah (2005) op. cit § 12 p. 230

⁴⁹³ Ibid. p. 230

strategic entry deterrence aimed at potential entrants rather than existing competitors. Though there is no jurisprudence with regard to limit pricing, a practice of such kind could hypothetically occur when the dominant undertaking creates excess capacity and uses this capacity to deter entrants without ever lowering its price below the average total cost; if entry is attempted, the dominant firm can increase its production and lower its price without going below cost.⁴⁹⁴

As discussed earlier⁴⁹⁵, issues related to dynamic changes in the available capacity are a rather typical feature of shipping markets, which can, *inter alia*, be explained by seasonal and directional fluctuations in demand and investments made in larger vessels in order to benefit from economies of scale. Excess capacity can be used as a kind of entry deterrence strategy by a dominant carrier. First, the dominant carrier can hold its excess capacity and the threat of future output increases over smaller carriers who are thinking about enlarging output or entering the market. The object of the dominant consortium to operate empty vessels is to prevent competitors from entering the market, because such entry will be considered unrewarding. Losses incurred from such inefficient capacity can be transferred collectively to the group and ultimately to the shipper.⁴⁹⁶

The above relies *ad hoc* on the detection of *intent*. It undoubtedly constitutes, in the context of competition law, a confirmed element of the *actus reus*, albeit I believe that it has to be supported by the evaluation of the competitor's behaviour as well. For instance:

- i) What did the competitor do in order to defend against this practice?
- ii) Did the competitor use all his resources available to defend against this practice?

⁴⁹⁴ Jones, Sufrin p. 465

⁴⁹⁵ Supra section 1.2 Economic Analysis of the Relevant Market p. 38.

⁴⁹⁶ Pozdnakova (2008) op. cit. p. 361

The matter is also addressed in *Arkin vs Borchard Lines*⁴⁹⁷, and Hovenkamp (2005)⁴⁹⁸ analyses the matter of excess capacity as the result of a merger against the static and traditional vision of evaluating market shares and market power. He raises the argument that an analysis should examine whether the competitor has done everything possible to counter the limit pricing and fighting ships; in particular, whether it offset excess capacity with output increases.

It is worth revisiting the issue of collective dominance as a result of a joint venture. Since the purpose of the consortium relates to the rationalisation of service, I this can only be achieved by withdrawing excess capacity (i.e. vessels) and operating costs. Yet this becomes a paradox on its own merit if one assumes that whenever firms form an alliance, the new business entity's market share is the sum of the constituent parties while the competitors' shares remain the same - this is rare, especially in shipping. I thus agree with the concerns raised by Hovenkamp (2005)⁴⁹⁹, who holds that if the joint venture's purpose is to decrease costs, the share of the consortium is likely to grow. By contrast, if the consortium's purpose is to reduce output (by practically limiting the excess capacity), the competitors may do the same, otherwise they must make offsetting output increases. In the latter case, the share of the consortium firm will decline. Hence it is necessary to examine whether the competitor has done its best to fill the gap of the capacity that was withdrawn by increasing its output.

2.2.3.4.6 *Lawful Price Decreases that Fall outside Article 102 TFEU*

Pricing policy adopted by a dominant liner shipping company or companies that would, in general, be considered abusive can fall outside Article 102 TFEU if justifiable by objective reasons.

⁴⁹⁷ *Supra* footnote 488

⁴⁹⁸ Hovenkamp (2005) op. cit. p 214

⁴⁹⁹ *Ibid.* p. 241

Objective justification under Article TFEU must be distinguished from the exemption rule laid down in Article 101(3) TFEU. Objectively justified tariff rate decreases fall outside Article 102 TFEU's prohibition, not because they produce benefits of the kind required for application of Article 101(3) TFEU, but because they do not amount to an abuse of dominant position at all; otherwise the opposite would constitute an exemption. In *TACA*⁵⁰⁰ the CFI held that the justifications permitted by the case-law cannot result in creating exemptions from the application of that provision. The sole purpose of those grounds of justification is to enable a dominant undertaking to show that the purpose of those practices is reasonably to protect its commercial interests in the face of action taken by certain third parties, and that they do not therefore constitute an abuse. In general, there are three major objective reasons that can justify price increases:

2.2.3.4.6.1 Competition Defence:

According to the EU Commission⁵⁰¹, this justification can only apply to *individual* and *not to collective* behaviour to meet competition; thus it cannot apply to liner consortia. The justification applies to individual dominant carriers engaged in price competition in order to protect their commercial interests when they are attacked.⁵⁰² Price cuts as such will not infringe Article 102 TFEU if they, first, protect the legitimate interests of the carrier and, second, are proportionate to the threat the carrier faces. The burden of proof that these conditions are fulfilled will be on the dominant company. The collective nature of dominance held by liner shipping companies can also affect the availability of the objective justification defence.

⁵⁰⁰ TACA Judgment op. cit. para 1114

⁵⁰¹ Discussion Paper on the application of Article 82 of the Treaty to exclusionary abuses, op. cit. para 81

⁵⁰² Tetra Pak II (CFI) op. cit. para 189.

While this interpretation is reserved only for individual companies, I argue that it can expand to cover consortia as well. I will base my arguments on the strength and level of coordination that is necessary for establishing collective dominance:

- i) For collective dominance to exist under Article 102, two or more undertakings must, from an economic point of view, present themselves or act together on a particular market as a collective entity.⁵⁰³ It is not required that the undertakings concerned adopt identical conduct on the market in every respect.⁵⁰⁴ What matters is that they are able to *adopt a common policy on the market and act to a considerable extent independently of their competitors, their customers, and also of consumers.*⁵⁰⁵
- ii) Coordination is more likely to emerge in markets where it is relatively simple to reach a common understanding on the terms of coordination. The simpler and more stable the economic environment, the easier it is for undertakings to reach a common understanding.⁵⁰⁶ For example, incumbents may coordinate by dividing the market, for instance by sub-geographic area or other customer characteristics, or by allocating contracts in bidding markets.⁵⁰⁷ The ability to arrive at and sustain such coordination is what matters. By contrast, the more dynamic and unstable a market is, the less coordinated the joint venture may become. Thus, the necessary element of coordination affects the strength of the consortium.

⁵⁰³ CEWAL (2000) op. cit. para 36.

⁵⁰⁴ Irish Sugar PLC vs Commission, (Irish Sugar), Case T-228/97 [1999 ECR II-2969] para 66

⁵⁰⁵ French Republic and Société commerciale des potasses et de l'azote (SCPA) and Entreprise minière et chimique (EMC) vs Commission, (SPCA), Joined Cases C-68/94 and C-30/95, [1998 ECR I-1375] para 221

⁵⁰⁶ Discussion Paper on the application of Article 82 of the Treaty to exclusionary abuses, op. cit. para 47

⁵⁰⁷ Ibid. para 47

- iii) For such coordination to be achieved, a proper centralised mechanism must be set to monitor whether or not the other undertakings are adhering to the common policy.⁵⁰⁸ This common policy must be sustainable over time⁵⁰⁹ and any abusive practice must not impede the implementation of the common commercial strategy.⁵¹⁰

If the above conditions that relate to the coordination of the policy are not fulfilled then we may have a loose joint venture that might not have established collective dominance. It is a matter of proof, however, and the consortium has the burden to prove that such coordination has not taken place.

2.2.3.4.6.2 Efficiency Defence

Tariff decreases, even below cost, can be explained by the need of the carrier to minimize losses arising from substantial fall in demand and resulting significant excess capacity - which needs to be filled at any price so that at least some fixed costs are covered. For this defence the dominant company must demonstrate that the following conditions are fulfilled⁵¹¹:

- i) that efficiencies are realised or likely to be realised as a result of the conduct concerned;
- ii) that the conduct concerned is indispensable to realise these efficiencies;
- iii) that the efficiencies benefit consumers;
- iv) that competition in respect of a substantial part of the products concerned is not eliminated.

⁵⁰⁸ *AIRTOURS* (2002) op. cit. para 111

⁵⁰⁹ *Idem.*

⁵¹⁰ *Idem.*

⁵¹¹ Discussion Paper on the application of Article 82 of the Treaty to exclusionary abuses, op. cit. para 84

In order to determine efficiency, the analysis must determine the type and effect of costs involved.

2.2.3.4.6.3 Promotional Campaign

Promotional tariff rates, which are lower than standard tariff rates, can be granted by shipping lines to shippers in order to enable their products to penetrate new markets. This falls under the legitimate rebates and discounts policy as analysed in section above.⁵¹²

⁵¹² *Supra* section 2.2.2.1 Requirement, Tying and Rebate Arrangements p. 141

CHAPTER THREE

3.1 Introduction

In chapter three, based on the findings and analysis of chapters one and two, I research the special particularities of the tramp maritime sector. This refers only to those specific issues that are relevant to the tramp maritime sector, as the majority of the legal issues are common between the two sectors. The subjects raised here relate to the definition of the relevant market in tramp shipping and review of tramp shipping pools and other cooperation agreements under Article 101 TFEU.

In the absence of any case law for tramp shipping, it seems that the term “tramp shipping services,” as understood by the Commission, is basically an intellectual construct with blurred boundaries and an uncertain scope that does not merit any legal consideration since it has not produced any case law.

Understanding of the industry is essential. If the purpose of the EC competition policy is to contribute to the efficiency and growth of the European economy, and at the same time impose non-pragmatic conditions and unfavourable regulatory frameworks to a market that accounts for more than 80% of the transport of goods, does not seem to be the right way to go.

In order to address the above, I structure this chapter as follows: First I present the nature and structure of tramp shipping pool. In chapters one and two, I have conducted competition analysis of the liner shipping consortia, and I set the central idea that governs my analysis. In this chapter, I examine tramp shipping and tramp shipping pools, revisiting the concepts of the relevant market, and the

compatibility of tramp shipping pools with article 101 TFEU. I structure the chapter by focusing on the tramp shipping particularities and adopting the findings of chapters one and two (where applicable). I categorise pools according to their level of risk under the current EU Legislation, finally proposing an unconventional solution that exceeds the standards of competition law and refers to the definition of the relevant market.

3.2 The Relevant Market in Tramp Shipping

3.2.1 The Relevant Service Market

Of course, it may not be feasible to tie the tramp shipping market to a pen-made definition that is not outlined nor agreed upon by the industry. Maritime transport is an extremely dynamic sector and therefore any market definition attempts must take into account the complexity of its structure.

The complexity of the maritime transport market and the relationships between contractual parties must not be underestimated. It is evident that supply substitutability in tramp shipping is achieved on a significant and satisfactory level. In a comprehensive report to the EU Commission, Fearnley Consultants (2007)⁵¹³ analysed the tramp market from the techno-legal and economic point of view. In their report, it is suggested (and insofar remains undisputed) that vessels of different types and sizes can be substituted for each other to meet the demand for the carriage of specific cargo. As explained in chapter one,

⁵¹³ Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm, *Legal and Economic Analysis of Tramp Maritime Services* [‘EU Report COMP/2006/D2/002’, 22/2/2007]: EU Commission, paras 93-94 <ec.europa.eu/competition/antitrust/legislation/maritime/tramp_report.pdf> [accessed 15 March 2009].

service can also be substituted by liner service. Even where specialised vessels have been developed to meet the requirements of a particular type of cargo, they can also be used for other cargo,⁵¹⁴ or economies of scale can be achieved by transshipments to other vessels of the parent company. Thus, a division between size-dependent sub-markets is quite normal, and, with reference to the market share, does not play a significant role in price determination or good market regulation. As mentioned previously, smaller vessels can often compete with larger vessels due to differences in trading patterns. Smaller vessels, due to versatility, can combine voyages and, hence, increase earning days by reducing the time in ballast. As a result, the operators of such vessels can be competitive with freight rates for one or more voyages in a combination trade, and subsequently, they can compete with larger vessels which are unable to utilise combination opportunities.⁵¹⁵ Likewise, ‘reverse substitutability’⁵¹⁶ or competition between different ship types⁵¹⁷ and significant commodity interchangeability⁵¹⁸ is regularly observed.

⁵¹⁴ Even in the cases where the size of vessel used is too large to allow it to call at the load or discharge port, the cargo can be transhipped to or from the mother ship to or from the shore by “lighters” or smaller vessels. It is therefore possible to get economies of scale when using a larger vessel, even where a port is not able to physically accommodate the ship. For example, reefer ships are used to carry new or used cars from the Northern Hemisphere to the Southern Hemisphere on their backhaul routes. Also in some cases, the substitution may occur primarily in one direction, e.g., it is easier to utilise a tanker trading with clean petroleum products in the dirty petroleum product trade than the other way around.

⁵¹⁵ Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), *op. cit.*, Para 94

⁵¹⁶ Where the charterer has to rent special equipment that is not charged to the client.

⁵¹⁷ We mention for example the OBO (Oil-Bulk-Ore) and OO (Ore-Oil) vessels. These are vessels that are specially constructed for the carriage of both liquid and dry bulk commodities (albeit, not simultaneously) and can therefore compete in most bulk commodity trades. Another example is the deep-sea Ro-Ro carriers that compete with PCTCs (Pure Car and Truck Carriers) for non-vehicle cargoes. Also, petroleum product carriers and chemical carriers may compete for clean petroleum products (e.g. gasoline and naphtha). Moreover, an OHBC's and multi-purpose carrier may carry containers, thus competing with container vessels; and reefers and car carriers may both carry (second hand) vehicles.

⁵¹⁸ Based on the internal databases of Fearnley (2006), in a sample of 1,924 dry bulk vessels trading in 2003, it was found that 54 per cent of the fleet carried three different commodities. See: Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), *op. cit.*, Para 98

Global Insight (2007)⁵¹⁹ uses price *correlation analysis*⁵²⁰ and the SSNIP test in order to address the problem of the definition of the relevant market.⁵²¹ I present a summary of the SSNIP test result below:

Basically, the SSNIP test seeks to identify the relevant market as the smallest market where a 5% increase in price can be sustained for one year assuming that *'the terms of sale of all other products are held constant'*. If substitutes are available such that a 5% increase in price must be lowered to maintain competitiveness, then the relevant market needs to be expanded to include substitutes to reach a point where the 5% price increase can be sustained.

Accordingly, in tramp shipping, a 5% price increase would be an increase in freight rates and the substitutable goods would be the vessel types. Applying the SSNIP test to tramp shipping is certainly less straightforward than applying it to other markets given the complexities of the industry. For instance, should the substitution rule apply in the transportation, it means that a 5% increase in freight rates on Capesize vessels would bring to a switch to Panamax vessels. However, the types of cargo that can be carried on each vessel, as they relate to the variety of geographical routes where these vessels can travel, add to the complexity of determining a standard for freight rates; consequently, this affects the definition of the relevant markets. In practice, one cannot simply consider the freight rate for the Capesize vessel and accordingly apply the SSNIP test in a productive manner, since, unlike other markets, tramp shipping experiences absolute geographical substitutability.

⁵¹⁹ Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), *op. cit*, Paras 1189-1233

⁵²⁰ Newbold Paul, Carlson William, Thorne Betty, *Statistics for Business and Economics* [Prentice-Hall, London 1995) p. 427 *et seq*

⁵²¹ Commission Notice on the definition of relevant markets (1997)*op. cit*, para 15

Three questions are raised here in relation to the interchangeability or substitutability in all segments of the market:

- A) Can a shipper of dry bulk use the services of a liquid bulk vessel instead?
- B) Can a shipper use different vessel independently of their draught and type?
- C) Can one assess the degree of substitutability among different types of vessels or ports?

To answer the above we need to establish a valid substitutability connection between different service providers.

Thus, while the SSNIP test can be theoretically applied in tramp shipping, it *consecutively fails firstly to identify a relevant product market beyond doubt*; and secondly, to reveal measureable substitutions. The assumption is, therefore, that the market is as *global* as the worldwide vessels trade, and there are no indications of regional markets,⁵²² especially since customers are prepared to switch between service providers regardless of their geographical location.

The above results were based on the method of correlation analysis, which showed increased fluctuation in the *correlation of tramp shipping markets*.⁵²³ Hence, any signs of evident correlation which could support the existence of certain geographical markets have not been persistent enough to conclude that the market, as such, was established and that market dominance could be built. On the contrary, enough fluctuation to suggest the opposite⁵²⁴ was observed.

⁵²² Fearnley Consultants (2007) op. cit. para 1316.

⁵²³ Fearnley Consultants (2007) op. cit. para 1195. In statistics, correlation refers to any of a broad class of statistical relationships involving dependence.

⁵²⁴ In fact, from the correlation tables, Global Insight (2007), *op. cit.*, analysis that spanned from 2003-2007 observed various correlations. Notably, the trans-Atlantic grain trades in Panamax correlated with Capesize iron ore shipments from West Australia to Japan. Throughout the entire period the correlation factor was 0.79 (high), while in the period from September 2003 to June 2004 the correlation factor was only 0.16. During this period, freight rates rose sharply towards the end

Another study⁵²⁵ indicated a spill over effect in the earnings of dry bulk and liquid bulk (tankers) cargo vessels. Inductively, and with certain degree of risk, one sees connection even between different types of cargo vessels.

Could it be suggested that the non-existence of a relevant geographic market might be a general rule?

-Undoubtedly, it *prima facie* does. From an unconventional point of view, the findings of Fearnley Consultants' Report (2007) furthermore suggest a general spill-over of interchangeability between services, manifested by the continuous substitution and *sui generis* absence of clear boundaries of the geographic market. A *sui generis* approach would involve accepting the impossibility of narrowing the relevant market in terms of service and geographic terms, and treat the sector as a "genuinely" non-stable market.

3.2.2 The Relevant Geographic Market

Unlike many markets, tramp shipping experiences unique geographical substitutability. In tramp shipping, most routes within the Atlantic or Pacific Oceans are substitutable in the short term. If operating a route between the United States and Europe, a vessel can quite easily shift to operate a Europe-Caribbean route if the freight rates make it economical for the vessel to do so. Furthermore, in the case of an EU-based power utility importing coal, the coal market is relatively advanced, offering hedging (an investment position intended

of January 2004, and declined sharply towards June. This example also illustrates the point that periods of low correlation can occur within one and the same product market and the volatility is an essential factor that influences the markets in question. See: Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), op. cit, paras 1206 and 1208

⁵²⁵ Koseoglu, Sinem Derindere, "Market Earnings Risks and Spillover Effects in Tramp Shipping Industry", *International Journal of Decision Sciences*, Vol. 2, No.1, [2011] pp.37-53

to offset potential losses/gains that may be incurred by a companion investment) and derivative tools (e.g. swaps) that provide the consumer with a number of alternatives for sourcing coal.⁵²⁶

The traditional approach of geographic definition is presented in chapter one. On this issue, both the TAA and the Guidelines on maritime transport provide guidance. The TAA decision states that “the geographic market is the area in which the services defined above are marketed”;⁵²⁷ while the Guidelines outline that, notwithstanding the final definition of the relevant geographic market, “ports provide the first orientation for the definition of the relevant geographic market”.⁵²⁸ The significance of the Fearnley Consultants (2007) findings is important. Their report proves that is only theoretical possible to define a geographic market in tramp shipping.⁵²⁹ I analyse below the matter of market definition by also exploring the concepts of cross-subsidisation and market aggregations as a possible proposal for market definition in dynamic markets.

3.3 Review of Cooperation Agreements under Article 101 TFEU in Tramp Cooperation Agreements

3.3.1 Tramp Shipping Pool and the Concepts of “Undertaking” and “Agreement”.

3.3.1.1 A Typical Tramp Shipping Pool Structure

⁵²⁶ Fearnley Consultants (2007) op. cit. para 1197.

⁵²⁷ TAA decision op. cit. Para 37

⁵²⁸ Maritime Guidelines (2008) p. 7

⁵²⁹ *Supra* op. cit para 1316.

A standard shipping pool is a type of horizontal cooperation between carriers that brings together a number of similar vessels under different ownership, to be operated under the single administration of a pool manager who markets the pool vessels as a single cohesive fleet.

In particular, a standard shipping pool brings together a number of similar vessels under different ownerships and operates under a single administration. Although there is no standard agreement for shipping pools, there are some common characteristics⁵³⁰, which are best summarised in the Guidelines on the Application of Article 101 of the TFEU to Maritime Transport. The Guidelines consider a pool agreement to be essentially a joint selling horizontal agreement; as such, it could potentially fall foul of Article 101. It should however be noted that the Guidelines do recognise the fact that some pool agreements may not constitute joint selling agreements, but could in fact simply be joint purchasing or joint scheduling arrangements. Pool agreements are highly flexible, and as such, each agreement has to be evaluated on its own merits.⁵³¹

Pools, as with other looser forms of cooperation involving actual or potential competitors, could be deemed as *prima facie* anti-competitive. Although from a competition point of view it could be argued that the relatively smaller bulk shipping operators cannot possibly compete for such contracts, pools are created in order to respond to demand requirements rather than to obtain market power or an increased market share.⁵³² This business model may not only

⁵³⁰ Holmes Marjorie, "Maritime Transport", *Competition Law Insight* [2008] pp. 9-10. Holmes denotes firstly that it is rare for sector specific guidelines to be issued, reflecting the importance of shipping for trade and global economies. She also mentions the *Chancery Division case of Bookmakers' Afternoon Greyhound Services Ltd vs. Amalgamated Racing Ltd*, which highlighted that many pools operate under different and special circumstances.

See case: *Bookmakers Afternoon Greyhound Services Ltd vs. Amalgamated Racing Ltd* [2008] EWHC 1978 (Ch); [2009] U.K.C.L.R. 547 (Ch D)

⁵³¹ Chuah Jason (2008) op. cit. §25 p. 366

⁵³² Haralambides Hercules, "The Economics of Bulk Shipping Pools", *Maritime Policy & Management*, [Volume 23, Issue 3, 1996] p. 236

raise shipowners' profits as a result of increased efficiency, but may also produce benefits for charterers in terms of lower quality adjusted freights. In this sense, bulk pools should not be seen as anti-competitive any more than the large international shippers of bulk commodities whom the pools try to serve.⁵³³ Following the Commission's reform programme, it has become a priority for all operators to examine the extent to which pools might have an impact on EU trade and to analyse them under the EC competition rules. Packard (1989)⁵³⁴ describes the basic features and criteria for a *tramp pool* as follows:

- i) a collection of similar vessel types;
- ii) under various ownerships;
- iii) placed under the care of an administration; which
- iv) markets the vessels as a single cohesive unit; and
- v) collects the earnings; which
- vi) Are distributed to individual owners under a pre-arranged *weighting (point) system* by which each entered vessel receives its fair share.

In this context, a *Pool Manager* is normally responsible for the commercial management (for example, joint marketing,⁵³⁵ negotiation of freight rates and centralisation of incomes and voyage costs⁵³⁶) and the commercial operation (planning vessel movements and instructing vessels, nominating agents in ports, keeping customers updated, issuing freight invoices, ordering bunkers, collecting the vessels' earnings and distributing them under a pre-arranged weighting

⁵³³ Lorenzon Filippo, Nazzini Renato, "Setting sail on a sea of doubt: Tramp shipping pools, competition law and the noble quest for certainty" in Antapassis Antonis, Athanassiou Lia, Røsæg Erik (ed/s.), op. cit. p. 100

⁵³⁴ Packard V. William, Shipping Pools [Lloyds of London Press, London 1989] p. 3

⁵³⁵ For example, the pool's vessels are marketed as one commercial unit offering transport solutions regardless of which ship performs the actual voyage.

⁵³⁶ For example, the pool's income is collected by the central administration and revenue is distributed to the participants based on a complex weighting system.

system etc.). The Pool Manager often acts under the supervision of a general executive committee representing the vessel owners. The technical operation of vessels is usually the responsibility of each owner (safety, crew, repairs, maintenance etc.), and although they market their services jointly, the pool members often perform the services individually.

3.3.1.2 Rationale for Entering a Tramp Pool

Haralambides (1996)⁵³⁷ identifies three broad reasons that motivate shipowners to join a tramp shipping pool:

Firstly, shipowners wish to obtain the best possible access to timecharters and depend less on the spot market. Accordingly, Contracts of Affreightment (COAs), i.e. timecharters, present greater risk sharing and income stabilisation, as well as exploitation of amassed resources. COAs require the regular movement of significant amounts of cargo on an agreed schedule with the charterer. Such contracts may be lucrative, but they are impossible for a shipowner to fulfil on an independent basis. By co-operating with owners who have similar tonnage, the pool can create a credible entity to meet the contract terms and negotiate charters with the shippers.

Secondly, pooling resources implies that owners also pool risk. The overall volatility of pool earnings will be less than the volatility of the earnings of each individual vessel. Haralambides (1996)⁵³⁸ also notes that income stabilisation will “mainly be the result of a careful ‘mix’ of COAs, spot, medium and long term charters.”

Thirdly, the (final) principal element is less to do with scale economies than to exploit economies of massed resources. The pool management can negotiate for bunkers on behalf of the fleet; obtain higher fleet

⁵³⁷ Haralambides (1996) op. cit pp. 223-224.

⁵³⁸ Ibid. p. 225. Of course, this type of flexibility requires a certain fleet size and here is found one of the advantages of pooling tonnage.

utilisation through improved planning; greater marketing effectiveness; and better networking.

Indeed, some authors usually view pools as a defensive mechanism, in that they are often created by owners when market conditions are poor. This point in itself does not preclude that the pool can potentially influence market conditions, if it becomes sufficiently large enough in terms of control of the relevant market segment tonnage.⁵³⁹ However, this possibility should be seen as a separate point from the one made earlier, in that pool operators may achieve higher earnings through better utilisation of the vessels and through lowering operating costs (e.g. in accordance with the pool's rules for common purchases of bunkers, of insurance etc). The competition issue at stake is not the raising of earnings by lowering costs, but the raising of earnings by raising rates obtainable by pool members; in my analysis below⁵⁴⁰, I support the view that relevant market and dominance can also be achieved temporarily⁵⁴¹ and influence conditions in a market despite its short period.

⁵³⁹ Glen David, Martin B.T., *Do Tanker Pools influence Market Rates? The Case of Tankers International*. Conference paper presented at International Association of Maritime Economists (IAME) Panama [15 November 2002] pp. 5-6 apud. Cullinane (2011)

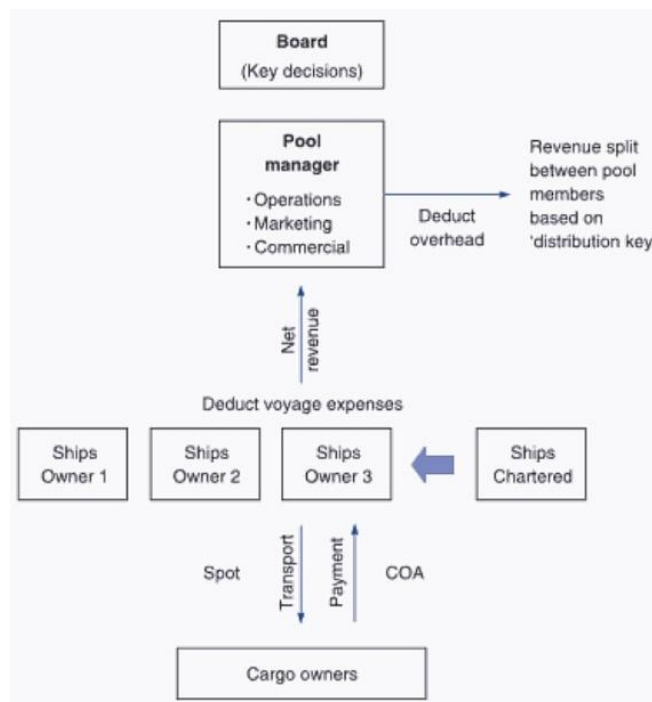
⁵⁴⁰ *Infra* section 3.4 Revisiting the Concepts of Relevant Markets, Efficiency and Consumer Benefits p. 232.

⁵⁴¹ *Supra* section p. 126 and 131 et seq

3.3.1.3 Structure of the Pool

The typical pool structure is depicted by the following graph:

1. **Figure 1 Structure of a typical Shipping Pool**



In a similar way to a liner consortium, the pool concept is a system involving the joint marketing of vessels owned by more than one shipowner, involving the pooling and sharing amongst the participants, of the chartering revenues or income accruing to the

participating vessels. Ideally, the participants in a chartering pool should have similar quality-oriented management, owning and operating essentially similar vessels of like quality⁵⁴².

This flexible vehicle of co-operation, based on the principles of consortium, is most suitable for the shipping companies that are used to more traditional models of corporate governance. On those grounds it is clear that, apart from any potential impact on freight rates, a pool can achieve substantial advantages for its participants. For example, the availability and the concentration of vessels enables the central

⁵⁴² Greek Shipping Cooperation Committee, Memorandum to the Members of Greek Shipping Cooperation Committee from the Chartering Pools Sub-Committee, [London, June 2000]. The Committee is an organisation, which was founded in 1935, that groups together some 150 Greek shipowners based in London and New York who own vessels of over 50,000 tonnes.

management to satisfy the terms of a charter; if, for instance, a vessel is out on hire, by replacing it with another available vessel. Thus, pools have another advantage, in view of the penalties imposed for breach of the terms of the COA, as the commercial individual risk and damages are spread among the participants. Moreover, with proper task and chartering management, the risks mentioned above can be undoubtedly reduced, as the waiting time and the ballast passages are minimised.

With regard to the above, the burden deriving from the obligations of the COA are not concentrated upon a specific vessel. The participants thus enjoy the privilege of not being under an explicit obligation to carry the cargo with reference to a particular vessel or group of vessels and the obligation survives even the total loss of one or more of the vessels originally intended by the carrier to perform the contract of affreightment. Hence, the above concept has the advantage that none of the intended performing vessels is contractually committed to the charterparty. In this connection, the carrier can remove vessels, dispose of them, and substitute them with others, provided that the charterparty is performed in accordance with its terms. Since the COA is not linked to a particular vessel, the scheduling of liftings under the contract can become a somewhat more complicated procedure, involving responsibilities on the part of the carrier that do not exist in the case of an owner fixing a ship on the time or voyage charter.

Pool structures can vary from less formal to more contractual arrangements, but a typical vehicle for the formation of a chartering pool might be the creation, in a suitable jurisdiction, of an independent corporation, which might be jointly owned by the pool participants, and which would take the vessels owned by the participants to contribute to the pool on a timecharter. However, this exceeds the scope of a partial function joint venture.

This timecharter would be concluded on a standard time charterparty form that is widely used in the marketplace for vessels of the size and type to enter the pool. However, instead of a fixed time charter rate, the pool would distribute its actual earnings to the participants pro rata. On those grounds, the pool would fulfil the role of and be responsible for the functions normally performed by a time charterer; while the shipowner, or its agents, would be responsible for all of the functions for which an owner is normally burdened under a typical time charterparty⁵⁴³.

Article 101(1) TFEU prohibits any agreement or concerted practice that has an actual or potential effect on trade between Member States, and objects to or affects the prevention, restriction or distortion of competition in the common market. Certain restrictions are deemed by reason of their objects to have an appreciable effect on competition, including the four core restrictions of price fixing, limitation of output, market sharing or customer sharing.

Inevitably, owners who place their vessels into such pool structure temporarily lose control over the way their vessels are traded and the prices obtained for the services provided through the use of those vessels.

From a competition law point of view, this structure may lie under Article 101 TFEU as freights are negotiated, not by the members separately, but by the Pool Manager, i.e. either the appointed third person or the dominant company of the pool. In this context, I have investigated whether tacit or explicit price collusion exists between the pool and third companies due to the concentration effect that the pool has created. This kind of representation may, in effect, become a price fixing mechanism, provided that the pool secures market dominance

⁵⁴³ 'Delays to vessels caused by such events as breakdowns, accidents, boycotts against the vessel, its owners or arising in relation with its crew or flag, arrest by the Port State Control, or any stoppages or delays not related to the execution of the voyage would all be considered off-hire and would be dealt with in the normal way under a time charter. Any delays to vessels awaiting fixtures would not be considered off-hire, however, and the pool would absorb any such delays'. Ibid., p. 2

and the consortia members are deprived of their individual identities, without being able to advertise their respective service separately⁵⁴⁴. In this case, only a pool limits the service output of the pool, and is *prima facie* caught under Article 101(1) TFEU.

Indeed, my analysis always has to set the criteria between partial and full function alliances; in other words, to investigate if a pool has upgraded from a simple loose alliance to a full function joint venture. Our analysis must focus on the role of the representative Pool Manager (PM). If the latter has the power to fix vessels, determine the commercial strategy, and influence the upstream and downstream service, then undoubtedly its behaviour is also indicative of dominance⁵⁴⁵. This would present a problem regardless of the model chosen (administration pool or members' pool) and whether the Pool Manager is required to sub-charter the vessels or charter them as an agent for the members. The problem arises wherever the Pool Manager's functions include the commercial management of the vessels. It is a parameter that perplexes things; in reality it touches the boundaries between partial and full JV. The matter is analysed by Dittmer (2010)⁵⁴⁶. The author proposes first that in order to avoid a strenuous self-assessment process⁵⁴⁷ and the associated risks, pool members may decide to convert their shipping into a full-function JV. An option as such would subject the agreement to the EC MR, and does not at the outset give rise to concerns under Article 101 TFEU. If the parents realise a sufficiently high turnover, it will be necessary to notify the full-function JV to the Commission and/or a number of

⁵⁴⁴ See Pozdnakova (2008) p. 188. See also: Herman Amos, Shipping Conferences [Deventer, Kluwer Law and Taxation Publishers, 1983] pp 140-143

⁵⁴⁵ We need to examine if the Pool Manager's has the capability to deal with specific customers and determine (within agreed parameters) commercial strategy (in particular the mix between spot and long-term business) as well as to fix the relevant charter rates and terms of charterparties with the charterers or other third party customers requiring the services.

⁵⁴⁶ Dittmer Martin Andre, "The future of shipping pools – Full Function Joint Ventures or Horizontal Cooperation?" in Wareham (2010) op. cit. pp. 99-117.

⁵⁴⁷ Wareham Philip, "The Challenges of Self-Assessment" in Wareham (2010) op. cit pp. 119-142.

National Competition Authorities.⁵⁴⁸ Dittmer (2010)⁵⁴⁹ sets certain criteria that distinguish between a full and partial function JV in shipping pools. In order to qualify as a full-function JV, cooperation must satisfy three criteria: First, the parent undertakings must exercise joint control over the cooperation. Secondly, the cooperation must perform all the functions of an autonomous economic entity. Thirdly, the cooperation must operate on a lasting basis, in accordance to Article 3(4) of the EC Merger Regulation.

3.3.1.3 Clarifying the contractual basis of the cooperation

The consensus of the parties while entering into a shipping pool structure is normally evidenced in a pool agreement. This agreement deals with the fundamental features of cooperation while there is no standard for pool agreement.

The definition of undertaking is provided by ECJ in the ruling of *Höfner vs Macrotron*⁵⁵⁰. An undertaking is “every entity engaged in an economic activity, regardless of its legal status and the way in which it is financed”. Undoubtedly, a tramp shipping pool is an undertaking, and because shipping pools are normally organised as a separate entity from its members, and this organization can take different forms, its decisions and/or concerted practices are also caught by article 101.

⁵⁴⁸ Dittmer (2010) in Wareham (2010) op. cit. p. 100

⁵⁴⁹ Ibid. pp 107-114

⁵⁵⁰ Klaus Höfner and Fritz Elser vs Macrotron GmbH, ECR [1991] p. I-01979

3.3.2 The Object and Effect of Pools to Restrict Competition

I mentioned above that the shipping pool can be considered as an “undertaking” or “association of undertakings” pursuant to 101 (1) TFEU and that the pooling agreement falls within the ambit of 101.

Yet it is necessary to investigate whether the type of the agreement or concerted practice of the undertaking is caught directly by 101

One of the two conditions must be fulfilled:

- 1) Pooling agreements must affect trade within the Member States.
- 2) Pooling agreements must also have the object or effect to “prevent, restrict or distort competition within the common market”

The investigation of the first condition cannot be subject of this thesis. As far as the second condition is concerned (by object or effect) EC case law (in *European Night Services*⁵⁵¹) has clarified that “object” and “effect” are not cumulative requirements, and that, at first stage, it is necessary to assess whether an agreement has the object to prevent, restrict or distort competition.

Some contractual restrictions are a priori presumed to affect competition, for example, the list of agreements that are found under article 101 (1) TFEU Treaty sections a) to e). Over this list of presumed practices a), price fixing, and c), market sharing, are the main violations that could be potentially entered into by shipping pools. If a tramp pool imposes a hardcore restriction on competition, it could be considered to have the object to restrict competition. I shall analyse those cases below.

⁵⁵¹ Supra § 52

3.3.2.1 Vessel Sharing Agreement

This practice is widespread among ship operators. It involves the leasing (sharing) of cargo space of a third company, primarily for operational reasons. The practice is met usually in dry bulk and the reefer industry, as well as other markets subject to cyclical peaks, enabling carriers to meet temporary capacity shortages.⁵⁵² They tend to be spot fixtures; hence, rates are determined in accordance with prevailing spot rates. However, the empirical evidence agrees with the findings of the research conducted by Global Insight (2007) that suggested that there were no particular competition issues that needed further investigation.

The majority of time charterparties and other agreements entered into between owners or operators would not normally be expected to raise competition issues as they are vertical in nature. This type of synergy activity consists of an agreement of chartering a vessel (bareboat) that belongs to a third company for a certain (usually long) period of time. They are often entered into as a means of procuring additional capacity for operators who do not want to invest in additional tonnage, or do not have sufficient tonnage available for various reasons to meet their contractual obligations at a particular time. Those types of agreements have to be distinguished from the '*ad hoc space share agreements*'⁵⁵³ which merely involve space sharing facilitation. The long charterparties, from the competition point of view, may not infringe Article 101 TFEU; yet we have to examine if they constitute a *quasi*-downstream concentration. However, agreements as such often benefit from automatic exemption under the block exemption for

⁵⁵² Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm, *Legal and Economic Analysis of Tramp Maritime Services* [EU Report COMP/2006/D2/002', 22/2/2007]: EU Commission Para 1974, <http://ec.europa.eu/competition/antitrust/legislation/maritime/tramp_report.pdf> [accessed 15 March 2009]

⁵⁵³ *Supra* pp. 73 and 215

vertical agreements⁵⁵⁴, subject to satisfying the relevant market share cap of thirty per cent⁵⁵⁵ if they are exclusive. They do still raise concerns if they are part of a wider economic context, in particular if they are used overtly or covertly as substitution for a pool. Likewise, when they are mutual, they clearly raise horizontal cooperation issues and would require analysis under Article 101(1)&(3) in the same manner as pooling agreements. Needless to say, collusion is also difficult to be established here, unless the market share can be defined in advance of every investigation.

3.3.2.2 Joint Outsourcing Collaboration Agreements

It happens that owners may contract with the same specialist ship management companies for technical management services where, as is frequently the case, such services are outsourced⁵⁵⁶. Certain types of technical agreements may not fall under the prohibition set out in Article 101 of the Treaty on the grounds that they do not restrict competition. This is the case, for instance, for horizontal agreements, the sole objects and effects of which are to implement technical improvements or to achieve technical cooperation⁵⁵⁷.

However, there could be an issue under competition law in terms of distortion in the dissemination of information from one owner to other parties, as it may be connected to concerted practices. It did not seem to me that it would raise any competition issue if the relevant vessels were in different markets, or if confidential information flows could be

⁵⁵⁴ See Commission Regulation 2790/1999 of 22 December 1999 on the application of Article 101(3) of the Treaty to categories of vertical agreements and concerted practices OJ [1999] 336/21, also known as (Vertical Block Exemption).

⁵⁵⁵ Ibid., Vertical Block Exemption (1999), Article 3

⁵⁵⁶ Guidelines on the application of Article 101 of the EC Treaty to maritime transport services, [OJ 2008 C245/2], paras 37, 38-46.

⁵⁵⁷ *Far East Trade Tariff Charges and Surcharges Agreement (FETTCSA)*, Commission Decision 2000/627/EC, Case IV/34.018, OJ [2000] L268, Para 153. Also see: *Deutsche Bahn AG vs Commission*, Case T-229/94, [1997] ECR II-1689, Para 37

prevented by various means (like agreements or technical methods) between competitors.

3.3.2.3 Pure Cargo and Vessel Sharing Agreements (VSA)

A limited reference has been made to a type of a *quasi*-pool agreement, which, although described by its participants as a pool, is not an actual pool agreement. The Vessel Sharing Agreements operate in the same pattern as the pools with the difference being that they are limited to joint scheduling.⁵⁵⁸ The European Commission has, in the past, been prepared to exempt a vessel sharing agreement (VSA) with a 24 month notice period in view of the highly integrated nature of the VSA.⁵⁵⁹

3.3.2.4 Co-Service Agreements

Another category of co-operation between carriers that is quite distinct from vessel pooling is co-service agreements. There is limited information about these agreements and no bibliographical reference; thus their analysis will depend on empirical evidence.

⁵⁵⁸ Recently, 'Maersk Line' and France-based 'CMA-CGM' have announced the establishment of a new Vessel Sharing Agreement (VSA) utilising both the Panama and Suez Canals, which began in May 2009. Source: <<http://www.maerskline.com/link/?page=news&path=/archive/news20081121>> [accessed 5 June 2009]

⁵⁵⁹ See: XXIVIIth DG Comp Report on Competition Policy [1997], p. 135 apud. Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), Para 1734. Though the details of the notifying parties are confidential, from the relevant literature we know that the notifying parties had made considerable investments in the acquisition of vessels and two others had to contribute to financing those investments; in addition, they, and one other participant, had agreed to withdraw their existing vessels in favour of the newly acquired one. The European Commission accepted that these facts demonstrated the highly integrated nature of the VSA and justified the long notice period. Although this example is taken from the liner industry, it would appear to confirm a general principle that a longer notice period is more likely to be considered reasonable and indispensable the more integrated the nature of the cooperation. See: Fearnley Consultants (2007) op.cit. para 1670

Under co-service agreements, two or more carriers agree, inter alia, to seek out business opportunities jointly, to provide each other with vessel capacity on an equivalent of the ‘most favoured nation’⁵⁶⁰ term and to operate certain services jointly, while retaining their commercial independence and marketing their services independently⁵⁶¹. Co-service agreements differ from pool agreements as the shipowners retain their commercial independence and bid against each other when tendering for the relevant contract from the customer (except in those cases where joint bids are accepted and the joint bid is submitted with the customer's knowledge and approval). So far, there has been no official observation that those agreements provide a special mechanism for the parties to carry out any joint marketing, but they are simply required to work with each other operationally and use each other's services in preference to any third parties wherever possible. Generally, therefore, the cooperation is limited to purely operational areas.

Co-service agreements are basically chemical tanker markets but variants may exist in other markets.⁵⁶² They are a relatively loose from

⁵⁶⁰ The most favoured nation term is based on a principle established in international law. The said term is found GATT Treaties. In particular, a key feature of this term is that it is founded on the principle of equality of treatment. Member states must accord the same rights and benefits to each other. It is an important stipulation of the agreement that where a member grants certain advantages to another member in the conduct of trade, these same advantages are to be extended unconditionally to all other members of the agreement. These advantages can be in the form of reduced or zero-rated taxation and waiver of pre-shipment inspection. Others include customs formalities connected with importation and exemption from foreign exchange restrictions in repatriation of the profits arising from the import or export of the product. See: Oppenheim Lassa, Roxburgh Ronald, *International Law: A Treatise, Volume 1* (New Jersey: The Law Book Exchange, Clark 2005), p. 374. Also see: Mistelis Loukas, Brekoulakis Stavros, *Arbitrability: International & Comparative Perspectives* [Kluwer Law International, 2009], pp. 190-191; Kaufmann-Kohler, Gabriele ‘Treaty Interpretation in Pervasive’, *Problems in international Arbitration* ed. by Mistelis Loukas, Julian Lew [Kluwer Law International, 2006]. p. 269

⁵⁶¹ Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), op. cit. Para 1736

⁵⁶² Examples of this type of co-operation, of which the consultants are aware, are the co-service agreements between ‘Tokyo Marine’ and ‘Stolt-Nielsen’ in relation to Mediterranean-Asia trades and between ‘Jo Tankers’ and ‘Stolt-Nielsen’ in the transport of bulk liquids from ports in the US Gulf to Asia (not a trade route that directly impacts on the EU). Another example of an apparently current co-service agreement is that between ‘Green Reefers’ and ‘Seatrade’ which the parties claim

of arrangement focused mainly on finding joint operational efficiencies to improve the services offered to customers.⁵⁶³ According to those agreements, the competing shipping companies will either bid for new business in competition with each other, with the winner of the bid relying on the co-service agreement for additional capacity or operational efficiencies, or, if the customer allows, submit a joint bid.

The operational cooperation consists of the premise that the shipowners may identify ports and berths where they can achieve efficiencies by working together on loading, discharging, transshipping and allocating cargoes to particular ships. It also offers carriers the possibility of servicing high volume trades which could not be adequately met by any one of them individually because of inadequate capacity. Another specific reason given is that they can reduce operational overlaps between the various chemical carriers on the same route, particularly on routes where port congestion is common, and so reduce delays and other inefficiencies.

3.3.2.5 Multiple Timecharter Agreements

Under this arrangement, a single shipowner or operator, operating in its own right in the market, enters into a series of long-term timecharters with other vessel owners in order to extend its fleet without incurring the capital cost of acquisition or financing the relevant tonnage or the legal responsibility for maintaining the vessels, crewing and other matters that belong to technical management and therefore remain the responsibility of the owners (and their ship management company). This sort of structure is considered separately

improves their utilisation of capacity and enables a higher frequency of service, so offering customers a more efficient and flexible service. See Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), *Ibid.*, Para 1739

⁵⁶³ Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007, *Ibid.*, Para 1737

in ‘multiple timecharters’, above⁵⁶⁴. However, all of the commercial management and operation of the vessels is the responsibility of the charterer. The charterer has to account to the owners for the usual charter hire provided for in the charterparty.

This model does not even require a ship operator to actually own vessels at all; all vessels can be chartered in. This is similar in concept to the NVOs⁵⁶⁵ practice found in the liner industry, where freight forwarders and other third parties offer liner services without actually owning the tonnage, but issue Bills of Lading as if they were owners. Thus, the owner or operator in question retains full responsibility for marketing and commercial operation of the vessels and is the only point of contact with customers in the downstream market.⁵⁶⁶

The difference from a pool, in the classical sense, is that once charters are entered into multiple timecharter agreements with the relevant operator, this happens on certain routes, and without any prior consultation with the other owners who may have leased the vessel to the operator. Thus, it is difficult to establish a horizontal level of cooperation capable of affecting competition.

3.3.2.6 Joint Selling, Joint Production and Market Sharing Issues

3.3.2.6.1 *Joint Selling in Pools*

In order to assess the potential competition concerns on the object of pool agreements the following questions are relevant: do shipping pools engage in price fixing?; are shipping pools joint production or joint selling schemes?; and, are shipping pools sharing the market,

⁵⁶⁴ Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), *op. cit.*, Para 1747

⁵⁶⁵ Supra p. 121 et seq

⁵⁶⁶ Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), *op. cit.*, Para 1749. Examples of multiple charters cooperation are *The Leonina System* operated by ‘NYKLauritzenCool’. See: J Lauritzen Annual Report 2006, p. 15, <www.j-l.com/jlauritzen-annualreport2006/pics/annualreport2006.pdf> [accessed 05 August 2009]

and consequently, falling under the prohibitions of article 101 (1) e TFEU?

The Guidelines for Maritime Transport⁵⁶⁷ stipulate that pool agreements between competitors limited to joint selling have, as a rule, the object and effect of coordinating the pricing policy of these competitors.⁵⁶⁸ If the pool does not have a restriction of competition as its object, an analysis of its effects in the market concerned is necessary. An agreement is caught by Article 101(1) of the Treaty when it is likely to have an appreciable adverse impact on the parameters of competition on the market such as prices, costs, service differentiation, service quality, and innovation. Agreements can have this effect by appreciably reducing rivalry between the parties to the agreement, or between them and third parties.⁵⁶⁹

A standard shipping pool brings together a number of similar vessels under different ownerships, operated under a single administration. Although there is no standard agreement for shipping pools, some common characteristics do exist. Some tramp shipping pools do not involve joint selling but nevertheless entail some degree of coordination on the parameters of competition (e.g. joint scheduling or joint purchasing). Such cases are only subject to Article 101(1) of the Treaty if the parties to the agreement have some degree of market power. Those characteristics are best summarised in the Guidelines on the Application of Article 101 to the Maritime Transport:

In this context, ‘a Pool Manager is normally responsible for the commercial management (for example, joint marketing⁵⁷⁰, negotiation

⁵⁶⁷ Maritime Guidelines op. cit. Para 66

⁵⁶⁸ Guidelines on Horizontal Cooperation Agreements, cited above in footnote 6, Section 5. The activities of an independent ship-broker when ‘fixing a vessel’ do not fall under this category

⁵⁶⁹ Guidelines on the application of Article 101(3), [OJ C 101, 2004] p. 97

⁵⁷⁰ For example, the pool’s vessels are marketed as one commercial unit offering transport solutions regardless of which ship performs the actual voyage

of freight rates and centralisation of incomes and voyage costs⁵⁷¹) and the commercial operation (planning vessel movements and instructing vessels, nominating agents in ports, keeping customers updated, issuing freight invoices, ordering bunkers, collecting the vessels' earnings and distributing them under a pre-arranged weighting system etc.). The Pool Manager often acts under the supervision of a general executive committee representing the vessel owners. The technical operation of vessels is usually the responsibility of each owner (safety, crew, repairs, maintenance etc.), and although they market their services jointly, the pool members often perform the services individually.

It should, however, be understood that there is no single universal model for a shipping pool, and the empirical analysis (along with the available bibliography⁵⁷²) reveal a variety of different pooling structures—albeit with a number of similar features and typical provisions. However, my focus will be on the main characteristics of the shipping pools that are common to the majority of the agreements.

This form resembles a liner consortium⁵⁷³. With regard to the commercial policy, the pool is usually formed when a number of tramp shipping companies join together to form a joint company, in which⁵⁷⁴ no single company has control⁵⁷⁵ (unless otherwise stipulated), though it is possible to have collective or common representation under a body, or major pool member that controls the pool's affairs. This style of synergy is mostly followed by liner and tramp shipping companies. Those horizontal agreements of

⁵⁷¹ For example, the pool's income is collected by the central administration and revenue is distributed to the participants based on a complex weighting system

⁵⁷² The only available bibliographical information is provided by the Wareham, Antapassis/Athanassiou/Røsægand Fearnley Consultants.

⁵⁷³ Boulton, A. H., 'Construction Consortia -- their formation and management', *Journal of Business Law* [1959], p. 234

⁵⁷⁴ Farrar, John (1991), *op. cit.*, p. 730

⁵⁷⁵ Wooldridge, F., 'Consortium and related operation in the United Kingdom', *Lloyd's MCLQ* 1978, p. 427

cooperation regarding provision of joint liner transport services are covered by the Commission Regulation 823/2000⁵⁷⁶ on the application of Article 101(3) of the Treaty to certain agreements, decisions and concerted practices between liner shipping consortia. In tramp shipping, pools are basically covered by Article 101.

I will attempt to analyse the matter further, in line with the idea that shipping is a *sui generis* sector where concerted practices may not necessarily have an effect on competition when the object cannot be classified as anti-competitive.

Within the Horizontal Guidelines⁵⁷⁷ and the Maritime Guidelines⁵⁷⁸ it is repeatedly mentioned that joint selling agreements have the object and effect of coordinating the pricing policy of undertakings. Moreover, it is also recalled that a horizontal price of market share constraint, explicitly referred to in article 101(1) TFEU as *core* restriction, cannot also benefit from the *de minimis* rule.⁵⁷⁹

My position is that it is difficult to establish both object as well as effect to distort competition in the shipping pools.

I accordingly support that the object of a tramp shipping pool is not the setting of pricing policy coordination, as Pool Managers are price-takers not price fixers. Secondly, far from restricting the volume of services, output in the supply side can be generally said to increase, as the purpose behind the rationalisation of service is to have a standby vessel in a particular region, ready to take cargo. This is far from restricting the volume of services; on the contrary, output in the supply side can be generally said to increase.

⁵⁷⁶ 'Liner Consortium Regulation'. OJ [2000] L100, p. 24

⁵⁷⁷ Horizontal Guidelines, op. Cit. paras 144-145

⁵⁷⁸ Maritime Guidelines, op. Cit. para 66

⁵⁷⁹ Commission Notice on agreements of minor importance which do not appreciably restrict competition under Article 81 (1) of the Treaty. [OJ 2001 C386/07] no 11

It is quite possible that the effect of a joint selling will be the increase of output, therefore I agree with Athanassiou (2009)⁵⁸⁰ which contests this strict approach (about joint selling) and aligns with Gellhorn, Kovacic and Calkins (2004)⁵⁸¹, who support that price fixing and joint selling may also enhance economic efficiency. The same is supported by Lorenzon and Nazzini (2009)⁵⁸², who performed a special analysis on tramp shipping pools. They too claimed that this rationalisation (control) of supply eventually creates more stability in the market. This in turn may not only raise shipowners' profits as a result of increased efficiency but may also have benefits for charterers in terms of lower quality adjusted freights.⁵⁸³

I agree with the authors above and I believe that it is better to proceed with a "*harms vs. benefits*"⁵⁸⁴ analysis. Members accordingly would need to demonstrate that their agreement:

- i) produces efficiency gains;
- ii) The benefits are passed on to transport users, for example as lower transport costs or new logistic solutions;
- iii) There is no less restrictive way to obtain the efficiencies, and finally,
- iv) There is no elimination of competition in relation to a substantial part of the market considering, for example, the market share of the pool and the number of competitors operating in that market'.

3.3.2.6.2 Joint Production in Pools

⁵⁸⁰ Athanassiou (2009) op. cit. p. 89

⁵⁸¹ Gellhorn Ernest, Kovacic William E., Calkins Stephen, *Antitrust Law and Economics in a Nutshell* [Thomson West, St Paul Minnesota, 2004 5th edition] p. 223 *et seq*

⁵⁸² Lorenzon, Nazzini (2009) op. cit. p. 100

⁵⁸³ Quality adjusted freights reflect the quality of the service provided at any given freight

⁵⁸⁴ Guidelines on the applicability of Article 101 of the TFEU to horizontal co-operation agreements [OJ 2011 C 11/01] Paras 160, 128

Another category in which shipping pools could fall is “production agreements,” a term which is said to “vary in scope and form”. In Horizontal Cooperation Guidelines (2001 p. 12) this term is used for the production of goods and services, and it is said to include three different types of agreements: joint production, specialisation and sub-contracting agreements. Of course, shipping pools could not fit the descriptions of specialisation and subcontracting agreements, but the label “joint production” needs to be investigated.

Joint productions are “agreements whereby the parties agree to produce certain products jointly, (unilaterally or reciprocally)”. Consequently, if pool agreements are indeed able to fall within the category “production agreements”, those pools with a market share of 20% could fall within the scope of the Specialization Block exemption.

In paragraph 62 of the Maritime Guidelines, the Commission says that the key feature of maritime pools is joint selling, coupled with issues of joint production. Nonetheless, the matter can be dealt with on a case by case basis. As per the details governing the joint production or selling agreements, the Commission refers to the Guidelines of the Horizontal Cooperation Agreements as providing guidelines on this matter. I agree with the analysis of Lorenzon and Nazzini (2009, p. 101) that support the following:

1) In the same Guidelines (para 90) all the circumstances are described where a joint production agreement always fall within article 101 and have the object in restricting competition. This is the case if the joint production agreement fixes the prices of the products supplied by the parties, limits output or shares markets.

2) The Commission, however, adds an important qualification. This strict standard does not apply if the parties agree on the output directly concerned by the production agreement or if a production

joint venture which also carries out the distribution of the manufactured products sets the sales prices for these products, provided that the price fixing by the joint venture is the effect of integrating the various functions.

3) The above can have application in the shipping pools. By pooling their vessels and agreeing on the way in which the vessels must be deployed, the parties only agree on the output of the joint venture. Furthermore, the shipping pool plainly carries out the distribution of the integrated service provided by pooling the ships. The fact that the freights are set or accepted by the pool manager may be seen as the effect of the provision of an integrated service.

3.3.2.6.3 Market Sharing in Pools

Undoubtedly, market sharing is a much more comfortable means to charge higher rates than price fixing. Among other reasons, market sharing agreements are much easier to monitor, and cartel members do not have to find a compromise on price level.

The Commission has usually focused on two concerns of market sharing under article 101 (1) TFEU: geographical market sharing, and the prevention of market penetration.

Geographical market sharing becomes very difficult in the tramp maritime sector, although it is not impossible. Moreover, market sharing as conceived by the ECJ jurisprudence requires output limitation, something that is totally contrary to the market reality in shipping, where we observe an oversupply of ships that results in the collapse of the freight rates.

3.3.2.7 Price Fixing Issues

With regard to price fixing, Article 101(1) stipulates:

‘...directly or indirectly fix purchase or selling prices or any other trading conditions...’

However, as mentioned above, tramp pool agreements do not pose competition problems if the participants cannot be considered actual or potential competitors. Nonetheless, pools may pose considerable risk, as their purpose is synergy: Cooperation is a prelude to concentration. The matter is discussed in the Antitrust Draft Guidelines for Maritime Transport (2007)⁵⁸⁵, which stipulates that:

‘...pools that have very low market shares are unlikely to raise competition problems provided that the agreement does not contain provisions regarding joint price fixing and/or joint marketing.’

The following paragraph refers to price fixing:

‘Any agreement between competitors that results in the fixing of prices requires careful consideration under the competition rules. Agreements on prices or sharing of markets between competitors are severe restrictions of competition explicitly prohibited by Article 101(1) of the EC Treaty. They normally lead to higher prices without producing countervailing value to consumers.’

The text continues:

“These agreements however may still be compatible with EU competition law if they have countervailing efficiencies fulfilling the four cumulative conditions listed in Article 101(3) of the Treaty.”

⁵⁸⁵ Antitrust: Draft Guidelines for maritime transport – frequently asked questions, [Reference: MEMO/07/355 Date: 13/09/2007]
<<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/355&format=HTML&aged=1&language=EN&guiLanguage=en>> [accessed 19 July 2009]

As mentioned, pools have a common pricing policy. It becomes clear that one of the central elements of pools is the joint negotiation of freight rates⁵⁸⁶. My opinion is that the Pool Manager is basically a price taker, rather than a price fixer.⁵⁸⁷ First of all, the characteristics of the tramp market provide for a bidding system in order for the price to be agreed.⁵⁸⁸ It is not the pool manager that sets a price; the price is agreed by the customer and the Pool manager (with the intervention of the broker). Yet, a Pool Manager may, in effect, contribute to a price fixing mechanism and its actions need to be investigated regardless of the market share held by the pool in a context of geographic market. If the agreement has the object to restrict competition, there is no need to show that they have the effect of doing so.

I agree with the authors above and I believe that it is better to proceed with a “*harms vs. benefits*”⁵⁸⁹ analysis. Members accordingly would need to demonstrate that their agreement:

- i) produces efficiency gains;
- ii) The benefits are passed on to transport users, for example as lower transport costs or new logistic solutions;
- iii) There is no less restrictive way to obtain the efficiencies, and finally,
- iv) There is no elimination of competition in relation to a substantial part of the market considering, for example, the market share of the pool and the number of competitors operating in that market’.

⁵⁸⁶ Athanassiou (2009) op. cit. p. 88

⁵⁸⁷ Varela Chouciño Milagros, “Tramp Shipping In The New Ec Competition Maritime Regime, Analysis of the latest developments in the regulation of Tramp Shipping and Tramp Shipping Pools”, Master Thesis submitted in the Instituto Universitario de Estudios Marítimos, Universidade Da Coruña [2008] p. 32
< <http://www.udc.es/iuem/documentos/monografias/2008-3.pdf>> accessed 10/9/2012

⁵⁸⁸ Ibid. p.32

⁵⁸⁹ Guidelines on the applicability of Article 101 of the TFEU to horizontal co-operation agreements [OJ 2011 C 11/01] Paras 160, 128

So far, both in the EU and in other parts of the world, there has been no confirmed form of collusion in pools.

3.3.4 Clauses that Restrict Competition

There are, a priori, several clauses commonly contained in shipping pool agreements that can bring about competition concerns. The wording of these clauses can vary significantly, therefore such clauses have to be analysed on a case by case basis in order to determine whether they encourage anticompetitive practices. The clauses that could potentially have the effect of restricting competition relate to: a) membership (entry and exit), b) non-competition and c) information exchange.

I analyse them below:

3.3.4.1 Membership Duration and Conditions

It is the usual practice of a tramp pool to impose certain conditions on membership in order to ensure the protection of its interests and the investments committed against opportunistic and speculative members. However, conditions such as these are due to practical reasons, and they are unrelated to certain practices by market actors. The question is whether any penalties and restrictions infringe article 101(1). As mentioned in chapter one⁵⁹⁰, any restriction must be proportionate to the objective pursued. Restrictions do not constitute an infringement of 101(1) if they are necessary for achieving the purposes of the main agreement, which will overall have beneficial effects on competition⁵⁹¹.

⁵⁹⁰ *Supra* Consortia Regulation 906/2009 op. cit. § 44

⁵⁹¹ Van Bael & Bellis (Law Firm), *Competition Law Of The European Community* [Kluwer Law International 2005] p. 80

Usually, restrictions to entry and penalties to entry are found within all tramp pool agreements. As far as the conditions of entry into a pool are concerned, they include, but are not limited to, matters that involve a) capital allowance; b) the cost of investment; c) maintenance costs; d) the timing of entry; e) management structure and strategy; f) technological difficulties; g) safety (labour and environmental) issues.

With regards to the conditions and/or restrictions and penalties for exit, a member of a shipping company has to take into account these conditions and select the best strategies to deal with them. It is widely accepted that a pool may not only provide significant income security but can also reduce the barriers to entry, since they can offer owners long-term timecharters with the potential for a share of profits in addition to hire. This would secure a steady source of income for vessels and consequently lead to the 'creditworthiness' of the ship owners in question being upgraded. However, every new entry into a sector requires specialist assets and resources which must be acquired or developed. These do not amount to barriers to entry in the economic sense, but do represent initial investment costs. For example, in addition to the (generally higher) costs to enter the chemical tanker, reefer, and gas carrier trades as a ship owner, IMO regulations that need to be observed make the business highly specialised, leading to a *de facto* limited number of shipping firms which can undertake the enterprise. This may eventually lead to a *quasi-oligopoly* that is closely-related, primarily due to issues of raising capital and management rather than due to anti-competitive market practices by the incumbents in the sector.

3.3.4.2 Non-Competition Clause among Pool Members

With regard to the ‘non-competition clause’, all pools contain a ‘non-competition covenant’.⁵⁹² The exact wording varies, although they usually make it clear that the restriction on competing activities applies only to vessels of the same type as those committed to the pool (which they term ‘qualifying’ or ‘restricted’ vessels) and/or in the same trade as the pool, and some specify that any activities must not be ‘in competition with’ the activities of other pool members. Some define the non-compete restriction in broader terms as ‘operating in a manner which would constitute a competition with the activities of the pool’, ‘engaging in independent action outside of the pool’, or ‘carrying on or investing in other enterprises provided they are not in conflict with the business of the pool’.⁵⁹³

The Horizontal Guidelines clearly categorise cooperation agreements that have the object of fixing prices, limiting output, sharing markets or sharing customers as automatically falling within the Article 101(1) prohibition regardless of their effects. The section of the Horizontal Guidelines titled Commercialisation Agreements makes it clear that, for this category of agreement, Article 101(1) will always be applicable by virtue of its prohibited objects regardless of whether or not the agreement has any appreciable effects on competition (or, for that matter, any effect at all), and will only rarely be capable of satisfying the conditions of application of Article 101(3). Likewise, the Guidelines on the Application of Article 101 of the EC Treaty to Maritime Transport Services⁵⁹⁴ considers pools to be commercial agreements

⁵⁹² Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), *op. cit.*, Para 1

⁵⁹³ Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), *op. cit.*, Para 1458. Moreover, termination provisions show some variations. Generally pools have no fixed term, but contain provisions whereby they can be dissolved on giving between 6 and 12 months’ notice, or whereby individual vessels can be withdrawn subject to notice.

⁵⁹⁴ Guidelines on the application of Article 101 of the EC Treaty to maritime transport services, OJ[2008] C245/2, Para 60-63. Guidelines on the application of

(though not joint commercialisation agreements) which generally fall under Article 101(1) of the EC Treaty.

Owing to the difficulty of creating a pool management team from scratch, it is not uncommon for established operators to operate pools and to foreclose internal competition among the owners, as it possible that the operators could seek to realise profits from the pool management activity in addition to the earnings of any vessels entered in the pool. In most cases, the pool is run by a board of directors or a pool committee. The administration is responsible for determining the policy of the pool, such as chartering policy, finance, economic policy and operation, as well as the official representation of the pool before third parties. This is in contrast to the merged companies, where the new vehicle that is created by substituting the old companies is governed by shareholders and the board of directors. Therefore, the concept of management and administration within the pool does not follow the same compulsory rules of company law. The role of the pool committee is given the authority to transact certain activities on behalf of the pool, and the extent of such authority will need to be decided by the members of the pool. Since the authorities of the board of directors are not prescribed by company law and they can be subject to negotiation or deducted by general conditions or jurisprudence produced in the certain jurisdiction, the decision-making can become a difficult and sometimes cumbersome business. Nonetheless, the most appropriate way to serve the concept of the pool can be achieved by adequate representation in the decision making of the pool by the participants. Unless the pool operates as a de facto group of merged companies, the authority of the pool committee is under the constant control of the participants.

As far as the assignment of the managers and the committee is concerned, the practices do not differ from the practices applied in the limited companies. It is appreciated that the management of a chartering pool, particularly one engaging in contracts of affreightment, is a complicated matter. It is essential that the pool be managed by an appropriate and qualified team. In the case of a newly established pool, the formation of a management team is clearly a crucial issue. Usually, the heads of the pool are shipowners that belong to the cast of the participants; however, my opinion stands that the most adequate form of governance is achieved by assigning independent and impartial individuals who are not specifically related with the participating members. Under this option, the members can rest assured that the phenomena of internal competition will be reduced, in principle. Matters of competition by the pool participants with the activities of the pool are frequently addressed in the pool agreements. In this way, it is usually a prerequisite that the participants should enter all of their vessels of the type in question into the pool. However, most of the shipowners prefer to engage only a part of their fleet into the pool and have the other vessels operate in the spot market. The security of a standard flow of income that the pool provides may be considered inadequate for a shipping company, as the dividend is not always high. On the other hand, it compensates the costs and the problems deriving from the search for tramp charter. Nevertheless, the security of a regular income, especially when the market news is not encouraging, is the best solution that a shipping company holds.

3.3.4.3 Information Exchange System

My opinion is that the will of the parties is to limit the information flow to a minimum, especially information regarding types of

commercial operations that are outside the scope of the pool, future projects, etc.

This is confirmed by Fearnley Report (para 1012 *et seq*). However, this should be evaluated in the light of each individual clause in order to search for potential competition infringements.

3.4 Revisiting the Concepts of Relevant Markets, Efficiency and Consumer Benefits

As mentioned already, the standard analysis on the relevant market requires, *a priori*, homogeneity in the services offered and certain geographic reference. Given the nature of tramp shipping, any attempt to narrow the geographic market would fail to produce credible results due to the constant movement of fleets across different geographic markets.

Within this section, I attempt to produce an *unconventional* approach with reference to the issue of defining the relevant market in tramp shipping and tramp pools. As for the concepts of cross-subsidisation and the aggregation of benefits across markets, I hold that when the dominant undertaking subsidises its operations across different markets, a certain connection is created between the markets in question, regardless of the degree of homogeneity they present. The fact that resources are being transferred from one market to another, in order either to rectify inefficiencies or to maintain and (possibly) develop presence in the secondary market, produces economic consequences to competition. This has been the case in Deutsche

Post,⁵⁹⁵ UPS⁵⁹⁶ and PTT Post⁵⁹⁷, respectively. The case law in the postal service is useful as it includes the transport as well as the logistics elements that require investment and involve high costs; in the case of shipping, the phenomenon is intensified given the involvement of significant capital requirements.

3.4.1 Correlation of the Relevant Markets

The first point in the Maritime Guidelines that is appropriate for tramp vessel services relates to the definition of the relevant market. The main terms of an individual transport request will be our starting point for defining relevant service markets. Following traditional reasoning, I need first to determine whether (from the Demand Side perspective) the services provided under charterparties are substitutable⁵⁹⁸. If they are, they will belong to the same relevant market. The supply-side position will also have to be examined in particular, as it concerns the substitutability of different cargo and size of vessels⁵⁹⁹. To determine substitutability there are three genuine difficulties: i) the overlapping of markets, ii) the fragmentation of the market and iii) the lack of available information (data).

A separation between different vessels and different cargo types might well prove to be inconsistent with reality where there is substantial substitutability across cargo carriers and different sizes of vessels.⁶⁰⁰ For Athanassiou (2009)⁶⁰¹, the indicators of cost and time are crucial for determining the degree of the substitutability in question. She

⁵⁹⁵ Op.cit supra § 118

⁵⁹⁶ *Infra* § 615

⁵⁹⁷ Post / TNT / GD Express Worldwide (PTT), Merger Procedure Case No IV/M.843 - PTT [OJ 1996 C302/06] Para 41

⁵⁹⁸ Fergus Randolph , “Overview, jurisdiction and legal status of Guidelines” in Wareham (2010) op. cit. p 29

⁵⁹⁹ Athanassiou, in Antapassis Antonis, Athanassiou Lia, Røsæg Erik (ed/s.), op. cit. pp. 84-85

⁶⁰⁰ Fergus (2010) op. cit. p. 30

⁶⁰¹ Athanassiou (2009), op. cit. ibid. p. 84

supports that if the time needed for the physical availability of a vessel to respond to a charter is limited – moreover, the costs involved are insignificant – then it is likely that the outcome of our investigation will show sufficient substitutability; it is the ideal condition undoubtedly. The temporal dimension⁶⁰² of supply and demand within a market has to be taken into account on an ad hoc basis. In addition to the above two indicators, the Maritime Guidelines⁶⁰³ indicate that the elements of quality, frequency and differentiation of the service provided, innovation, marketing and commercialisation of the service are particularly relevant for the assessment of the effect an agreement may have in the relevant market.

An interesting point is found within the Commission Notice on Postal Services,⁶⁰⁴ where it has been called upon to examine a number of tax advantages granted to a postal operator that could be used to cross-subsidise the operator's activity in sectors open to competition.⁶⁰⁵ The phenomenon occurs where a company uses funds generated from one area of activity to fund activities in another. A cross-subsidy may give rise to an antitrust problem if the dominant company has an oligopoly or near-monopoly position in one market and also has activities in another related market where it is in competition with competitors who sell only in the second market.

The problem for competition consists when market boundaries can be used in favour of the dominant party against its competitors in the

⁶⁰² See analysis *supra* p. 131 et seq

⁶⁰³ Maritime Guidelines (2008) op. cit. para 35

⁶⁰⁴ Notice from the Commission on the application of the competition rules to the postal sector and on the assessment of certain State measures relating to postal services, [OJ 1998 C39] Para 7(b)

⁶⁰⁵ Spurling David, *Introduction to Transport Economics* [Universal-Publishers, Florida, 2010] pp. 60, 101, 208-213, 361. Spurling presents various cases of cross subsidisation, indicating that it is a business strategy implemented in many transport services.

second market. Temple Lang & O' Donoghue (2002)⁶⁰⁶ describe that independent competitors have to meet *ad hoc* all the costs necessary for their production for a particular market (i.e. the "stand-alone costs"). A horizontally-integrated dominant company, however, is subject to several kinds of costs. Thus, it has "*incremental costs*"⁶⁰⁷, which arise only because of its operations in the competitive market; these would cease if the company's operations in that market would also be ceased. It also has, or is likely to have, "*fixed costs*"⁶⁰⁸ which are common to its operations in both markets, but which would be unaffected by cessation of its activities in the competitive market. It furthermore has costs which arise only because of its operations in the market in which it has a monopoly. The problem for competition law is that the dominant company is able to spread its common costs over two sets of operations instead of only one; in other words, it develops economies of scale or scope. As a defence, of course, we could mention that the dominant party can use its reserves in order to improve its service; in this context the user of services is benefited by the variety of the available options. Another defence would be that an exposure as such is necessary in order to produce high gross income, which would secure it better pooling of finance.

Within the Horizontal Merger Guidelines⁶⁰⁹ and Horizontal Cooperation Agreements⁶¹⁰, entry barriers are relevant not because they allow an incumbent to enjoy excess profits, but because they

⁶⁰⁶ Temple Lang John, O' Donoghue Robert "Defining Legitimate Competition: How to Clarify Pricing Abuses Under Article 82 EC" *Fordham International Law Journal* [2002 Volume 26, Issue 1] p. 150

⁶⁰⁷ See *supra* p. 168

⁶⁰⁸ See *supra* p. 158 et seq

⁶⁰⁹ Horizontal Merger Guidelines (2004) op. cit. Para 70 "Barriers to entry are specific features of the market, which give incumbent firms advantages over potential competitors".

⁶¹⁰ Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [OJ 2011/C 11/01] Para 45. It is sited that: "Depending on the market position of the parties and the concentration in the market, other factors such as the stability of market shares over time, entry barriers and the likelihood of market entry, and the countervailing power of buyers/suppliers also have to be considered."

reduce the profitability of entry. Hence, potential entrants may encounter (business generated) barriers to entry which determine entry risks and costs; thus, these barriers have an impact on the profitability of entry. Accordingly, this kind of spill-over of incremental costs by the dominant carrier acts as an indirect barrier to entry into the market for its competitor, due to the competitor's underlying need to enter and/or expand in the said market, and not to the dominant company's cost allocation.⁶¹¹ Henceforth, it would be necessary to prove objectively that independent activities in the competitive market were inherently unprofitable, and were not uneconomic for competitors only because of predatory pricing by the dominant company.

Yet, a spread as such may be beneficial for the consumer; moreover we should not overlook the key factor that characterises the legitimacy of most of the business strategies: the absence of exclusionary intent. Conversely, setting prices low in one sector and high in another is regarded by Bellamy & Child (2008)⁶¹² as indicative of predatory pricing⁶¹³, and in that event may implicitly satisfy the same objective as the economic need for recoupment⁶¹⁴; presumably, in the sense of protecting a dominant position in another market. Furthermore, a general position such as the above might effectively render cross-subsidisation by dominant firms almost illegal *per se* in predatory pricing cases, whether or not the source of funding in the market with low prices was lawful or whether low prices were funded in non-dominated markets in an attempt to gain entry into new markets.⁶¹⁵ However, the connection between cross-subsidisation and predatory pricing may not always prove to be genuine, as there is the risk of

⁶¹¹ Temple Lang John, O' Donoghue Robert (2002) op. cit. p. 157

⁶¹² Bellamy & Child (2008) op. cit. Paras 10.117, 11.018, 12.191

⁶¹³ UK competition law case: *Aberdeen Journals Limited vs. OFT* [2003 CAT 11] Para 445

⁶¹⁴ See *supra* p. 185 et seq

⁶¹⁵ *UPS Europe SA vs Commission (UPS)* [2002 ECR II-1915]

potential fallacy. Alese (2008)⁶¹⁶ analysed the subject and referred to the risks of broadly equating different conditions in separate markets, a position with which I agree: the required condition for geographical service relevance is homogeneity. Hence, this means that the concept of cross-subsidisation may be useful tool only if there is homogeneity between the “connected” markets in question.

Homogeneity, for instance, exists if the operations in the second market in question are not really different in size and type, but constitute an extension of the business purpose of the main (profitable) market in which the dominant company operates. There, I support that the two markets are connected and they can be deemed as an integrated economic entity. Admittedly, by this approach, I suggest that there may be a suspicion of systemic nature in tramp shipping businesses, where several interconnected markets constitute a greater deregulated whole.

However, there are many observational problems involved in determining and identifying the causal relations developed in *open* and *complex* systems. This is because the complexity and uniqueness of the shipping system means that it:

- i) Engenders new phenomena endogenously, making particular properties and states of the system singular, historically specific (through the maritime cycles) and perhaps irreversible, in the sense that pool size, movements and incumbents’ numbers are not stable enough to produce credible results⁶¹⁷;

⁶¹⁶ Alese Femi, *Federal Antitrust and EC Competition Law Analysis* [Ashgate Publishing, 2008] p. 359

⁶¹⁷ Carsten Herrmann Pillath, ‘How to research complex systems: a methodological comparison of Ordoliberalism, and Regulation Theory’ in Agnès Labrousse, Jean-Daniel Weisz (editors), *Institutional economics in France and Germany: German Ordoliberalism versus the French regulation school* [Springer Verlag Berlin Heidelberg 2001] p. 272 p. 275

- ii) Is influenced by non-linear and frequency-dependent processes. Consequently, causal relations exist where the strength and direction of both cause(s) and effect(s) are highly divergent in terms of magnitude and power⁶¹⁸. For this reason, even the unambiguous observation of systems according to deterministic causality is not possible due to the magnitude of inherent deterministic volatility;
- iii) Has no fixed boundaries; due to the process of engendering endogenously new phenomena change the meaning of exogenous influences on the system. Synergy, as phenomenon for instance, alters the finance standards, and the legal perception (subsequently intervention) about it;
- iv) Consists of agents and actors whose actions are not fully determined by the system but rather stem not only from statistical perception of the information but from autonomous cognitive motives (e.g. shipowner's atomicity agent, banking and financing practice, shippers' reactions; short- and mid-term predictions about volatility that affect the company's strategy). This means that events in the system are not completely dependent on the environment and are therefore 'coincidental';
- v) Consist of agents who actions are determined by cognitive motives;
- vi) Is hierarchically ordered. This means there is causality between the elements (vessels, companies etc.) and the particular emergent properties of the system (volatility, synergy etc.) which run in both directions. Thus, there is no easy way of ontological reduction in either direction.

⁶¹⁸ Mainzer Klaus, *Thinking in Complexity: The Computational Dynamics of Matter, Mind and Mankind* (Springer, Berlin Heidelberg NY, 5th Edition, 2007), pp. 73-75, 301-303

In view of the above difficulty to define⁶¹⁹ the service and geographic boundaries of the relevant market, I argue that if there are certain regions in which the pool may pursue more frequent presence, they can be defined by the statistical proof of presence in relation to their competitors. In any event, geographic specialisation is desirable by any shipping company because, in this manner, it becomes more acquainted with the local circumstances, the shippers and/or the charterers; moreover, the chances to achieve long COA increase. Frequent presence in the market equates to more market power.

Presence in an area ultimately affects the negotiations for the COA. The contract market is not so much influenced by spot rates and demand-supply considerations as it is by the existence of long-standing relationships between shippers and carriers. A proof of this is to be found in the fact that average long-term pool earnings demonstrate a more stable development over time than the average market. A shipper-carrier relationship is not based on the opportunities of taking advantage of favourable market conditions but rather on a mutual compromise by which shippers do not light-heartedly go to the open market during periods of freight recession and, similarly, carriers do not charge market rates during periods of prosperity. In the above sense, and for their contract business, bulk pools could be seen as industrial carriers, or as an integral part of the entire production-distribution chain. Freight rates are thus negotiated, and although the pricing of COAs may entail a number of non-price considerations, the underlying forces of demand and supply are still there.⁶²⁰

3.4.2 Correlation of Relevant Market Shares

⁶¹⁹ Athanassiou (2009) op cit. p. 86

⁶²⁰ Haralambides (1996) op. cit. pp. 236-237

In tramp shipping markets, service providers compete for the award of transport contracts, that is to say, they sell voyages or transport capacity. Depending on the specific services in question, various data may allow operators to calculate their annual market , for instance:

- (a) the number of voyages;
- (b) the parties' volume or value share in the overall transport of a specific cargo (between port pairs or port ranges);
- (c) the parties' share in the market for time charter contracts;
- (d) the parties' capacity shares in the relevant fleet (by vessel type and size).

Depending on the specificities of the relevant tramp shipping market shorter periods may be envisaged, e.g. in markets where contracts of affreightment are tendered for periods of less than one year.

In practice, however, as many relevant markets overlap both in their product and geographical dimensions, it is nearly impossible to estimate market shares in each relevant market; moreover there is insufficient data regarding supply volume and value.⁶²¹

Consequently, instead of resorting to the classical market shares thresholds⁶²², I would propose to adopt a combination of post-Chicago and neoclassical approaches based on the actual ability of the pool to exclude rivals and increase prices, respectively. An option could be for members of those agreements to include all shares of their vessels (in and out of the consortium) and of all vessels in other consortia they belong to.⁶²³ This will allow clearer pictures of market penetration and the critical market share, respectively, to emerge. The particular

⁶²¹ Fearnley Consultants (2007) op. cit. para 94.

⁶²² Whish & Bailey (2011) op. cit pp. 46-47

⁶²³ See proposal of Holman Fenwick and Willan (Law Firm) to the European Commission, Document about the revision of Regulation 823/2000, [21st November 2008], page 1

<http://ec.europa.eu/competition/consultations/2008_consortia/holman_fenwick_willan.pdf> [accessed 10 August 2009]

difference in tramp shipping is the seasonal/temporal and sporadic (perhaps opportunistic) ability to abuse its market power in a non-predictable pattern, in comparison to other sectors. For example, it is an indication of market power for a pool if it influences the freights; its repeated success to bid for a charter and be awarded the COA it is an exception to the chaotic and dynamic characteristics of the market.

This approach is also endorsed by the Maritime Transport Guidelines⁶²⁴. The pool's ability to cause appreciable negative market effects depends on the economic context, taking into account the parties' combined market power and the nature of the agreement together with other structural factors in the relevant market. It must also be considered whether the pool agreement affects the behaviour of the parties in neighbouring markets that are closely related to the market directly affected by the cooperation⁶²⁵. For example, this may be the case where the pool's market is that for the transport of products of type "x" in specialised box-shaped vessels (within market A) and the pool's members also operate ships in the dry bulk market (market B).

Therefore, accumulation of small market shares creates a significant sum of market power that is not limited within the boundaries of a certain geographic context. Although Athanassiou (2009)⁶²⁶ contends that *cost* and *time* are more relevant factors from a competition law point of view, the fact that the vessels may occasionally enter a spot market is an indication of occasional market power that can be only explained as a *sui generis* one: Whereas it cannot be easily identified due to the large size and open boundaries of the markets, once they exhibit high degree of interdependency the evidence show as connecting link the pool in question. Its ability to influence multiple markets can be deduced by the statistical analysis of the regional

⁶²⁴ Maritime Guidelines op. cit. para 69

⁶²⁵ Guidelines Horizontal Cooperation Agreements, op. cit para 142

⁶²⁶ Athanassiou, op. cit. p. 85

presence without even fulfilling the minimum market share threshold. In a particular manner, a pool achieves dominance when it manages to create (or secure) a less dynamic environment in comparison to its competitors, that are constantly subject to dynamic volatility. In this context, market power is signified by causation.

Aggregating across various market shares, even of non-homogeneous services, which is – if it is considered by the traditional view - *de minimis*, now becomes a valuable evidence of power: the ability of the pool to influence prices in a certain region to a degree that pushes competitors to reduce prices. Here we have to take into consideration that the price of the freight can be pushed even lower due to feature of the carrying vessel (age, Classification society, Insurance etc). Lower COA means lower revenue, and results in a genuine inability of the competitors to renew and/or upgrade their fleet. Whereas the above constitutes a kind of paradox, since the consumer is being benefitted by lower prices that are not necessarily the result of predatory practice, I consider this approach suitable for markets of significant dynamism.

3.4.3 Revisiting the Concept of Consumer Benefit

The EU courts look for Article 101(3) benefits anywhere they are possible. This reinforces the idea that competition law protects consumers as a category, rather than as specific individuals in specific markets⁶²⁷. Accordingly, consumers must receive a fair share of the efficiencies generated. Under Article 101(3) TFEU, it is the

⁶²⁷ Townley Chris (Townley 2011 b), “Inter-generational Impacts in Competition Analysis: Remembering Those Not Yet Born”, *European Competition Law Review*, [2011 Issue 11] p 4

beneficial effects on all consumers in the relevant market that must be taken into consideration, not the effect on each individual consumer⁶²⁸.

Generally, the transfer of benefits to consumers depends on the intensity of competition in the market. Article 101(3) §3 refers to: ‘...improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit’.

The expression ‘fair share’ gives regulators a margin of discretion in applying this condition, and, on several occasions, the Commission has held that agreements in question did not yield a fair share of their benefits to consumers, particularly in the long term.⁶²⁹ Article 101(3) also manifests the Community principle of proportionality, and is not applicable to an agreement in restriction of competition, which adopts greater restrictions than those necessary to produce the benefit in question.⁶³⁰ Several times, the Commission has imposed conditions on parties while granting the exemption to ensure that firms do not operate the agreement more restrictively than the Commission was willing to countenance. Furthermore, if the effect of an agreement is to substantially eliminate competition, it will not satisfy Article 101(3).⁶³¹

⁶²⁸ Asnef-Equifax vs Asociación de Usuarios de Servicios Bancarios (Asnef Judgment), Case C-238/05, [2006 ECR I-11125] Para 70.

⁶²⁹ For instance, in *Screensport/EBU*, the Commission held that a the establishment of a transnational satellite channel dedicated to sport may be beneficial to consumers in the short term, but in the long term, it would deprive them of the benefits having a choice of channels differing in fashion, content and quality. Commission Decision: *Screensport/EBU* [1992] 5 CMLR 273

⁶³⁰ For instance, in *Metropole Television SA* *ibid.* the CFI annulled a Commission decision granting individual exemption to the regulations of the European Broadcasting Union on the grounds that it had erred in law on the issue of indispensability.

⁶³¹ In *Heintz Van Landewyck, Fédération Belgo-Luxembourgeoise des industries du tabac vs. Commission*, [1981] 3 CMLR 134, the ECJ upheld the Commission’s decision that an agreement affecting over 80 per cent of the Belgian cigarette market failed under this head. In the Commission Decision: *Bayer/BP Chemicals*, [1989] 4 CMLR 940, the Commission had to explain that since the geographical market for polyethene was the entire Community, a restructuring agreement between two significant undertakings did not substantially eliminate competition.

The pass-on of benefits must at least compensate consumers for any actual or potential negative impact caused to them by the restriction of competition under Article 101(1)⁶³². It is on the grounds above that the benefit to consumers constitutes an absolute rule. Practice which is harmful to consumers infringes 101(3), notwithstanding that it is not harmful to the structure of competition on the relevant market.⁶³³ Furthermore, it is not necessary to show that the firm that is guilty of the infringement derives a commercial advantage from it.⁶³⁴ The only defence against this absolute rule is to prove that the practice and/or agreement in question shall produce benefits to the consumer, if not immediately, in a measurable and foreseeable future.

However, Article 101(3)§3 provides that the prohibitions set in Article 101(1) may be declared inapplicable in respect of agreements, decisions or concerted practices, which satisfy four conditions:

- iii) The agreement necessarily improves the production or distribution of goods;
- iv) The agreement promotes technical and economic progress;
- v) Consumers receive a fair share of the resulting benefits;
- vi) The agreement does not contain any dispensable restrictions, nor substantially eliminate competition in the relevant market.

All four of these requirements must be satisfied if an agreement is to prove a true benefit to the consumer in accordance with Article 101(3).⁶³⁵

⁶³² Guidelines on the application of Article 101(3) of the Treaty, op. cit. Para 4

⁶³³ Continental Can Co op. cit. Para 26.

⁶³⁴ Football World Cup (2000) Commission Decision, (Football World Cup), Case IV/36.888 – 1998 [OJ L 005, 2000], Paras 101-102.

⁶³⁵ In *Metropole TelevisionSA vs. Commission*, [1996 5 CMLR 386], the CFI annulled the Commission's decision on the grounds that it had not shown enough evidence to support that the restrictions in the agreement were indispensable.

Some restructuring agreements have passed the test of paragraph 3 because it would result in a healthier industry giving consumers greater benefits.⁶³⁶

Yet another perspective may be that at the heart of competition law is not the debate between consumer welfare and competitor protection, but as to who makes the decision. Although the ideological debates of the twentieth century have largely favoured the market mechanism, the very nature of competition law suggests that there are circumstances in which imperfections of the market require the control of economic behaviour. On the one hand, this is significant because the use of competition law to ‘benefit’ the consumer leaves the door open for its populist use, and to questions about the competence of competition regulators to make a price determination. On the other hand, a short-sighted interpretation with consumer welfare might even cause a producer to exit the market. In the context of the maritime industry, and with regard to competition law, the European legislative position up to the end of the year 2000 was based on the opinion that the said industry may contain self-regulatory elements, or, due to its international nature, was difficult to regulate by a restrictive legislative framework.

Even though, historically, the Commission was empowered to grant ‘individual exemptions’ to agreements notified to it, the situation has since changed. Now,⁶³⁷ undertakings are expected to conduct a ‘self-assessment’, and the Commission no longer enjoys a monopoly with respect to ‘individual exemption’ as the responsibility is now shared with community courts and national competition authorities.

⁶³⁶ In *Synthetic Fibres Agreement*, an 18 per cent reduction in production agreement that was to last for three years was sanctioned by the Commission. OJ [1985] L207, p. 17

⁶³⁷ See Council Regulation 1/2003

As is obvious, any benefit claimed by the agreement must outweigh any detriments it might produce. However, rarely has a hardcore restriction, such as price-fixing, been found to satisfy Article 101(3), whereas Articles 3, 4 and 5 of the (now abolished) Regulation 4056/86 on maritime transport provided a block exemption for price-fixing in the case of international liner conferences that lasted for decades.

A narrow view regarding the importance of consumer benefit is that subsection 3 only refers to economic efficiency that benefits the consumer. A greater view is that broader policy goals other than economic efficiency may need to be considered. Some broader considerations like employment, culture and environment have affected the decision-making of the Commission. For instance, in *Metro*⁶³⁸ the ECJ considered employment a relevant factor under the first condition of Article 101(3), holding that the agreement was to stabilise the provision of employment. Similarly, the Commission in *Ford/Volkswagen*⁶³⁹ considered the fact that a joint-venture would bring a substantial amount of employment and foreign investment into one of the poorer regions of the Community.⁶⁴⁰ Likewise, agreements between manufacturers of domestic appliances were countenanced because of ‘collective environmental benefits’.

The importance that the EC Competition Law merits the Consumer Benefit Factor is shown by the wording chosen in the Commission's *2004 Guidelines on Article 101(3)*⁶⁴¹. The Guidelines contain a statement of the objectives of Article 101:

The objective of Article 101 is to protect competition in the market as a means of enhancing consumer welfare and of ensuring an efficient

⁶³⁸ *Metro vs Commission* [1978] 2 CMLR 1

⁶³⁹ *Ford/Volkswagen* [1993] 5 CMLR 617

⁶⁴⁰ See: CECED (European Committee of Manufacturers of Domestic Equipment) (Commission Decision) OJ[2000] L 187/47

⁶⁴¹ OJ [2004] C101 para 13

allocation of resources. Competition and market integration serve these ends since the creation and preservation of an open single market promotes an efficient allocation of resources throughout the Community for the benefit of consumers.

Commissioner *Neelie Kroes*, who took up office as head of the DGComp in the autumn of 2004, continued to proclaim the goal of protecting competition as a means of ensuring efficiency and consumer welfare.⁶⁴² At *European Consumer and Competition Day* at London in September 2005 she stated:⁶⁴³

“Consumer welfare is now well established as the standard the Commission applies when assessing mergers and infringements of the Treaty rules on cartels and monopolies. Our aim is simple: to protect competition in the market as a means of enhancing consumer welfare and ensuring an efficient allocation of resources. An effects-based approach, grounded in solid economics, ensures that citizens enjoy the benefits of a competitive, dynamic market economy.”

Further, her speech to the BEUC in November 2006 was actually entitled *Consumer Welfare is the Standard of Anti-trust Enforcement*.⁶⁴⁴ In fact, at that conference the Chairman of the OFT, John Vickers stressed that: ‘... *consumer and competition policies must work together in tandem if not as one*’.⁶⁴⁵

⁶⁴² Jones Alison, Sufrin Brenda, 2007, op. cit. p. 46

⁶⁴³ Neelie Kroes, (European Commissioner for Competition Policy 2004-2009), ‘European Competition Policy – Delivering Better Markets and Better Choices’ ‘European Consumer and Competition Day’ speech at the European Consumer and Competition Day, [London 15 September 2005]
<europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/05/512&format=HTML&aged=1&language=EN&guiLanguage=en> [accessed 17 May 2009]

⁶⁴⁴ Neelie Kroes, (European Commissioner for Competition Policy 2004-2009), ‘Competition Policy and Consumers’ speech at the Bureau Européen des Unions de Consommateurs [Brussels, 16th November 2006]
<europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/06/691&format=HTML&aged=0&language=EN&guiLanguage=en>, [accessed 17 May 2009]

⁶⁴⁵ Jones, Sufrin, (2007) op. cit. p. 46

In alignment with this policy, the CFI has given importance to the welfare of the consumers as the objective of the competition rules. In two judgments, the well-being or welfare of the consumer has been identified as the objective:⁶⁴⁶ the 2006 *Österreichische Postsparkasse* judgment and the (2007) 2009 *GlaxoSmithKline* judgment.

What the term ‘consumer welfare’ – as adopted by the Court - actually means still remains unclear. As mentioned earlier, the role of the national and community competition authorities has been to determine when a benefit under Article 101(3) would overcome a restriction caught under Article 101(1). In other words, competition law prohibits agreements, which establish anti-competitive effects and identify the detrimental effects that may arise from the conduct or transaction under review. Certainly, the standard or objective of EU competition law does not appear to be the ‘total welfare’.⁶⁴⁷

3.4.3.1 Intergenerational Impact

The fact that benefits generated in one market can spill over into other markets or in future generations makes sense in shipping, especially in connection to the quality and reliability of service. However, the position of EU Competition vis-à-vis the argument of intergenerational impact remains generally unclear. To measure whether the presence of a liner service creates future benefits to the local economy is undoubtedly important for various reasons but cannot be addressed in this study. Without timely and safe service, however, industrial

⁶⁴⁶ See: CFI Joint Cases T-213/01 and T-214/01, *Österreichische Postsparkasse vs. Commission and Bank für Arbeit und Wirtschaft AG vs. Commission*, ECR [2006] II-1601 paragraph 115. See also: CFI Case T-168/01, *GlaxoSmithKline Services vs. Commission* OJ [2009] C282

⁶⁴⁷ Jones Alison, Sufrin Brenda, (2007), op. cit. p. 48

deliveries become uncertain; a factor that jeopardises the reliable operation of any business.⁶⁴⁸

Perhaps one can address the matter in relation to the intergenerational benefits that derive from the products that are specifically developed for the sector and committed R&D.

In addition, I consider that it is necessary to investigate further the intergenerational impact in abnormal changes in shipping. The shipping business can easily turn into a failure unless good planning (within all shipping markets), good management, beneficial random events (good luck), experience and talent co-exist. In a sense it is in the interest of the market to safeguard possible benefits, but in shipping *such a result can be achieved by the intergenerational evolution of knowledge and good practice of ship operators* (i.e. the concept of maritime tradition as *heritage*). European seamanship, the experience of shipping managers and their experiential knowledge of market trends have is an important factor that saves shipping firms from decline and contributes to the efficiency global trade.⁶⁴⁹ In fact, I hold that European maritime transport industry, especially bulk (tramp shipping) is a constituent parameter of the multilateral international trade regime. In an analogy, by providing reliable transport services it guarantees nonrivalry, nonexcludability, nonexclusivity in the trade patterns between developing and

⁶⁴⁸ In *European Night Services* op. cit. para 230, the CFI considered that “the duration of an exemption ... must be sufficient to enable the beneficiaries to achieve the benefits justifying such exemption, namely, in the present case, the contribution to economic progress and the benefits to consumers provided by the introduction of new high-quality transport services...Since, moreover, such progress and benefits cannot be achieved without considerable investment, the length of time required to ensure a proper return on that investment is necessarily an essential factor to be taken into account when determining the duration of an exemption”.

⁶⁴⁹ Quoting John Faraclas, shipping consultant, shipbroker and editor of *Shipping International Monthly Review*
<http://www.otenet.gr/portal/portal/info/economynews/maritime_report?media-type=html&user=anon&js_panename=maritime_report&action=portlets.PsmlPortletAction&eventssubmit_doview=1714488&category=maritime_report> [accessed 10 March 2009]

underdevelopment countries.⁶⁵⁰ Undoubtedly European tramp shipping becomes the most reliable server of the aforementioned principles of the international trade. In a second analogy, DG Communications, Network, Content and Technology⁶⁵¹ aims to ensure the renewal of scientific bases for future ICT by fostering excellence in ICT research, and to help transform the way it is conceived, practiced, disseminated and used. In this context, one must take into account not only the benefits for the consumer but the potential preservation of tradition and craftsmanship that will ultimately benefit the consumer, since by this kind of operation safety and quality will continue to exist. The matter requires further investigation. It will be subject to future research, especially in relation to the shipbuilding industry.⁶⁵²

3.4.4 Benefits to Efficiency and Competitiveness

Given the above, we cannot dissociate efficiency benefits from those of the consumer. Either within a short or long period the consumer must secure a fair share of benefits. Thus, one can evaluate the characteristics of a market that measures only the economic efficiency that benefits the consumer. Another way of evaluating efficiencies would be based on the existence of broader policy goals besides economic-consumer efficiency. Parameters which could also be

⁶⁵⁰ Mendoza Ronald, "The Multilateral Trade Regime: A Global Public Good for All?" in Kaul Inge, Conceição (Conceicao) Pedro, Goulven Katell Le, Mendoza Ronald U, (eds) *Providing Global Public Goods* [Oxford University Press 2003] pp 460-461. Mendoza explores whether the multilateral trade regime is a global public.

⁶⁵¹ See the objectives of the DG that include the development of a full-cycle roadmap to get the output into the EU economy, through innovation tools such as pilot-lines and open innovation platforms. Source:

<http://ec.europa.eu/dgs/connect/mission/index_en.htm> Accessed : 10/09/12.

⁶⁵² Rosa Angelo L., "Contrariety: Divergent Theories of State involvement in Shipping Finance Between the United States and the European Union" *Tulane Maritime Law Journal Volume 29*, [2004-2005] pp. 187-216. Rosa supports that in response to the financial pressures put on shipowners by the oversupply of shipping tonnage on the world market and the increased competition from third-country vessels, a great part of EU shipowners have decided to reduce their costs by registering their ships under non-EU flags or under second national registers, moreover they preferred foreign shipyards (mainly in the Far East) to build and repair their vessels.

considered could be market balance, economic development, protection of weaker companies, labour consideration, etc. It is evident that the competition policy related to shipping does not limit itself only to the aforementioned criteria of whether and to what extent consumers are benefited. In my opinion, the main concern so far has been market regulation rather than benefit to the consumer. Should benefit to the consumer be the decisive criterion behind any legislative initiative, then any amendment, as such, would be aimed at maintaining or promoting a regime that could guarantee the welfare of the consumer.

In reality, the competition law regime in shipping has been more or less the same for the last fifty years. Maritime transport consisting of trampers guaranteed that transport costs would not only be low but would also not affect the retail price of the commodity. Indeed, this has been proven:

It is cheaper, nowadays, to transport a 50 kilogram television appliance from Shanghai to London than to send a 250 gram First Class letter within the UK.⁶⁵³

⁶⁵³ We refer to the Royal Mail price list. In comparison to the postage fees, we herewith show a chart provided to us by the ELAA. It exhibits the average transport cost on a variety of commodities in 2007 and 2008. It is also worth mentioning that the said costs refer to the route Shanghai – UK, which, incidentally, is one of the longest ones. It is clear that the burden of transport costs is absolutely insignificant, in view of the distance and the weight involved. In particular, in a television set price of \$2,550 USD the transport costs amounts only 1.1 per cent of the retail price; as for the example of sport shoes the corresponding costs are 1.8 per cent, i.e. \$0.9 USD that is cheaper than the lightest 1st class letter post within the UK, as mentioned above. It is evident that shipping transport utilises economies of scale and provides the best possible value of service in relation to the freights that they are charged Source: Chris Bourne, Executive Director ELAA/European Liner Affairs Association ASBL. Private email to Ioannis Voudouris, 05–09 June 2009.

Figure 2 Retail /Transport Cost matrix

Retail /Transport Cost matrix	Price Consumer to	Ocean Freight	Total Transport Cost
Television Set	\$2,550	\$12.00	\$30.00
Vacuum Cleaner	\$300	\$3.36	\$4.65
Sports Shoes	\$50	\$0.26	\$0.90
Video Game	\$135	\$0.58	\$1.75
Bottle of Whisky	\$50	\$0.13	\$0.78

Until the recent legislative initiative (started in 2004) for the revision of the block exemption, shipping was perceived to be a stable system. In practice,⁶⁵⁴ it is observed that the block exemption was considered by some to be a kind of ‘immunity’ that served its purpose as an adequate stabilising factor. Although this policy may be deemed conservative, it is suggested that the majority of requirements that are necessary for balance in the market, economic development and consumer benefit were all covered by the block exemption regime.

The perception that the shipping industry may be an efficient and contestable (competitive) market has, for decades, profoundly influenced the legislative frameworks which govern shipping. As reason for this competitiveness I have so far mentioned the dynamic element and the loose boundaries among markets that allow competitors to participate. We could therefore support that the tramp market is – theoretically at least – contestable.

In an attempt to defend contestability we shall use an example from retail commerce. In an analogy, a grocery shop competes with the

⁶⁵⁴ In addition to the data provided *supra* (footnote 296), we refer to statistical information provided by IMO, according to which, ‘the transport cost element in the shelf price of consumer goods varies from product to product, but is ultimately marginal. For example, transport costs account for only around 2% of the shelf price of a television set and only around 1.2% of a kilo of coffee’. See: IMO Report, ‘International Shipping, Carrier of World Trade’, [2005], op. cit. p. 1

supermarket/hypermarket chain for market share. The difference between the retail industry and shipping is that the products sold at the grocery shop are not usually cheaper than those sold at the supermarket. In contrast to the independent shipowner who is always cheaper than conferences, in the supermarket-minimarket equation price inelasticity is observed: firstly, a grocery shop does not represent a good example of economies of scale; and secondly, predatory pricing by supermarkets and agents' commissions (market intermediates) inhibit the growth of grocery shops and consequently any effective competition between the two subsectors.⁶⁵⁵ Moreover even small tramp independents apply principles of economy of scale which enable them to compete with cartels. This phenomenon is a 'self-regulating' attribute of supply; the main characteristic of a contestable market.

However, an adoption of such argument contains the risk of generalisation because some of the conditions of the Contestable-Competitive Markets Theory are not met in shipping and, in particular, in liner shipping. For example, the Contestable Markets Theory opposes external interventions which impede free entry and exit and sunk costs. Conversely, in tramp shipping, initial investment and sunk costs are very high, in principle, making this an apparent paradox.

Another paradox that characterises the market is that while the market is theoretically contestable, there are no reports of distortions of competition before the competent authorities. The fact that pools aim to regulate supply equates them to be *prima facie* anti-competitive. However, I agree with Athanassiou (2009)⁶⁵⁶ on the fact that different forms of cooperation in shipping may be included under the term "pool," that have to be considered on a case-by-case basis. Our subject matter – the partial function cooperation tramp shipping

⁶⁵⁵ In shipping the only additional cost on top to COA may be the broker's fee, agents' fee, which is traditionally fixed (by an 'unwritten' rule), to 1-10% case-by-case basis.

⁶⁵⁶ Athanassiou op. cit. p. 87

consortia – produce significant efficiencies; accordingly I suggest that any distortions are balanced by the benefits which relate to the surplus capacity effect.

This over-surplus inefficiency is what actually makes the shipping market dynamic; and, subsequently, competitive and beneficial for the users. In particular, the opinion of the majority of maritime economists⁶⁵⁷ holds that an inherent structural market failure exists in shipping (both liner and tramp), relates to price instability (also known as volatility or maritime cycles), and is indicative of a contestable market appearing to rest on a solid foundation. This instability guarantees actual and efficient competition; both the old and new legal regimes in shipping could be considered to be explicit or tacit indications that the maritime market has been and continues to be contestable.

Therefore, if tramp shipping has been a contestable market, how can we explain the efforts for regulation? The rationale behind the new legislative initiatives (abolition of conferences and regulation of tramp shipping by competition law) may have no practical effect. So what has been the actual motive behind the recent legislative initiatives?

My opinion is that there is no clear answer to this question, due to the inconsistency mentioned above⁶⁵⁸. For example, the EU Commission has systematically degraded and rejected the competitiveness assumption of scheduled lines,⁶⁵⁹ and no special theoretical (legal or

⁶⁵⁷ Baumol William, Panzar J.C., Willig R.D., *Contestable Markets and Theory of Industry Structure*, [New York: Harcourt Brace Jovanovich, 1982] p. 510; Gwilliam, K. M., Molenaar H. J., *Current issues in maritime economics*, [Dordrecht, Boston: Kluwer Academic Publishers, 1993], pp. 70-75, 84; Blauwens, Gust, De Baere Peter, Van de Voorde Eddy, *Transport Economics*, [Uitgeverij De Boeck, 3rd Edition 2007], pp. 342-343; Desmond George, Kenneth Joll Caroline, Lynk E. L., *Industrial Organisation: Competition, Growth, and Structural Change*, [Routledge, London, NY, 4th Edition], p. 278.; Sjostrom William, "Collusion in Ocean Shipping: A Test of Monopoly and Empty Core Models", *Journal of Political Economy*, Vol. 97 No. 5,[1989], pp. 1160-1179; Shashikumar, N., "Competition and Models of Market Structure in Liner Shipping", *Transport Reviews*, Vol. 15 No. 1,[1995]p. 25-26; Meyrick, *op. cit.*, pp. 97-98, 104, 157. De Borger Bruno, Kerstens Kristiaan, 'The performance of Bus Transit Operators' in Button K.J. and Hensher D.A. (editors) [Oxford: Emerald Group Publishing, 2000] pp. 578, 591

⁶⁵⁸ See supra Nazzini § 208, Bredima § 274 and Wareham §275

⁶⁵⁹ TACA(1998), *op. cit.*, Para 351

economic) maxims have been advertised as being capable of replacing the contestable markets theoretical background and supporting the legal rationale underlying the abolition of liner conferences. Thus, any findings or justifications rely more on the general principles of competition law which govern all commercial activity and relate to market freedom rather than to a particular economic theory relevant to the shipping industry.

Eventually, the combination of the principles mentioned above would lead to the conclusion that shipping is characterised as a 'Pareto'⁶⁶⁰, or a 'weak-Pareto optimised' market. This supports the suggestion that tramp shipping has been and still is a contestable market from the theoretical point of view. An adoption of such a conclusion could consequently provide an argument for the reversal of the legislation which abolishes liner conferences (as being unnecessary). In fact, Liner Conferences have been abolished in the EU and demised in the US. In any event, one cannot derogate from or limit the confidence that shipping is indeed an optimised, balanced and contestable market by nature: these are the theoretical foundations of the maritime industry and are the active components of the systemic ontology of the maritime industry.

To proceed with this analysis, I support that even dominant pools may not be perfectly contestable; nevertheless, they operate within a system of interlinked markets; the aggregate of their presence suggests that the tramp market is *systemically* contestable as a whole. A contestable market must first be examined with regard to whether and to what extent it is governed by stability, or if it is alternatively a naturally unstable market which is incapable of eliminating competition (contests). From the analysis so far, it is quite clear that the maritime industry is a genuinely unstable market. One cannot but

⁶⁶⁰ Miller Grady, *The legal and economic basis of international trade*, (Westport CT, London, 1996), p. 86

recognise that market failures correlate with market efficiency in shipping.

The peculiarity of maritime industry consists of inherent instability – one cannot but recognise periodic market failures. At the same time, there exists no strong evidence which proves that competition has been effectively eliminated, as a result of the block exemption.

In particular, it is observed that the individual conditions regarding contestable markets are satisfied in both situations. Blanco (2007)⁶⁶¹ uses the case study of liner conferences and supports that:

- i) Either incumbents must believe that potential new entrants take the decision to enter on the basis that the prices of present operators are fixed; or, incumbents must believe that potential competitors can protect themselves from reprisals, by entering long term charterparties before entering the market;
- ii) Incumbents must believe that new entrants are capable of taking over the market by lowering the prices
- iii) The cost of financing capital must be the same for new entrants and incumbents; products must be standard; there must be no ‘sunk costs’ (costs that cannot be recovered once they have been incurred as they make expensive to leave the market); entry and exit must be without barriers. In this context, authorities should make markets as contestable as possible, facilitating the entry and exit of undertakings onto the market in order to reinforce potential competition.

One would expect that Blanco endorses the contestability assumption. On the contrary, Blanco (2007)⁶⁶² and others,⁶⁶³ including the EU

⁶⁶¹ Blauwens, Gust, Peter De Baere, Eddy Van de Voorde, 2007, *op. cit.*, pp. 342-343

Commission, consider that the theory does not appear to be solid enough, as they emphasise the prerequisites which are not wholly met. One of the basic arguments they offer is that the Contestable Market Theory depends entirely on various assumptions.⁶⁶⁴ Inter alia, it puts weight on the time which the incumbent outside the conference takes to react. Those who claim that the Contestable Market Theory does not apply to the shipping industry also argue that the theory is often presented as a model of competitive equilibrium of a strictly static nature and normative value; this leads to the conclusion that a static market can never be competitive. I agree with their assertions, which can be summarised in shipping as follows:

- i) There is limited empirical support available;
- ii) The theory depends on the reaction time of incumbents;
- iii) A contestable market produces results which are strictly static and refer to long-term market equilibrium;
- iv) In tramp shipping, it is doubtful that the threat of the large-scale entry of competitors keeps shipowners grouped in pools;

⁶⁶² Blanco Luis Ortiz, (2007), *Shipping Conferences under the EC Antitrust Law: Criticism of a Legal Paradox*, [Hart Publishing, Oxford and Portland, Oregon, pp. 483-484]

⁶⁶³ Gardner, Bernard, 'An Alternative Model of Price Determination in Liner Shipping' *Maritime Policy and Management*, [Vol. 5 1978], pp. 197-218; Vickers, John Stuart, George Yarrow, *Privatization: an economic analysis*, (MIT Press, Rhode Island, 2nd Edition, 1989), p. 61; Also see: Sayers, C. R., *Contestability Theory: An Assessment of its Relevance to Australian Liner Shipping*. (Australian Government Publishing Service, Canberra, 1986), p. 24-25

<<http://www.bitre.gov.au/publications/42/Files/OP076.pdf>> [accessed 11 December 2009]; Brooks, M. R., Sidney Gilman, 'Competition Policy in Liner Shipping: Policy Options' in HJ Molenaar and E. Van de Voorde, (1994), *Competition Policy in Liner Shipping: Proceedings of a Conference Organised by the International Association of Maritime Economists (IAME) and the University of Antwerp (UFSIA)* apud. Voorde, De Baere, Blauwens, 2007, op. cit, p. 342; Stephen Martin, *Advanced Industrial Economics*, (Blackwell Publishing, 2nd Edition, 2002), p. 305

⁶⁶⁴ In this context, any intervention aims in reproducing 'Kaldor Hicks efficiencies'. Regardless of its true scope and desired result, an intervention as such has to anticipate all subject market peculiarities. In cost-benefit analysis, an aim is evaluated by comparing the total costs, such as building costs and environmental costs, consumer benefits; the project would typically be given the go-ahead if the benefits exceed the costs. It is perhaps one of the reasons that justify the introduction of the block exemption in liner shipping in the first place.

- v) In pools, the incumbent shipowners confront new entrants, right from the start, with price wars and other predatory tactics. This tactic is expensive as it generates greater sunk costs from the incumbent shipowners' side;
- vi) The large sunk costs that result from leaving a route due to inefficiencies are difficult to be set aside by reusing vessels on the other routes especially in times of market crisis; the excess capacity would therefore remain unused;
- vii) The large-scale entry of new vessels is virtually impossible not only because of what such an entry would cost but also because of the time it would require;
- viii) Shipowners have to make a great deal of investment in the management and marketing of their services; these investments and their related assets are considerably less mobile than the vessels themselves;

It is worth mentioning that the EU Commission clearly agrees with arguments (iv), (v) and (vi) above.⁶⁶⁵ In particular, the Commission and various academics reject the idea that a large influx of entrants by competitors is capable of stirring further volatility in the market.⁶⁶⁶ It must also be admitted that reasons (v) and (vi), regarding sunk costs, are well-grounded and could well be strong enough to support the conclusion that the liner shipping market is not contestable.⁶⁶⁷ The main argument behind (v) is based on the assumption that, even in the complete absence of entry or exit barriers, the market would not

⁶⁶⁵ In *TACA* (1998), op. cit, paras 355-356, the EU Commission incorporates the views of Sidney Gilman (Professor (em.) University of Liverpool; member of International Association of Maritime Economists); while in *EATA* (1999), op. cit, Paragraphs 130-131, and *FETTCSA* (2000), op. cit, Par 119, the Commission even argues that Gilman's analysis underestimates problems for the application of the theory of contestability in regular maritime transport markets, reducing it to a vessel mobility problem.

⁶⁶⁶ Blanco , 2007, op. cit. p. 484

⁶⁶⁷ *TACA*(1998), op. Cit, Paragraphs 351, 355

be so contestable as to make it possible to entirely substitute the existing capacity.⁶⁶⁸

These arguments establish reasonable doubt regarding the applicability of the theory of contestability. In particular, the issue of sunk costs (for both tramp and liner) and the block exemption for liner shipping, if accepted, justify the EU change in policy towards a liberalised shipping industry.

Instead, I propose to examine the nature of the shipping industry in a global context instead of merely focusing on certain points of the Contestability Theory. This allows one to evaluate the importance of the arguments made and to take into consideration additional features and particularities of the system.

3.4.4.1 The Pareto Nature of the Tramp Shipping Markets

Thus, while competition is understood as rivalry for its own sake, efficiency is defined as probable Pareto Efficiency. In other words, a change is efficient if it produces gains which are sufficient to compensate victims for their losses. Should legislators merely intervene, via protectionism, the self-generated Pareto Efficiency properties of shipping would be replaced by new rules which could be resolved by methods of cost benefit efficiency. It is on these grounds that proceed to the following suggestions:

⁶⁶⁸ Quoting from Blanco (2007), *op. cit*, p. 485: ‘...sunk costs related to the availability of capacity for entry onto the conditions existing on other routes. If these routes were in equilibrium, they simply would not have the capacity of instant or total substitution of the companies present on any of these markets. To the extent that the vessels start to leave the other routes, rates would increase according to the elasticity of demand, and the process would quickly end’. Moreover, Sidney Gilman, in HJ Molenaar and E Van de Voorde (1994), gives the example of principal world routes with three big routes (the Atlantic, Pacific, Europe/Far East), which represent a big portion of the overall industry, and extends the argument to smaller routes. *apud. TACA (1998), op. cit*, para 355

There is an infinite loop of 'Nash equilibrium'⁶⁶⁹, of cyclic behaviour in market strategies and decision-making between market players (whether they are conferences & independents). This can be deemed to be a kind of tacit and informal cartel;⁶⁷⁰

The said equilibrium can be deemed to produce Weak Pareto Efficiencies (WPO) of cyclic behaviour (synchronised with the phenomenon of maritime cycles), in the way in which resources are generally allocated;

Maritime cycles combined with maritime markets' volatility act as self-correcting properties with regard to the proper allocation of resources; The cyclic processes do not necessarily affect the price of the final product as both subsystems (liner consortia/independents) apply economies of scale provided that there are no significant market barriers or restrictions which distort the balance of the market.

High competition may lead to further concentration as defence mechanism against destructive competition. Perhaps a good example

⁶⁶⁹ The Nash equilibrium concept is used to analyse the outcome of the strategic interaction of several decision makers. In other words, it is a way of predicting what will happen if several institutions are making decisions at the same time, and if the decision of each one depends on the decisions of the others. Basically, Nash equilibrium in shipping is a solution concept of a 'game' involving two or more market players, in which, each player is assumed to know the equilibrium strategies of the other players, and no player has anything to gain by changing only his or her own strategy unilaterally. In many cases, most shipowners that operate within a certain trade might improve their revenues if they could somehow agree on strategies different from the Nash equilibrium (e.g. competing shipowners forming a cartel in order to increase their profits). See Dimitriou Loukas, Tsekeris Theodore, Stathopoulos Antony, 'Competitive Network Design In Short-Sea Liner Markets Using Agent-Based Game-Theoretic Models', in Proceedings of the 1st International Conference 'Competitiveness and Complementarity of Transport Modes - Perspectives for the Development of Intermodal Transport' University of Aegean, Chios [Internet Article, 2007]

<www.kepe.gr/pdf/Competitive%20network%20design%20in%20short-sea%20liner%20markets%20using%20agent-based%20game-theoretic%20models.pdf> [accessed 20 August 2009]

⁶⁷⁰ Pozdnakova, 2008, *op. cit.*, pp. 49-50. Traditional liner conferences impose on their members a strict rate discipline, which can only be relaxed by taking independent rate action or entering into individual service arrangements. In such case, carriers may still be willing to cooperate on tariffs in a more flexible framework of stabilisation or discussion agreements. These are also known as 'non-binding and recommended tariff rate levels' and they are considered price-fixing agreements. Thus mainly non-conference liners may have sufficient market power to negotiate cooperation agreements with the conference members.

would be the facts in *Yeheskel*.⁶⁷¹ What was interesting in this case was that, besides the claimant and the defendant, there was a third (a sizeable) competitor in the relevant market, Mediterranean Shipping Corporation (MSC). The price war became very serious at the operative time, with the claimant and MSC adopting a very aggressive undercutting exercise. Although MSC had not significant market share, its behaviour was substantial in increasing competition.

Accordingly, the findings suggest that a further liberalisation – by means of legislative intervention on an already competitive market, could possibly result in an increase of prices: inefficient ship owners will have to partially or totally withdraw from non-profitable trades. Hence, further competition reduces capacity and, should this coincide with low troughs, excessive supply would lead to ‘destructive’ competition and the further withdrawal of supply (by way of scrapping or conversions). Such a phenomenon may result in a considerable increase of prices or in a decrease in the quality and reliability of services.⁶⁷²

3.5 Tramp Pools and Market Power

Article 102 of the TFEU could apply to pools on the basis that the members of a pool might hold a dominant position collectively. However, a dominant position would only arise if the pool had sufficient market power to achieve dominance in the relevant market. In addition, the pool would have to engage in abusive conduct which would not be objectively justifiable. Moreover, the evidence from international case law has shown that the establishment of a pool

⁶⁷¹ *Yeheskel Arkin vs Borchard Lines* op. cit. § 488

⁶⁷² *Supra* Bredima (2010) §274, Wareham (2010) §275

would not involve the strengthening of a pre-existing dominant market position.⁶⁷³

The matter is analysed in chapter one. We shall only refer to the subjects that present differentiation.

3.5.1 Cost Structure and Economies of Scale Indicators

The tramp shipping industry has always been flexible enough to respond to the changing demands of its customer base. This can be seen in all markets and in the development of specialised vessels to service particular trades. Most of the changes tend to be evolutionary rather than revolutionary. With regard to the same type of ship, the rule is that there has been a general evolution towards larger ships. Economies of scale which are related to larger vessels reduce freight per unit of cargo and ease port operations, as fewer calls are needed to import a given volume of cargo. This is most obvious in the large cargo-volume markets such as those of coal, iron ore, and crude oil.

However, this is not an invariable norm. Larger vessels have proportionally higher maintenance and operational costs than the smaller vessels. Moreover, the necessary capital to acquire or build vessels which are bigger/faster does not always come cheap. Tramp owners usually find it hard or unwise to commit useful equity and other collateral, and they prefer to focus on the S&P market by running older and smaller ships which can guarantee a certain yield.

⁶⁷³ Though there has been a considerable research in many countries, we find no cases where pools were found to be infringing competition. See: *Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), op. cit*, paras 1886-1887

In case of pools, the profits are shared among the participants in proportion to their participation (without absolute dominance by one party)⁶⁷⁴. We have to take into consideration that, in accordance with the particular type of agreement, the ownership and the distribution of profits are exchanged with other forms of benefits e.g. privileged shares or managerial motives. The usual practice of profit distribution as applied in a typical pool structure is that each participating vessel's percentage of the pool earnings is determined by a series of voyage calculations.⁶⁷⁵ The series of voyage calculations would include voyages relating to any contracts of affreightment concluded by the pool. The dividends are attributed according to the accession agreement among the participants.

3.5.1.1 Cost Effectiveness

Cost effectiveness can be examined from two points of view: that of the consumer and that of the operator.

⁶⁷⁴ Young Richard, Standish Bradford, *Joint Ventures, Planning and Action* [New York: Financial Executives Research Foundation, 1977], p. 11

⁶⁷⁵ Each voyage included in series of voyage calculations would be assigned to a point system (a weighting), similar to the procedure used in the scales that describe the various Baltic Freights and other freight indices. The earning capacity of each vessel participating in the pool is related to that of the other entered vessels, would determine the percentage of the pool earnings, and is attributed to each vessel. In the case of pools comprising vessels that are essentially homogeneous insofar as their specification is concerned, the calculation could be determined by differences in relatively simple factors, such as the dead-weight, speed, consumption and cubic capacity for cargo. There may, however, be other differences in the specifications of the participating vessels which are not so easily quantifiable and, therefore, a more subjective assessment of the value of the pool of such differences would need to be made. In the case for instance of the tanker market, double hull tankers versus single hull tankers, or tankers with heating coils versus uncoiled vessels. Such differences in the specification of participating vessels might give rise to a further adjustment factor, which would affect the percentage of the pool earnings, thus changing the system that is based on the model voyage calculations. Furthermore, if the age of the participating vessels differs widely, an age adjustment factor affecting the allocation attributed to each vessel might be agreed upon. Alternatively, it might be agreed by the participants that any overage insurance would be on the owner's account. Other factors are considered, such as fuel consumption, bunker prices, *et cetera*.

On the one hand, from the consumers' point of view (shipper), maritime transport is generally accepted to be highly cost effective. Despite this, given volatility,⁶⁷⁶ there has been a long downward trend in the ratio between freight costs and values of the products transported; in fact this downward trend is a genuine deflation – shipping rates follow a deflationary trend, reducing the actual yield per transported unit.

On the other hand, the issue of cost effectiveness from the point of view of ship operators relates to the cost/profit equilibrium and the ROI. In order to effectively deal with this matter, ship owners became the first sector of the economy which globalised, reducing costs. Despite global inflation, transport costs in tramp shipping have declined by 80% in real terms during the second half of the 20th century on average.⁶⁷⁷ (A similar situation exists in liner shipping.)

The main reasons are: a) the incorporation of technological advances in shipbuilding which allow larger, faster vessels which can leverage economies of scale to their benefit to be built; b) responsiveness to the development of the market and to shippers' needs; c) increased 'buyer-power' which has encouraged banks to commit specialised funds to 'maritime portfolios' which allow the financing of maritime entrepreneurs; d) the opening of the markets and the abolition of trade benefits which have allowed independent ship-operators to access the majority of trades and markets. Regardless of the fact that this has proven to be helpful in expanding operations and reducing costs, it has simultaneously contributed to the decrease of income since the economies of scale and oversupply of vessels reduce freight rates.

⁶⁷⁶ Spot freight rates in the tramp markets are in general quite volatile, and it has been known for certain segments to see changes of more than 25 per cent, up or down, during the course of one month.

⁶⁷⁷ Clarkson Research Studies, 'The Tramp Shipping Market', [April 2004], p. 3

3.5.1.2 Capital Considerations

The pool structure does not require finance since it is basically a fleet of similar vessels with different owners who operate under the care of a central administration. Costs related to the operation of the pool are self-financed by charter revenues. The members of the pool would require working capital to finance the operation of their fleets. Owners retain considerable responsibility for matters relating to the vessels themselves, such as finance, insurance, safety and maintenance, classification, et cetera.

The pool does not relate its activities, pending the receipt of freights and hires, in respect of the participating vessels, and such working capital would need to be contributed by the participants. This suggests that there is a similarity between the shipping pool and an industrial consortium.

From the type of financing required for the realisation of this alliance, entering a pool facilitates financing since it is accepted that a pool is the only organisation that reduces maritime risk.

Shipping is a capital intensive industry and there are various financial institutions which are involved in either providing or arranging finance for shipping companies. Shipping is an expensive business and, due to the huge funds needed, the role of financial institutions subsequently determines entry and operative conditions in the shipping market by providing the necessary funds to maritime entrepreneurs. A variety of financial institutions such as commercial banks, export credit agencies, investment banks, private equity houses and financial institutions are potential creditors.

The three basic sources of finance are loans (including bonds, export credits and sellers' credits), finance leases (including tax leases) and equity (either private or public). Due to the high amount which is needed, financial means usually include a combination of these

sources, as a result of which some deals are highly complex.⁶⁷⁸ One could claim that the stability of the shipping business relies on securing both charterparties and finance. Insufficient finance would stall any company regardless of its size and the quality of service it provides to its customers, and ultimately lead to its demise.⁶⁷⁹

3.5.1.3 Multiple Timecharter Agreements and Quasi-ship-owning

Under this arrangement, a single shipowner or operator, operating in its own right in the market, enters into a series of long-term timecharter(s) with other vessel owners in order to extend its fleet. This practice allows the shipowner to secure revenue without incurring the capital cost of acquisition or financing the relevant tonnage⁶⁸⁰. This sort of structure is considered separately in ‘multiple timecharters’ above⁶⁸¹. However, all the commercial management and operation of the vessels is the responsibility of the charterer. The charterer has to account to the owners for the usual charter hire provided for in the charterparty.

⁶⁷⁸ Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), *op. cit.*, paras 283-286

⁶⁷⁹ There is the notable example of one of the few villains in the maritime industry, the Tidal Marine International Corp, a shipping company in the 1970s that declared bankruptcy due to financial collapse of its main creditor (and financier) National Bank of North America (NBNA). Though in this case fraud was involved, it is indicative of how shipping and financing may be linked. See: USA Securities and Exchange Commission (SEC), *News Digest for Official Publication*, [Issue no 73-21, 31st January 1973], p. 2, <<http://www.sec.gov/news/digest/1973/dig013173.pdf>> [accessed 18 December 2008]; Stopford, (1997), *op. cit.*, p. 3

⁶⁸⁰ In addition, this strategy allows a shipowner to avoid any subsequent fixed costs, such as the legal responsibility for maintaining the vessels, crewing and other matters that belong to technical management and therefore remain the responsibility of the owners (and their ship management company).

⁶⁸¹ Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), *op. cit.*, para 1747

This model resembles vessel sharing agreements (VSA); *paradoxically*, does not even require a ship operator to actually own vessels at all, as any vessels belonging to the pool can be chartered as long as the operator continues to be either a pool member or affiliated to the pool.

This case of a *quasi-shipowner* is similar in concept to the NVOs (Non-vessel operators) concept found in the liner industry, where freight forwarders and other third parties offer liner services without actually owning the tonnage, but issue Bills of Lading as if they were owners. Thus, the owner or operator in question retains full responsibility for marketing and commercial operation of the vessels and is the only point of contact with customers in the downstream market⁶⁸².

The difference from a pool, in the classical sense, is that once charters are entered into multiple timecharter agreements with the relevant operator happens on certain routes, and without any prior consultation with the other owners who may have leased the vessel to the operator. Whereas it is difficult to establish an horizontal level of cooperation capable enough to affect competition, it allows a shipping operator to expand across multiple markets. Of course, this operation does not constitute an abuse unless it is a dominant undertaking in one of the markets in question and its pricing is predatory by effect or objective.

3.5.2 Non-Pricing Exclusionary Abuses

⁶⁸² Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm (2007), *op. cit.*, Para 1749. Examples of multiple charters cooperation are *The Leonina System* operated by 'NYKLauritzenCool'. See: J Lauritzen Annual Report 2006, p. 15, <<http://www.j-l.com/jlauritzen-annualreport2006/pics/annualreport2006.pdf>> [accessed 05 August 2009]

3.5.2.1 Requirement, Tying and Rebate Arrangements

Under a contract of “requirements”, one party agrees to supply as many goods or services as required by the other party and, in exchange, the other party expressly or implicitly promises that it will obtain its goods or services exclusively from the first party.⁶⁸³

In tramp shipping this can be translated as follows:

Company ‘A’, hereafter the buyer, agrees to charter from company ‘B’, hereafter the seller, (it may be a shipper or another shipping company that is entered into a VSA); in exchange, company ‘B’ will be supplying the charter in stable flow.

Several problems typically arise with requirements contracts. Generally, the antitrust concerns in shipping arise because a requirements contract prohibits the buyer from doing business in a particular commodity with a party other than the seller. This may create an exclusive dealing arrangement which gives the seller a monopoly over the buyer, preventing the buyer from seeking a better deal if the market becomes more competitive. On the contrary, a buyer (company A) may be able to generate sufficient demand and can absorb all of the seller's output, effectively removing that seller from competing on the open market. This situation resembles a covert merger of asset substitution or a full function joint venture.

Requirements contracts have nevertheless been upheld in the face of challenges on antitrust grounds⁶⁸⁴. The ECJ condemned requirement contracts in *Hoffmann-La Roche*⁶⁸⁵, where customers were forced to

⁶⁸³ Miller Roger LeRoy, Gaylord A. Jentz, *Business Law Today: The Essentials* (Thomson-South-Western West, 2005), p. 336

⁶⁸⁴ Bork Robert, *Antitrust Paradox: A Policy at War With Itself*, (New York: Free Press, 1978), p. 309. Also see: Whish, Richard, *Competition Law*, (Oxford University Press, 5th Edition, 2005), pp. 203-204

⁶⁸⁵ ECJ Case 85/1976, *Hoffmann – La Roche & Co AG vs. Commission of the European Communities*, ECR [1979]

buy vitamins from Roche. This practice directly violates Article 102, where the abusive nature of tie-in transactions is explicitly recognised in paragraph 2(d). For the most part, requirements contracts in shipping are unlikely to raise competition issues as they would normally be classified as vertical agreements and would be eligible for block exemption under the Vertical Block Exemption, which stipulates, *inter alia*, a 30% threshold⁶⁸⁶ for the behaviour to infringe competition. This is a cap that is very difficult to achieve in shipping.

⁶⁸⁶ Commission Regulation (EC) 2790/1999: 'On the application of Article 101(3) of the Treaty to categories of vertical agreements and concerted practices', [OJ 1999 L336/21]. In the event that the agreement is characterised to be vertical, then they are subject to the relevant 30% market-share cap and a five-year limit if exclusive; see para 8 and article 5 respectively of the Regulation.

CONCLUSION

I. Overview

Original Scope of the Research

The aims and motivations underlining this research project and the research question, as described in the Introduction Chapter, have been: *“What are the competition law issues in partially functioning (limited) co-operation agreements in Liner and Tramp Maritime Transport? Which sector-specific particularities affect (predominately EU) competition law?”*

In order to answer the above research question and working hypothesis, I examined the partial function horizontal co-operation agreements in shipping that do not constitute a concentration within the meaning of the Merger Regulation (MR), i.e. the liner consortia and tramp pools. The choice of research on shipping synergy has been decided on the basis that they represent the most common forms of alliances and, most importantly, are the ones that significantly influence the competition law issues within the service market. Any analysis of competition law could not have disregarded their existence. Liner trade is organised, in its majority, in consortia. Moreover tramp pools are the most common form of alliances and constitute one of the most attractive strategies – though synergy is not as popular in tramp shipping as it is in liner shipping.

Accordingly, I have examined the matter from the perspective of competition law, incorporating the methodology and structure as it is used in competition law bibliography. Moreover I extended the research further by informing legal analysis with sources from microeconomics and maritime economics. In this context, qualitative

data have been used in order to exhibit the properties of the maritime system, its functions, and its interaction with competition law in relation to the synergy activity. This has been necessary as the maritime sector is particularly idiosyncratic, and requires deep and global understanding of the way it is structured and operates so that my research will have valid and verifiable objectives and findings. Thus I decided to research general competition law issues in relation to shipping, and this required examining the four main areas of competition law: the relevant market, indicators of dominance, compliance of the alliance agreements with Article 101 TFEU and abusive conducts by dominant undertakings the organized categories of abusing conducts under Article 102 TFEU. The development of the above areas aims to demonstrate the interaction of sector particularities with competition law as a whole; conversely should I have focused in one category e.g. Article 101 or 102 TFEU, I could not have had confirmed results. This, however, became a challenging task in terms of structure and content required.

In this context, my work has been organised in the following manner: I first examine the aforementioned competition law issues in liner shipping and in liner shipping consortia; this has been accomplished in two chapters: the first analyses matters regarding the relevant market, the second analyses issues related to Article 101 and 102 TFEU. In the final chapter, I review the nature of the maritime tramp sector and I refer only to those matters that I consider to be important, given that these issues have been analysed in chapters one and two they are applicable also to tramp shipping; on the contrary, equal reference to the aforementioned mentioned issues would exceed the limitations of a PHD research.

II. Structure of Chapters

The conclusion of this thesis has been organised into two parts:

The first part provides an overview of the thesis: I present the original research hypothesis and the structure and content of the Chapters.

In the second part I present the outcomes of my research into four sections: Within the first section my Main Findings are listed in correlation to the original research question. In the second section, I present the Collateral (Incidental) Findings ensued during the progress of my research. In the third section I refer to the Findings that may be limited only to the maritime industry and may have wider application and appeal to other sectors of economy as well. Finally, in the fourth section I mention the limitations of the current thesis and I discuss candidate topics that can be subjects of further research.

In order to meet the questions above, the thesis is structured in three chapters:

Chapter One

In the first chapter I analyse the general economic properties of the maritime industry and the way these influence the interpretation of the competition law. I also discuss – on a theoretical level – the economic principles that govern the maritime industry and the way it operates. Moreover I examine the concept of the relevant market revisiting the service and geographic criteria from the combined perspective of the maritime industry and competition law. Schematically, the chapter is structured in the following sections:

- i) Presentation of the maritime sector properties;
- ii) Presentation of maritime markets subsequent to the undertaking's operation;
- iii) Examination of the current legal regime on liner consortia;

- iv) Analysis of the relevant service and geographic market and analysis of the subsequent markets in shipping. ;
- v) Analysis of the stability, temporal and dynamic elements in shipping.

Chapter Two

In the second chapter, I emphasise competition law issues in relation to the liner consortia. I first review issues of compliance of the liner consortium agreement with competition law, in accordance with the Article 101 TFEU. Then I proceed in researching on the indicators that contribute to market dominance, i.e. the market shares, as well as the cost. Thus, I analyse general indicators such as the market shares, as well as more special ones such as the capital, technology, and economies of scale that are not only relevant to shipping but constitute residual elements of the sector and influence the business as a whole. I continue my analysis by referring to indicators that contribute to dominants and market power of liner consortia. In particular, I emphasize the concept and critical size of the power itself, as it is understood from legal, jurisdictional and economic points of view. Moreover I research the factors of cost structure and economies of scale, as well as capital consideration (access to capital and liquidity). I then revisit the subject of market share that is needed in order to determine the degree of dominants, and I juxtapose this with the market shares held among the competing companies. I then proceed to examine non-pricing exclusionary abuses and I conclude with exploitative pricing practices. Schematically the chapter is structured as follows:

- i) Review of consortium agreements under Article 101, mentioning the special clauses and practises of the consortia agreements, such as: The rationalization, sharing, commercial policy,

membership agreements as well as restrictions imposed to deter losses of benefits.

- ii) Assessment of market power indicators.
- iii) Non pricing exclusionary abusers that are caught by Article 102 TFEU

Exploitative pricing practises with reference to the shipping specific costs and price discriminations.

Chapter Three

In chapter three, based on the findings and analysis of chapters one and two, I research the special particularities of the tramp maritime sector. I have preserved the structure of chapter one but I preferred to refer only to those specific issues that are relevant to the tramp maritime sector, as the majority of the legal issues are common between the two sectors. The subjects that I raised relate to the definition of the relevant market in tramp shipping, review of tramp shipping pools and other co-operation agreements under Article 101 TFEU. Given that in chapter one I have made special references to the concept of the relevant market as it is perceived in liner shipping, I investigate the matter further and research this subject in the context of tramp shipping particularities. I revisit accordingly the concepts of relevant market, efficiency and consumer benefit as they required, in my view, special attention. In order to resolve the true difficulty of defining a relevant spot market in tramp shipping I propose the solution of aggregative market shares held by the shipping company-consortium across markets in order to verify the actual degree of dominants. I then analyze the indicators of cost structure and economist of scale as well as capital consideration that are equally relevant indicators of market power. Schematically I present chapter three as follows:

- i) The relevant tramp shipping market.

- ii) Review of the cooperation agreements under Article 101 TFEU.
- iii) Tramp pools and market power, with emphasis on the indicators of dominants.

III. Research Outcomes

Main Findings

The main findings of the thesis include but are not limited to the following.

General Findings

- i) I reviewed the legal and economic concepts that determine the relevant market in shipping.
- ii) I searched the background of the subject matter for elements that play important role in the interpretation of the competition law in shipping. I presented the subsequent and special maritime markets to the main service provided by the undertaking; I underlined their correlation with the relevant service and geographic market.
- iii) In an effort to bypass the genuine difficulty in defining the geographic relevant market in tramp shipping, I proposed a possible but unconventional solution. Perhaps, the aggregation across markets could be an appropriate method to determine the actual benefits to the consumers, as well as the critical market share held by an undertaking that operates in multiple open and loose border markets. This method can be particularly

useful to tramp shipping, but its applicability is not limited to this industry.

- iv) I highlighted the cost and time parameters that are residual to the shipping business. I support that these indicators greatly influence dominance and market in both liner and tramp shipping. I support that these indicators are more relevant to determine market power
- v) I reviewed the specific clauses of consortia pool agreements and their compliance with Article 101 TFEU.
- vi) I conducted an assessment of market power in liner and tramp shipping and I researched on the maritime sector specific cases, by taking into account the cost related factors.
- vii) I examined abusive practices by liner consortia.
- viii) I investigated the application of the same in tramp shipping; I accordingly researched on the nature of tramp shipping pools.

Specific Findings:

- i) Where pools are caught by Article 101 TFEU it is necessary to insure that they fulfil the four cumulative conditions of Article 101(3) TFEU.
- ii) It is necessary to define the boundaries between partial and full Joint Ventures. The latter must collectively satisfy three criteria: First the parent undertaking must exercise joint control over the cooperation. Second, the cooperation must perform all the function of an autonomous economic entity. Third, the cooperation must operate on lasting basis. Regulation 1419/2006 amended Regulation 1/2003 as regards the extension of its scope to include international tramp services. Each shipping pool must be analysed by case to case basis to determine by reference to each centre of gravity, whether it scope infringes competition.

- iii) It is confirmed that the use of market shares, as an indicator of dominance, produces better results provided it is correlated with the frequency about the number of voyages, volume or value share in the overall transport of a specific cargo, the share of timecharter contracts and the shares in the relevant fleet. The degree of market stability indicates respectively the competitive importance of the parties and their competitors.
- iv) Whereas the SSNIP test can be theoretically applied to tramp shipping, it fails to identify a relevant product market beyond doubt, or to reveal measurable substitutions. Subsequently as many relevant markets overlap both in the product and geographical dimensions, it is nearly impossible to estimate market shares in each relevant market based on supply volume and value. In order however to determine its degree the indicators of cost and time are crucial. Thus, it is the temporal dimension of supply and demand that has to be taken into account.
- v) Accordingly, supply substitutability in tramp shipping is achieved on satisfactory level. The fragmentation of the relevant market suggests that the substitutability of different cargo and size of vessels is essential.
- vi) In view of the difficulty to define the service and the geographic boundaries of the relevant market, I argue that if there are certain regions in which the pools may pursue more frequent presence, they can be define by statistical means. There I can define the ability of the pool to exclude rivals and significant influence competition. Then I use the indicator of aggregated market shares across the said markets in order to determine dominants regardless of their size. A *sui generis* market like tramp shipping, where unpredictable movements of vessels combined with unstable demand (temporal and seasonable) prevail, may ultimately be a kind of system comprised of multiple relative neighbouring markets that ultimately

constitute a region. In other words it would be convenient to see a relevant greater trade even if this is intercontinental or intra-EU. In this context, it is necessary to aggregate market shares across multiple markets that could be relevant in terms of geographic and product criteria.

vii) The temporal element in shipping is of important significance not only as regards the product market, but also in terms of measuring the actual supply of vessels in a given time. The Maritime Guidelines refer to the time element in paragraphs 25, 34 and 70 on issues related to market concentration and the relevant product and geographical market. Based on this approach, I consider the temporal element is not only an element that affects supply and demand but also the residual elements of the shipping business, which are cost efficiencies and available capital. Since temporal supply and demand are present, I subsequently support that they may also have temporal dominants. Here one has to distinguish between liner and tramp service. In the former, the temporal element may not affect the long term service and revenue projections, but it can overturn the medium returns. Moreover, the temporal instability constitutes a discouraging factor for potential entrants. The temporal element in liner shipping is not expressed in terms of short term volatility, but through greater cycles, also known as the maritime cycles.

viii) In tramp shipping respectively, the temporal element constitutes a significant factor as it is responsible for the dynamic conditions that exist therein

ix) Consumers should benefit from a fair share of the efficiencies generated and must be at least compensated for any actual or potential negative impact cost to them by the restriction of competition of Article 101 (1) .

x) Although cross subsidisation does not constitute ad hoc a violation it can be used as tool in order to eliminate competition.

In shipping, cross subsidies can have an appreciable effect on the competition levels in both liner and tramp sector. In tramp shipping, however, given the difficulty of defining the relevant market, one cannot easily obtain evidence of such practice. Information also remains insufficient regarding the intention (object) of the pool to influence a certain marketplace, given that freights are negotiated within short intervals and pools generally are price-takers. So part of the chartering contract would be to call ports at low freights. This of course is not a cross substitution but a kind of rebate given to the customer or, from the *altera pars* of the shipper, a compulsory choice in order to break even from losses coming from inactivity. The difference between this obligation to rebate (reposed by the shipper) and the regular rebates promoted by the carrier is that the latter may only have exclusionary effects to potential entrance if certain conditions are fulfilled; yet, there has not been a single case reported.

- xi) Under EC Competition Law, the efficiency generated cannot be limited only to the saving of costs. Although the latter is a residual part of competition, it must result from the integration of other economic activities.
- xii) Joint selling and joint commercial policy of a pool can appreciably have an adverse impact on the parameters of competition. This can be determined by examining the power and the influence of the pool manager. In this context the legitimacy of the structure of the pool can be determined by restriction on membership, non competition clause and price fixing. A Pool Manager may, in effect, contribute to a price fixing mechanism and its actions need to be investigated regardless of the market share held by the pool in a context of geographic market.
- xiii) Given the difficulty of defining the relevant market in tramp shipping we face an equal difficulty in defying the benefits to the

consumer within a market. I support that the key benefit to the consumer is related to this *sui generis* nature of shipping of dynamic and unpredictable changes in the supplied and demand equilibrium. This is the element that guarantees effective and actual competition in all markets, at a global level. Regardless of the presence of concentration in a form of pool, or other types of JVs, the result of competitiveness remains the same. It is also remarkable that for this trillion dollar industry we do not have any reported case of competition aw worldwide.

- xiv) Based on the above, I contend that tramp shipping produces benefits not only to the users of transport services, but to other sectors of the economy as well. In this context we have the following possible types of benefits: i) Benefits to users in the relevant market, ii) Benefits to users across markets, iii) Benefits to other sectors of economies and iv) Intergenerational benefits.

Collateral Findings

I have investigated the nature of maritime sector and have discovered that it is a particular market that operates in dynamic conditions. I tend to agree with the argument of ship operation that claims that concentration and alliances are defence mechanisms against instability. In contrast to the traditional approach of competition law, market shares are not indicative of market power. This is manifested in jurisdictional approach as a kind of inconsistency; ultimately it has been recognised as a feature element by the Maritime Guidelines that the Commission interprets market shares, the market conditions on a case by case basis.

Findings of Wider Application and Appeal

The abolition of liner conferences and the new regulation of liner and tramp sector brought up the subject of EU unilateral legislation in globalised but non-harmonised business contexts. Liner conferences continue to exist in all countries except in the EU, and this constitutes an indication that even OECD countries do not view price fixing in shipping to be anticompetitive. On the contrary, they continue to support their fleets and the argument of the liner operators and several authors that price fixing may leave to stability and further competitiveness. I tend to agree with this opinion, as I believe that liner service does not have the flexibility of tramp shipping—to cut cost without compromising quality of service. The matter of interconnected but open markets is common also to air transport and I support that these markets may not have to be of homogenous products, but can be reviewed as a kind of system of interdependent markets. Transport serves many other industries that each depend on quality of service and availability; these industries are, for example, export-imports, trade and tourism.

Limitations and Further Research

Depending on circumstances, it would be desirable to continue this exploration of related transport sectors by extending it to include air transport, rail transport, and integrated transport networks. Of course, the method of approach which has been followed here, can apply to other complex dynamic and open sectors such as the medical, agricultural, tourism and e-governance as well.

Furthermore, the systemic approach understands economic sectors from a wide point of view, notably taking into account such factors as the interactions between domestic and international markets. A proposal for further research would be the evaluation of the applicability of EU competition law principles to foreign jurisdictions with a view to reevaluate the concepts of protectionism and globalisation from a greater perspective.

IV. Limitations

Because of the extent and the complexity of the subject, and the limited space available, I considered it appropriate to examine only the partial function Joint Ventures. Also, I focused on the ocean-borne shipping that includes shipping in EU catchment areas.

I decided not to involve terminal and port operations, as well as matters related to taxation and state aid.

Further Research

This thesis can be the starting point for future research for several subjects.

First of all, one can further develop the matter of relevant market in tramp shipping with the scope of defining the nature of open boundaries and the connections between neighbouring markets. Second, one could investigate the temporal element as decisive indicator for dynamic markets.

Third, one could investigate the intergenerational impact of European seamanship.

Fourth, it will be worth examining the topic of cross subsidies in air transport.

Fifth, I would like to examine further the issue of economies of scale as a barrier to entry or as a factor of efficiency.

Sixth, the abolition of liner conferences and the new regulation of liner and tramp sector brought up the subject of EU unilateral legislation in globalised but non harmonised business context.

Finally, I would like to investigate the correlation between maritime transport and tourism by passenger ferries.

BIBLIOGRAPHY AND REFERENCES

Bibliography

Alese, Femi, *Federal Antitrust and EC Competition Law Analysis* [Ashgate Publishing, 2008]

Allsop James, "Maritime Law-The Nature and Importance of Its International Character", *Tulane Maritime Law Journal*, Volume 34

Antapassis, Antonis, Athanassiou, Lia, Røsæg, Erik (eds), *Competition and Regulation in Shipping and Shipping Related Industries* [Martinus Nijhoff, Leiden and Boston 2009]

Athanassiou, Lia, 'Competition in Liner and Tramp Maritime Transport Services: Uniform Regulation, Divergent Application?', in Antapassis, Antonis, Athanassiou, Lia, Røsæg, Erik (eds), *Competition and Regulation in Shipping and Shipping Related Industries* [Martinus Nijhoff, Leiden and Boston 2009], pp. 70-93

Baughen Simon, "European Union Maritime Law", *Lloyd's Maritime and Commercial Law Quarterly* 2010, 3(Aug) Supp (*International Maritime and Commercial Law Yearbook* 2010), pp. 122-127.

Baumol, William, Panzar J.C., Willig R.D., *Contestable Markets and Theory of Industry Structure*, [New York: Harcourt Brace Jovanovich, 1982]

Bellamy, (Sir), Christopher, Child Graham, and Roth Peter (eds), *European Community Law of Competition* [Sweet & Maxwell; 5th Revised edition 2001]

Bergé Jean-Sylvestre, 'The Community Framework for Cross-Border Intellectual Property and Information Technology Litigation' in Nuyts Arnaud., Hatzimihail Nikitas, Szychowska Katarzyna (eds.),

International Litigation in Intellectual Property and Information Technology [Kluwer Law International 2008] pp. 49 -60

Blanco, Luis Ortiz, Shipping Conferences under the EC Antitrust Law: Criticism of a Legal Paradox [Hart Publishing, Oxford and Portland, Oregon, 2007]

Blauwens, Gust, De Baere Peter, Van de Voorde, Eddy, Transport Economics, [Uitgeverij De Boeck, 3rd Edition 2007]

Blitz, David, 'Ocean Shipping Economics: Free Trade and Antitrust Implications', Contemporary Policy Issues, Vol. 11 [1993], pp. 69-80

Bork, Robert, Antitrust Paradox: A Policy at War With Itself, (New York: Free Press, 1978]

Boulton, A. H., "Construction Consortia -- their formation and management", Journal of Business Law [1959]

Brealey, Richard A., Myers Stewart, Brattle Group, Capital investment and valuation on Corporate Finance Series [McGraw-Hill Professional, NY, 2003]

Bredima, Anna, "Shoot first, ask questions later: International implications resulting from the unilateral abolitions of liner conferences in the EU", in Wareham, Philip (ed.), Competition Law and Shipping: The EMLO Guide to EU Competition Law in the Shipping and Port Industries [Cameron May, London, 2010], pp. 53-65

Button Kenneth, "Is There an "Economics of Oceans?" Ocean Yearbook, Volume 14 [2000] pp. 16-37

Button Kenneth, "The Importance of the "Core in Explaining Shipping Alliances", Ocean Year Book 328, Volume 16 [2002] pp. 328-353

Carr, Indira International Trade Law, [Routledge Cavendish, 3rd Edition, 2005]

Carsten Herrmann, Pillath, 'How to research complex systems: a methodological comparison of Ordoliberalism, and Regulation Theory', in Agnès Labrousse, Jean-Daniel Weisz (eds), Institutional economics in France and Germany: German Ordoliberalism versus the French regulation school [Springer Verlag Berlin Heidelberg 2001]

Carlton, D.W. and Perloff, J.M., *Modern Industrial Organization* [Harper Collins, New York, 2nd edition 1994]

Chuah Jason, "Liner conferences in the EU and the proposed review of EC Regulation 4056/86", *Lloyd's Maritime and Commercial Law Quarterly* [2005] part 2 (May), pp. 207-233.

Chuah Jason, "The Commission Guidelines on the Application to Maritime Transport Services Of EC Treaty Rules on Restrictive Business Practice", *Journal of International Maritime Law* [2008] 14 pp. 364-366

Chuah Jason, "The New Liner Shipping Consortia Block Exemption Comes Into Force", *Journal of International Maritime Law* [2009]

Clough Mark, "The devil and the deep blue sea (EC competition law and liner shipping consortia)", *European Competition Law Review*, Volume 16 [1995] pp. 417-427

Clyde, Paul S., Reitzes, James D., "The Effectiveness of Collusion Under Antitrust Immunity, The Case of Liner Shipping Conference", *Bureau of Economics Staff Report Federal Trade Commission* Washington, D.C., [2005], pp. 34-40

Dabbah, Maher, *EC and UK Competition Law* [Cambridge University Press 2004]

Davies, J.E., "An Analysis of Cost and Supply Conditions in the Liner Shipping Industry", *Journal of Industrial Economics*, [1983 Vol. 31, No. 4] pp. 417-435

De Borger, Bruno, Kerstens, Kristiaan, 'The performance of Bus Transit Operators' in Button K.J. and Hensher D.A. (eds) *Handbook of Transport Modelling*, [Oxford: Emerald Group Publishing, 2000], pp. 577-595

Desmond, George, Kenneth, Joll Caroline, Lynk E. L., *Industrial Organisation: Competition, Growth, and Structural Change*, [Routledge, London, NY, 4th Edition]

Devaney, Robert, *An introduction to Chaotic Dynamical Systems*, [Westview Press, 2nd edition 2003]

Devanney, III J. W., Livanos, V. M., Stewart, R. J., 'Conference Ratemaking and the West Coast of South America', *Journal of Transport Economics and Policy*, [1975 Vol. 9], pp. 154-177

Dimitriou, Loukas, Tsekeris, Theodore, Stathopoulos, Antony, 'Competitive Network Design In Short-Sea Liner Markets Using Agent-Based Game-Theoretic Models', in *Proceedings of the 1st International Conference 'Competitiveness and Complementarity of Transport Modes - Perspectives for the Development of Intermodal Transport, University of the Aegean, Chios* [Internet Article, 2007] <www.kepe.gr/pdf/Competitive%20network%20design%20in%20short-sea%20liner%20markets%20using%20agent-based%20game-theoretic%20models.pdf> accessed 20 August 2009

Dittmer, Martin Andre, "The future of shipping pools – Full Function Joint Ventures or Horizontal Cooperation?", in Wareham, Philip (ed.), *Competition Law and Shipping: The EMLO Guide to EU Competition Law in the Shipping and Port Industries* [Cameron May, London, 2010], pp. 99-117

Farrar, John Hynes, *Company law* [London: 3rd Edition, Butterworths, 1991]

Fergus, Randolph, "Overview, jurisdiction and legal status of Guidelines", in Wareham, Philip (ed.), *Competition Law and Shipping: The EMLO Guide to EU Competition Law in the Shipping and Port Industries* [Cameron May, London, 2010], pp. 21-32

Flynn Matthew, "Brokers See Bleak Outlook for Shipbuilders as Demand Slows", *Lloyd's List International*, Nov. 9, [2001]

Fruhling Pierre, Whiddington Charles, Cassels John and Decat Elisabeth, "The application of European competition law in the transport sector", *Journal of European Competition Law & Practice* 1(2) [2010], pp. 144-154

Gardner, Bernard, 'An Alternative Model of Price Determination in Liner Shipping', *Maritime Policy and Management*, [Vol. 5 1978], pp. 197-218

Gellhorn, Ernest, Kovacic William E., Calkins Stephen, Antitrust Law and Economics in a Nutshell [Thomson West, St Paul Minnesota, 2004 5th edition]

Giles Ian, "Competition law starts to bite", Maritime Risk International volume 24, [2010-2011] pp. 10-11

Gkonis, Konstantinos and Psaraftis, Harilaos, "Some key variables affecting liner shipping costs", working paper of the Laboratory for Maritime Transport School of Naval Architecture and Marine Engineering National Technical University of Athens [2009] available in:

<www.martrans.org/documents/2009/prt/TRB_paper%2010_3188_Gkonis_Psaraftis_revised.pdf> accessed 4th July 2012

Glen, David, Martin B.T., Do Tanker Pools influence Market Rates? The Case of Tankers International. Conference paper presented at International Association of Maritime Economists (IAME) Panama [15 November 2002]

Gellhorn Ernest, Kovacic William E., Calkins Stephen, Antitrust Law and Economics in a Nutshell [Thomson West, St Paul Minnesota, 2004 5th edition]

Goode, Roy, Commercial Law, [Penguin Books, 2nd Edition, 1995]

Grammenos, Costas, Handbook of Maritime Economics and Business [Lloyds List Publications 2010 2nd edition]

Green, N., and Ruttley P., "The consortia block exemption" European Transport Law [1993]

Gwilliam, K. M., H. J. Molenaar, Current issues in maritime economics, [Dordrecht, Boston: Kluwer Academic Publishers, 1993]

Haralambides, Hercules, 'The Economic Impact of Shipping on the National Economy', International Conference on Shipping, Ports and Logistics Services: Solutions for Global Issues, organised by The International Association of Maritime Economists, Vancouver, B.C., Canada, [1996]

Haralambides, Hercules, "The Economics of Bulk Shipping Pools", *Maritime Policy & Management*, [Volume 23, Issue 3, 1996] pp. 221-237

Hatzimihail, Nikitas, "Concluding Remarks: Territoriality, International Governance and Cross-Border Litigation of Intellectual Property Claims", in Nuyts Arnaud, Hatzimihail Nikitas, Szychowska Katarzyna (eds.), *International Litigation in Intellectual Property and Information Technology* [Kluwer Law International 2008] pp. 303-308

Hatzimihail, Nikitas, "The Many Lives - And Faces - Of Lex Mercatoria: History as Genealogy in International Business Law", *Law and Contemporary Problems* [2008] Vol. 71 (3) pp. 169-190

Heaver, T. D., "Responding to Shippers' supply chain requirements", in J. McConville, Alfonso Morvillo, Heather Leggate, *Routledge advances in maritime research: International Maritime Transport*, [Routledge, 2004]

Herman, Amos, *Shipping Conferences* [Deverter: Kluwer law and Taxation Publishers 1983]

Herzfeld, Edgar, *Joint Ventures* [Bristol: Jordan & Sons Ltd., 1983]

Hildebrand, Doris, *The Role of Economic Analysis in the EC Competition Rules* [Kluwer Law International 2009]

Holmes Marjorie, "Maritime Transport", *Competition Law Insight* [2008] pp. 9-10.

Holmes Marjorie, Lennon Paula, "Competition: Damages - Standard of Proof", *International Business Lawyer*, [2003] pp. 259-263.

Hovenkamp, Herbert "Exclusivity Rules in Network Joint Ventures", *Federal Trade Commission Office of Policy and Planning*, [2007] available on the website of the FTC <<http://www.ftc.gov/opp/global/hovenkmp.shtm>> accessed May 2012

Hovenkamp, Herbert, "Exclusive Joint Ventures and Antitrust Policy", *Columbia Business Law Review* [1995]

Hovenkamp, Herbert, *Federal Antitrust Policy: The Law of Competition and its Practice* [MN West, St Paul, 3rd Edition, 2005]

Jones, Alison, Sufrin, Brenda, *EC Competition Law* [Oxford University Press, 3rd Edition 2007]

Kaufmann-Kohler, Gabriele, "Interpretation of Treaties: How Do Arbitral Tribunals Interpret Dispute Settlement Provisions Embodied in Investment Treaties?", in Loukas Mistelis / Julian Lew (eds.) *Pervasive Problems in International Arbitration*, [Kluwer Law International, 2006], pp. 257-276

Kavussanos, Manolis G., "The dynamics of time-varying volatilities in different size second-hand ship prices of the dry-cargo sector" *Applied Economics* v 29 [April 1997], pp.433-444

Koseoglu, Sinem Derindere, "Market Earnings Risks and Spillover Effects in Tramp Shipping Industry", *International Journal of Decision Sciences*, Vol. 2, No.1, [2011] pp.37-53

Kolstad, Olav, 'Cooperate or Merge? Structural changes and full function joint ventures in the shipping industry', in Antapassis Antonis, Athanassiou Lia, Røsæg Erik (eds), *Competition and Regulation in Shipping and Shipping Related Industries* [Martinus Nijhoff, Leiden and Boston 2009], pp.117-135

Levitt, Matthew, "Liner Consortia, Liner Mergers and individual exemption" in Wareham, Philip (ed.), *Competition Law and Shipping: The EMLO Guide to EU Competition Law in the Shipping and Port Industries* [Cameron May, London, 2010], pp. 41-52

Lim, Seok Min, "Economies of container ship size: a new evaluation", *Maritime Policy & Management* [1994 vol 21 no 2] pp. 149-160

Lorenzon, Filippo and Nazzini, Renato, "Setting sail on the sea of doubt: Shipping pools, competition and the noble quest for certainty", in Antapassis Antonis, Athanassiou Lia, Røsæg Erik (eds), *Competition and Regulation in Shipping and Shipping Related Industries* [Martinus Nijhoff, Leiden and Boston 2009], pp. 94-116

Mainzer, Klaus, *Thinking in Complexity: The Computational Dynamics of Matter, Mind and Mankind* [Springer, Berlin Heidelberg NY, 5th Edition, 2007]

Malgorzata Nesterowicz Anna, "The Mid-Atlantic View of the Antitrust Regulations of Ocean Shipping", *University of San Francisco Maritime Law Journal* [2004-2005] pp.45-88

Marquez Terry, "Shipping, Competition, and Dumping: The European Community's Liner Shipping Regulations", *Tulane Maritime Law Journal* Volume 23, [1998-1999] pp. 139-182.

Martin, Stephen, *Advanced Industrial Economics*, [Blackwell Publishing, 2nd Edition, 2002]

Marx, Daniel, *International Shipping Cartels: A Study of Industrial Self-Regulation by Shipping Conferences*, [Princeton: Princeton University Press, 1953]

Maydell, Patrick, Fina Siegfried, and Vogl Roland (eds.), "Non-horizontal Mergers under the EC Merger Regulation", *European Union Law, Stanford – Vienna, Transatlantic Technology Law Forum Working Papers* [2012 No. 3]

<http://papers.ssrn.com/sol3/papers.cfm?abstract_id=281755>
accessed 20 May 2009

Mendoza Ronald, "The Multilateral Trade Regime: A Global Public Good for All?" in Kaul Inge, Conceição (Conceicao) Pedro, Goulven Katell Le, Mendoza Ronald U, (eds) *Providing Global Public Goods* [Oxford University Press 2003] pp 455-483

Miller, Grady, *The legal and economic basis of international trade*, [Westport CT, London, 1996]

Miller, Roger LeRoy, Gaylord, A. Jentz, *Business Law Today: The Essentials* [Thomson-South-Western West, 2005]

Mistelis, Loukas, Brekoulakis, Stavros, *Arbitrability: International & Comparative Perspectives* [Kluwer Law International, 2009]

Monti, Giorgio, "The Concept of Dominance in article 82", *European Competition Journal* [2006 v2 (special issue)], pp. 31-52

Monti, Giorgio, *EC Competition Law* [Cambridge University Press, 2007]

Munari Francesco, "Competition Law in Liner Shipping", in Basedow Jurgen, Magnus Ulrich, Wolfrum Rudiger, Dutta Anatol (editors), *The Hamburg Lectures on Maritime Affairs 2009 & 2010* [Springer-Verlag Berlin Heidelberg 2012]

Munari Francesco, "Liner shipping and antitrust after the repeal of Regulation 4056/86.", *Lloyd's Maritime and Commercial Law Quarterly* [2009] 1(Feb), pp. 42-56

Nazzini, Renato, *The Foundations of European Union Competition Law: The Objective and Principles of Article 102*, [Oxford, GB, Oxford University Press, 2011]

Neocleous Panayiotis and Stamatiou Costas, "The new era of EC competition law in the shipping industry", *International Company and Commercial Law Review*, 20(1) [2009], pp 1-9

Newbold, Paul, Carlson William, Thorne Betty, *Statistics for Business and Economics* [Prentice-Hall, London 1995]

Oppenheim, Lassa, Roxburgh Ronald, *International Law: A Treatise*, Volume 1 [New Jersey: The Law Book Exchange, Clark 2005]

Packard, V. William, *Shipping Pools* [Lloyds of London Press, London 1989]

Panayides, Photis, Stephen Gong, 'Consolidation, mergers and acquisitions, in the shipping industry' in *Handbook of the Maritime Economics and Business*, ed. by Costas Grammenos, [London: Lloyds of London Press, 2002]

Phang Sock-Yong, "Competition law and the international transport sectors", *Competition Law Review* [2009] Volume 5 issue 2, pp. 193-213

Pozdnakova Alla, "New liner consortia block exemption: a legislative commentary", *European Competition Law Review*, [2010] pp. 415-420.

Pozdnakova, Alla, 'Information Exchange Agreements between Liner shipping companies under EC Competition law', in Antapassis Antonis, Athanassiou Lia, Røsæg Erik (eds), *Competition and Regulation in Shipping and Shipping Related Industries* [Martinus Nijhoff, Leiden and Boston 2009], pp. 26-42

Pozdnakova, Alla, *Liner Shipping and Competition Law* [Kluwer Law International BV, Netherlands, 2008]

Prisker Antje, "Commission adopts new block exemption regulation for liner shipping consortia" *European Commission Competition Policy Newsletter* [2010] pp. 8-12

Randolph Fergus, "The European Commission's draft guidelines - a promising starting-point or a missed opportunity?", *Shipping & Transport International* [2008] 7(1) pp. 11-13.

Ridyard, Derek, "Exclusionary Pricing and Price Discrimination Abuses under Article 82 - An Economic Analysis", *European Competition Law Review* [2002], pp. 288-290

Ritter, Lennart, Braun, W. David, *European Competition Law: A Practitioner's Guide* [Kluwer Law International 3rd edition 2005]

Sagers Chris, "The Demise of Regulation in Ocean Shipping: A Study in the Evolution of Competition Policy and the Predictive Power of Microeconomics", *Vanderbilt Journal of Transnational Law*, Volume 39 [2006] pp.779-818

Sayers, C. R., *Contestability Theory: An Assessment of its Relevance to Australian Liner Shipping* [Australian Government Publishing Service, Canberra, 1986]

Scott Morton, Fiona, Joel Podonly 'Social Status, Entry and Predation: The case of British Shipping Cartels 1879-1929', *Journal of Industrial Economics* Vol 47 [1999] pp. 41-67

Shashikumar, N., "Competition and Models of Market Structure in Liner Shipping", *Transport Reviews*, Vol. 15 No. 1,[1995]pp. 3-26

Sjostrom, William, "Collusion in Ocean Shipping: A Test of Monopoly and Empty Core Models", *Journal of Political Economy*, Vol. 97 No. 5,[1989], pp. 1160-1179

Spurling. David, *Introduction to Transport Economics* [Universal-Publishers, Florida, 2010]

Stopford, Martin, *Maritime Economics* [London: Routledge, 1st Edition, 1995]

Stopford, Martin, *Maritime Economics* [London: Routledge, 2nd Edition, 1997]

Stopford, Martin, *Maritime Economics* [London: Routledge, 3rd Edition, 2009]

Tassel, Yves, "Freedom of Contract and Public Order relative to the legal effect of the Hague Visby Rules: Prospects of English law and of French law", in Antapassis Antonis, Athanassiou Lia, Røsæg Erik (eds), *Competition and Regulation in Shipping and Shipping Related Industries* [Martinus Nijhoff, Leiden and Boston 2009], pp. 375-384

Temple Lang John, O' Donoghue Robert, "Defining Legitimate Competition: How to Clarify Pricing Abuses Under Article 82 EC", *Fordham International Law Journal* [2002 Volume 26, Issue 1]

Townley, Chris, "Inter-generational Impacts in Competition Analysis: Remembering Those Not Yet Born", *European Competition Law Review*, [2011 Issue 11] pp 580-590

Townley, Chris, "The Relevant Market: an acceptable limit to competition analysis?" *European Competition Law Review*, 10, 2011 pp. 490- 499

Van Bael & Bellis (Law Firm), *Competition Law Of The European Community* [Kluwer Law International 2005]

Varela Chouciño Milagros, "Tramp Shipping In The New Ec Competition Maritime Regime, Analysis of the latest developments in the regulation of Tramp Shipping and Tramp Shipping Pools", Master Thesis submitted in the Instituto Universitario de Estudios Marítimos, Universidade Da Coruña [2008]

Vickers, John Stuart, George Yarrow, *Privatization: an economic analysis*, [MIT Press, Rhode Island, 2nd Edition, 1989]

Voionmaa, Tapani, 'Competition Law and Short Sea Shipping including some anomalies along the line', in Wareham, Philip (ed.), *Competition Law and Shipping: The EMLO Guide to EU Competition*

Law in the Shipping and Port Industries [Cameron May, London, 2010], pp. 167-175

Wareham, Philip (ed), Competition Law and Shipping: The EMLO Guide to EU Competition Law in the Shipping and Port Industries [Cameron May, London, 2010]

Werden, G, “Demand Elasticities in Antitrust Analysis”, Antitrust Law Journal [1998 issue 66], pp. 373-383

Whish, Richard, Bailey David, Competition Law [Oxford University Press 2012]

Whish, Richard, Competition law [Oxford University Press, 5th Edition, 2005]

Wilson John F, Carriage of Goods by Sea, [Pearson Longman 2008 6th Edition, Harlow-Essex]

Wooldridge, F., ‘Consortium and related operation in the United Kingdom’, Lloyd’s MCLQ [1978]

Young, Richard, Standish Bradford, Joint Ventures, Planning and Action [New York: Financial Executives Research Foundation, 1977]

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Reports and Other Sources

Armateurs de France ‘Projet de lignes directrices relatives à l’application de l’article 81 du TCE aux services de transport maritime’. Consultation Guidelines on the application of Article 81 of the EC Treaty to maritime transport. Observations d’Armateurs de France: [2004]

Brealey and Myers Report 1998

Clarkson Research Services Ltd ‘The Tramp Shipping Market’, [April 2004].

ELAA Response to Issues Paper

ESC, Maritime Regulatory Reform The European Shippers' Council's submission to OECD

European Shippers Council, Maritime Regulatory Reform. "The European Shippers' Council's submission to OECD", [10 April 2001].

European Shippers' Council (ESC), 'Response to the ELAA Proposal For A New Regulatory Framework For The Liner Shipping Industry – Article 81 EC Assessment', Confidential Response [10th March 2005]

European Shippers' Council (ESC), 'What Shippers require from Liner Shipping in the future and why' ESC Future Paper, Review of the Regulation 4056/86

Fearnley Consultants AS, Global Insight, Holman Fenwick & Willan Law Firm, Legal and Economic Analysis of Tramp Maritime Services [‘EU Report COMP/2006/D2/002’, 22/2/2007]: EU Commission

Federal Maritime Commission, Bureau Of Trade Analysis, Study of the 2008 Repeal of the Liner Conference Exemption from European Union Competition Law [January 2012, uploaded in February 2013, accessed in 20 Feb 2013]

Global Insight and Berlin University of Technology (WIP) and Institute of Shipping Economics and Logistics (ISL) 'Application of Competition Rules to Liner Shipping', Final Report [October 2005]

Greek Shipping Cooperation Committee, Memorandum to the Members of Greek Shipping Cooperation Committee from the Chartering Pools Sub-Committee, [London, June 2000]

Holman Fenwick Willan, Client Briefing: "EU maritime exemptions due for abolition"

House of Lords (1983): Competition Policy: Shipping, (House of Lords. Select Committee on the European Communities, Session 1985-86, 3rd Report), [HMSO, London 1983]

International Shipping, Carrier of World Trade, IMO Report, 2005

Meyrick & Associates, 'Economics of Liner Shipping Conferences: A Critical Review of the Literature and its Implications for Australian Policy', Australian Productivity Commission Inquiry into International Liner Cargo Shipping (A review of Part X of the Trade Practices Act) [April 1999], <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=281755> accessed 20 May 2009

Memorandum to the Members of Greek Shipping Co-operation Committee, from the Chartering Pools Sub-Committee, London, Internal Document, June 2000

Monti, Mario, European Commissioner for Competition Policy, 'Does EC competition policy help or hinder the European audiovisual industry?' [British Screen Advisory Council The Cavendish Conference Centre, London, 26 November 2001]

Neelie Kroes, (European Commissioner for Competition Policy), 'European Competition Policy – Delivering Better Markets and Better Choices 'European Consumer and Competition Day' speech at the European Consumer and Competition Day, [London 15 September 2005]

Norton Rose Group (Law Firm), "Transport Survey, the Way Ahead" Third Report [2010]

Opinion of the Committee of the Regions on the role of local and regional authorities within the new Baltic sea strategy' OJ [2009] C200 /06

Opinion of the European Economic and Social Committee on the 'White Paper on the review of Regulation No.4056/86, applying the EC competition rules to maritime transport' OJ [2005] C157/130

Organisation for Economic Cooperation and Development (OECD), "Regulatory issues in international maritime transport" Directorate for Science, Technology and Industry, Division of Transport, DSTI/DOT(2001)2, [2002]

UNCTAD Secretariat Report, 1970

UNCTAD Review of Maritime Transport, 2004[UNCTAD/RMT/2004]

UNCTAD Review Of Maritime Transport 2011,
[UNCTAD/RMT/2011]

UNCTAD, Transport Newsletter no 24, Q2 [2004]

EU Reports, Notices and Guidelines

EU Draft Guidelines 2007 (Memo 07/335) on the application of Article 81 of the EC Treaty to Maritime transport services
Guidelines on the application of Article 81(3) of the Treaty OJ [2004] C101

Guidelines on the application of Article 81 of the EC Treaty to maritime transport services OJ [2008] C245/2

UK Office for Fair Trading Guidelines for Market Definition and Mergers: assessment guidance (OFT 403) and (OFT 516)

Commission Notice on the definition of relevant market for the purposes of Community competition law, OJ [1997] C 372/5

Commission Notice on agreements of minor importance, Official Journal of the European Communities, C 368, 22/12/2001

Commission Notice on the Definition of Relevant Market Guidelines on the applicability of Article 81 of the EC Treaty to Horizontal Cooperation Agreements OJ [2001] C 3/2

Commission Consolidated Jurisdictional Notice under Regulation (EC) No 139/2004 on the control of concentrations between undertakings OJ[2008] C95

Commission Report on Terminal Handling Charges: "Terminal handling charges during and after the liner conference era", [October 2009]

Treaties

TFEU

GATT / WTO

IMO Rules and Conventions

The Hague and Hague-Visby Rules

United Nations Convention on a Code of Conduct for Liner Conferences

Legislation

Council Regulation 479/92 on the application of Article 85 (3) of the Treaty to certain categories of agreements, decisions and concerted practices between liner shipping companies (consortia) OJ [1992] L 55/3

Commission Regulation 2790/99 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices (Vertical Block Exemption) OJ [1999] L336/21

Commission Regulation (EC) No 2658/2000 on the application of Article 81 (3) of the EC Treaty to categories of specialisation agreements OJ [2000] L 304/3

Commission Regulation (EC) No. 463/2004 amending Regulation No. 823/2000 OJ on the application of Article 81(3) of the Treaty to certain categories of agreements, decisions and concerted practices between liner shipping companies (consortia) [2004] L 77/23

Council Regulation (EC) No. 139/2004 on the control of concentrations between undertakings (EC Merger Control) OJ [2004] L 24

Commission Regulation (EC) No. 611/2005 which amended Regulation No. 823/2000 on the application of Article 81(3) of the Treaty to certain categories of agreements, decisions and concerted practices between liner shipping companies (consortia) OJ [2005] L 101/10

Council Regulation (EC) No. 1419/2006, repealing Regulation (EEC) No 4056/86 laying down detailed rules for the application of Articles 85 and 86 of the Treaty to maritime transport, and amending Regulation (EC) No 1/2003 as regards the extension of its scope to include cabotage and international tramp services OJ [2006] L 269/1

Commission Regulation (EC) No 906/2009 of 28 September 2009 on the application of Article 81(3) of the Treaty to certain categories of agreements, decisions and concerted practices between liner shipping companies (consortia) [OJ L 256, 29.9.2009]

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