LINER SHIPPING COMPETITION POLICY REPORT

This document is submitted for comment and discussion at the Workshop on Competition Policy in Liner Shipping to be held on 6 December 2001.

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SUMMARY

As part of an ongoing OECD work on regulatory reform, the OECD Division of Transport convened a workshop in May of 2000 in order to discuss regulatory reform in the maritime sector. Given the wide divergence of views at the workshop regarding anti-trust exemptions given to liner operators, the chair called on the OECD to investigate three issues relating to regulatory reform and competition policy in the sector:

1. The positive and negative impacts to both carriers and shippers of common pricing under anti-trust exemptions.

2. The impacts of conference, discussion and stabilisation agreements on both carriers and shippers.

3. The possible effects stemming from the removal of anti-trust exemptions for liner shipping.

The present document is a draft of the report carrying out this mandate. It will be put forward to an OECD workshop bringing together carriers, shippers and government regulators on December 6, 2001. The discussions at the workshop and comments provided by participants will serve to shape the final report on Competition Policy in Liner Shipping which will be released in 2002.

This report’s focus is not on the operational arrangements used by carriers to generate greater efficiencies and promote higher productivity, but rather, on those arrangements amongst market actors that seek to fix and/or discuss prices or artificially control supply. In particular, the draft report looks into the rationale and impacts of traditional Conference price-fixing and Discussion agreements, and, insofar as they could potentially skew market-wide freight rates, capacity limitation agreements.

The analyses in this report is based on information collected through a survey completed in the spring of 2001, supplemented by other publicly available sources of information. This report has investigated market share, freight rate, financial performance and regulatory trends in addition to different models of liner shipping markets. Based on the results of this analysis, this report has sought to determine whether the continuing existence of anti-trust exemptions for price fixing and rate discussions in liner are preferable to a move towards more competitive liner markets. This review has not found convincing evidence that the practice of discussing and/or fixing rates and surcharges among competing carriers offers more benefits than costs to shippers and consumers and recommends that limited anti-trust exemptions not be allowed to cover price-fixing and rate discussions. It also finds that capacity agreements should be carefully scrutinised to ensure that they do not distort the markets in which they are present.

Recognising, however, that the high degree of polarisation in the longstanding debate relating to these topics, the paper sets out a possible way forward based on points of convergence between shippers and carriers. These points serve to frame three principles that countries should use to guide when re-assessing the validity of anti-trust exemptions for price fixing, rate discussions and capacity agreements between competitors in the liner shipping sector.

Action required:

For comment and discussion.
1 WHY RE- VISIT COMPETITION POLICY VIS- À- VIS LINER SHIPPING?

1. If there is one topic that elicits passionate responses in the maritime sector, it is the practice of carriers to commonly fix prices and regulate capacity in international liner shipping. Proponents of these practices vigorously defend these as necessary in order to deliver regular maritime freight transport services. Opponents, on the other hand, vehemently attack these as one of the last bastions of cartel control of an entire sector. More words have been said, more ink has been spilled and more acrimonious jibes exchanged on the subject than on possibly any other in the maritime sector. And yet, there is no clear resolution in this matter. Are these practices -- and the anti-trust exemptions granted to them by most countries -- beneficial or harmful to society at large?

2. It is against this backdrop that the OECD Division of Transport, in May of 2000, convened a workshop to discuss opportunities for regulatory reform in the maritime sector. This workshop was part of an ongoing initiative within the OECD to investigate the state of, and potential need for, reform activities within various economic sectors – including maritime transport. The OECD Secretariat had prepared a background paper [DSTI/DOT/MTC(99)8] to provide a framework for the workshop discussion. While much of the paper elicited little reaction from delegates, industry representatives and maritime experts – those sections dealing with competition policy in the liner shipping sector gave rise to heated debate.

3. In particular, the paper called for a gradual roll-back of anti-trust exemptions for common rate-fixing and capacity limitation agreements among liner shipping companies – especially those involved in conferences, discussion agreements and/or consortia. While many shippers and representatives of competition authorities present at the workshop expressed strong support for these recommendations, many maritime ministry delegates and carrier representatives were adamantly opposed to any change in the status quo. One criticism levelled at the background paper was that its conclusions seemed to be more grounded in ideology than in a complete and detailed analysis of the issue. Proponents of keeping block anti-trust exemptions in place expressed frustration at the leap they perceived between the quantitative and anecdotal data provided in the paper and the strong findings against granting anti-trust immunity for liner operators.

4. It is true that more can and should be done to more thoroughly investigate the impacts of anti-trust exemptions in liner shipping on shippers, carriers and the community at large. Faced with calls for the immediate removal of anti-trust exemptions on one side, and calls for no action on the other, the Secretariat chose to ask both proponents and opponents of these measures to provide the data necessary to fully and objectively analyse the issue. In particular, the chair of the workshop called on the OECD to investigate three central issues:

1. The positive and negative impacts to both carriers and shippers of common pricing under anti-trust exemptions.

2. The impacts of conference, discussion and stabilisation agreements on both carriers and shippers.

3. The possible effects stemming from the removal of anti-trust exemptions for liner shipping.

5. This report seeks to investigate these three issues from a neutral perspective, acknowledging that, while anti-trust exemptions typically impose costs on society, they may in special circumstances give rise to benefits that outweigh these. What follows is a critical evaluation of whether scheduled maritime freight transport services constitute such a case. However, before describing how the Secretariat has sought to balance the arguments for and against anti-trust exemptions for liner shipping, it is perhaps useful to
understand why OECD Member countries have given regulatory reform (including reform of competition policy) such a high priority.

1.1 The OECD and Regulatory Reform

6. Democratic governments give voice to the collective will of citizens and serve to frame and guide their actions in order to maximise economic and social well being. This broad task can be carried out in a number of ways, e.g by developing policies to promote economic vitality, high levels of employment, better education, and high standards of environmental quality health and safety. Government regulation -- the elaboration of enforceable rules of conduct -- is one necessary and effective tool governments use to carry out their mandate. However, with the ability to impose rules concerning the activities of citizens and enterprises comes an equal responsibility to ensure that these rules are still relevant, effective and able to improve the welfare of citizens. Regulatory review and, when necessary, regulatory reform are therefore two central government activities.

7. In 1995, OECD Ministers requested that the OECD embark on a two-year study of the significance, direction and means of reform in regulatory regimes in OECD countries. In 1997, the resulting OECD report on regulatory reform concluded that citizens had much to gain from government efforts to analyse and reform their regulatory framework. This is especially true in nations and economic sectors undergoing rapid changes where existing regulatory frameworks can quickly become obsolete and serve to block rather than contribute to intended improvements in economic and social welfare.

8. The failure to re-evaluate the effectiveness of regulatory regimes can have two significant results. The first is that governments, through their regulations, serve to promote less-than-optimal outcomes by creating unnecessary and unwanted barriers to trade, investment and economic efficiency while, at the same time, reducing innovation, wasting government resources and favouring uncompetitive economic actors. The second outcome is a result of the first – failure to enact necessary regulatory reform imposes significant costs on citizens. These costs are difficult to precisely quantify but the OECD report’s analysis of sectoral reforms indicates that they can be substantial (Box 1.1).

1.2 Competition Policy

9. One common theme of regulatory reform in OECD countries in the past twenty years has been the greater reliance on competitive markets. Through competition policy, governments seek to develop an equitable framework for competition among market actors. A well-functioning competitive market environment allows for buyers to decide and communicate what products and services they desire, and allows sellers to respond to this demand as creatively and inexpensively as the market will permit. These goals can be thwarted by inefficient government regulation or by collusion among sellers to artificially restrict output, set prices above what they might otherwise be and/or unfairly eliminate competitors.
Box 1.1: Regulatory reforms increase productivity, lower prices, and eliminate shortages...

By sharpening competitive pressures, elimination of economic regulations has encouraged firms to become more efficient and helped to boost the productivity of entire industries:

- In Europe, labour productivity growth in the manufacturing sectors most affected by competition-enhancing reforms in the Single Market Programme were double those of other sectors (14 percent versus 7.5 per cent for the period 1986-91).

- In air transport in the United States, real fares dropped by one-third between 1976 and 1993; more than half of this decline is attributed to deregulation. Following airline liberalisation in 1993 under the European Single Market, 800 new licences were granted in Europe, and more people are using lower-cost economy fares.

- Road haulage industries in the United States and United Kingdom enjoyed increases in capital productivity of around 50 per cent after relaxation or elimination of out-dated operational controls. Capital productivity was also boosted in these industries in France and Germany following liberalisation.

- Market liberalisation in telecommunications and technological advances led to new services and striking improvements in efficiency. Elimination of monopolies helped stimulate new technologies and increase the number of subscribers of cellular phones in OECD countries from 700,000 in 1985 to 71 million in 1995. After reform, average prices for telephone services fell by 63 per cent in the U.K. and 41 per cent in Japan; long distance prices fell by 66 per cent in Finland.

Increased efficiency means lower prices for consumers and businesses. Prices have fallen significantly and often swiftly where regulatory reforms strengthened competition or imposed efficiency-enhancing price regulations (Figure 1). Not all of the price reductions reported in Figure 1 can be attributed to regulatory reform only. Part of the decline in prices of telecommunications services, for example, is likely to reflect technological progress rather than regulatory reform. However, on balance, much of the price reductions represented below were enabled by the removal of regulatory barriers and a more pro-competitive legislative framework.

Price reductions after elimination of economic regulation

Excerpted from: The OECD Report on Regulatory Reform – Synthesis, pages 11-12
10. Achieving an equitable balance between the benefits of free markets and the need to promote social objectives that cannot be met through markets is one of the foremost tasks for regulatory agencies. While in the overwhelming majority of cases anti-competitive behaviour imposes large net costs on society, under special circumstances, restrictions to competition may deliver some benefits (Figure 1.1). Governments, therefore, find it necessary at times to intervene directly in markets to overcome market failures and/or to pursue other social goals. In some case this might even require sacrificing some of the benefits of competition.

11. Given the effectiveness of competitive markets in most sectors, and the net negative impact of most anti-competitive practices, these are the exception rather than the rule. The common practice is to put the onus of proof for implementing or continuing such practices on the proponents of such measures. Furthermore, governments engaging in regulatory reviews of competition policy have a responsibility to ensure that the special circumstances that gave rise to restrictions on competition still exist and/or warrant exemptions to the general pro-competition policies. Indeed, OECD ministers agreed in 1997 to “reform economic regulations in all sectors to stimulate competition, and eliminate them except where clear evidence demonstrates that they are the best way to serve broad public interests”¹.

Figure 1.1 Impact of restrictions to competition on the community

Source: Centre for International Economics, 1999, pg. 6

1.3 Reform in the transport sector

12. Transport plays a crucial role as an input into almost all economic sectors. It is also a means of globally moving all trade in goods, as well as passengers, and is a sector characterised by particularly intricate domestic and international regulations and institutions that have accumulated over time. It is also a sector where regulatory review and reform has the potential to unleash efficiency gains, cost savings,

service innovation and user and consumer welfare. Recent analyses of past and/or partial reform in road, rail and air transport indicate that these benefits can be significant (Figure 1.2). Technical and organisational progress in transport services also necessitate regulatory adjustment at domestic and international levels.

13. Transport is also a very important economic activity in its own right. It can be assumed that the production, maintenance and use of transport infrastructure and mobile equipment represents some 4–8 per cent of GDP and 2–4 per cent of the labour force. Maritime transport, by far the main mode of international transport of goods, is particularly significant as a service industry facilitating international trade. Total seaborne trade volume reached 5173 million metric tons in 1999.

14. This maritime trade involved two major maritime transport sectors. Liner shipping provides shippers with transport services (mostly by ships designed to carry modular containers) involving regularly scheduled arrivals and departures from advertised ports. On the other hand, bulk shipping operations are undertaken by vessels designed to carry homogeneous unpacked dry cargoes (for example grain, iron ore and coal), or liquid cargoes (such as oil, liquefied gas or chemicals). Bulk shipping operations are ordinarily carried out for individual shippers on non-scheduled routes.

**Figure 1.2 Performance of major railroads in the United States, 1964-1998**

![Graph showing productivity, volume, revenue, and price from 1964 to 1998 with the note on pro-competitive reform of US rail-legislation (Staggers Act, 1980) Index 1981=100.

Source: ECMT, 2001 (Association of American Railroads)

15. Many have argued that liner shipping is indeed a special case where practices that are otherwise considered anti-competitive in fact deliver advantages beyond the costs imposed. Indeed, the history of the Conference system (where carriers openly and collectively set rates or otherwise organise aspects of their business) is a long one that has been marked by continued and repeated government support. However, as pointed out earlier, the “specialness” of liner shipping and its exemptions from anti-trust legislation have equally been strongly called into question by the users of shipping services and certain regulatory agencies.
1.4 Getting to the heart of the matter… data and analysis

16. The difficulty in assessing the validity of the pro- or anti-exemption position has always been the availability (or lack thereof) of the detailed information necessary regarding actual negotiated freight rates, terms and provisions of service contracts, relationships between operating costs and freight rates and the nature of arrangements among carriers. In an ideal world, a regulatory agency would be able to proceed in a logical fashion to investigate the benefits/dis-advantages of anti-trust arrangements. This would entail making an assessment as to these practices’ impacts on competition, the net balance of benefits and dis-benefits flowing from these measures and an investigation of alternative approaches to achieving the benefits resulting from these actions (Figure 1.3).

Figure 1.3 Competition policy review flowchart

Source: Centre for International Economics, 1999, pg. 7
Box 1.2: Parties asked to provide data for the OECD review of liner shipping competition policy

<table>
<thead>
<tr>
<th><strong>Carrier Trade Associations</strong></th>
<th><strong>Shipper Associations</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>World Shipping Council</td>
<td>Dutch Maritime Shippers’ Council</td>
</tr>
<tr>
<td>CENSA</td>
<td>British Shippers’ Council (Freight Transport Association)</td>
</tr>
<tr>
<td>European Community Shipowners’ Association (ECSA)</td>
<td>Federation of Swedish Industries</td>
</tr>
<tr>
<td>Japanese Shipowners’ Association</td>
<td>American Import Shippers Association (AISA)</td>
</tr>
<tr>
<td>Korean Shipowners’ Association</td>
<td>Canadian Shippers’ Council</td>
</tr>
<tr>
<td>International Chamber of Shipping</td>
<td>European Shippers’ Council (ESC)</td>
</tr>
<tr>
<td></td>
<td>International Federation of Freight Forwarders Associations (FIATA)</td>
</tr>
<tr>
<td><strong>Conference Secretariats</strong></td>
<td><strong>Data on share of freight volume by trade covered by service contracts.</strong></td>
</tr>
<tr>
<td>Liner Shipping Services</td>
<td><strong>Data on share of freight volume by trade covered by door-to-door multi-modal contracts vs. port-to-port contracts.</strong></td>
</tr>
<tr>
<td>SCAGA</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Canada Westbound Rate Agreement</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Trans Pacific Stabilisation Agreement</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Associated Conferences Secretariat Inc.</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Canadian Continental Eastbound Freight Conference</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Canadian North Atlantic Westbound Freight Conference</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Continental Canadian Westbound Freight Conference</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Europe to Australia and New Zealand Conference</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Europe Japanese Freight Conference</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Europe Mediterranean Trade Agreement</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Europe Middle East Rate Agreement</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>India Pakistan Bangladesh Ceylon European Conferences</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Philippines Europe Conference</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Far Eastern Freight Conference</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Far East/South Asia-Middle East Conference</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
<tr>
<td>Hong Kong Europe Freight Conference</td>
<td><strong>Patterns of non-observance or breach of terms of shipping contracts.</strong></td>
</tr>
</tbody>
</table>

17. This framework served to underpin the analysis in the present paper. A number of conference/discussion agreement secretariats, and carrier and shipper trade organisations were thus approached by the OECD in December of 2000 (Box 1.2) with a request for data. These parties were given the assurance that whatever information provided would remain confidential and be presented only in the aggregate (unless the provider agreed to make it public). In particular, the OECD asked for information regarding:

- Market definition and market share.
- Freight rates charged by carriers and rates paid by shippers (including details on the application of surcharges).
- Carrier participation in conferences, discussion agreements, capacity stabilisation agreements and consortia.
- Capacity deployed and volume carried on major trades.
- Profits on turnover, return on capital and other financial performance assessment by trade or trade segment.
- Investment in new capacity and updated technology or enhanced equipment.
- Data on share of freight volume by trade covered by service contracts.
- Data on share of freight volume covered by door-to-door multi-modal contracts vs. port-to-port contracts.
- Patterns of non-observance or breach of terms of shipping contracts.
18. After the deadline for submittals had passed, two things became very clear. The first was that relatively few parties had taken the initiative to answer in their own capacity -- if at all. Many respondents chose to go through their trade organisations and thus an opportunity was lost to collect some of the specific dis-aggregated data necessary for the Secretariat analysis. Secondly, the quality of the data provided by both carrier and shipper representatives, while variable, tended to be rather poorly suited to the detailed analysis necessary for the study. This was a surprising finding in itself as one might have expected either side to provide a large amount of detailed information supporting their position. This was not the case and the analysis that follows is therefore based on the best of the information provided by shippers and carriers supplemented by research and commercially available data.

19. Following a brief overview of the liner shipping industry, this paper addresses each of the three points in the Secretariat mandate for this work (e.g. the positive and negative impacts of common pricing, the impacts of conference, discussion and stabilisation agreements on both carriers and shippers and the possible effects stemming from the removal of anti-trust exemptions for liner shipping). In each case, the paper examines assertions made by both proponents and opponents of anti-trust exemptions and seeks to apply appropriate “tests” to these when possible and supported by data. The balance of the outcomes of these tests helps to form the conclusions on the need to retain or modify existing competition policy in the sector.

2. Ironically, some shipper organisations have pointed out that providing the detailed rate data required would make their members liable to the same anti-trust actions from which carriers have immunity.
2 THE LINER SHIPPING SECTOR

2.1 General

20. Liner shipping refers to maritime transport services that are provided on a regularly scheduled basis to pre-determined ports. Ships involved in these trades can be general cargo carriers, specialised cargo carriers (e.g. car carriers or refrigerated goods carriers) and/or partially or fully dedicated container carriers. A number of important characteristics and trends relating to the liner shipping sector are outlined in Figure 2.1.

Figure 2.1

Snapshot of World Liner Shipping Fleet: 2001

<table>
<thead>
<tr>
<th>Top 20 Liner Operators (fully cellular fleet in TEU’s)</th>
<th>Share of world slot capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maersk Sealand</td>
<td>34%</td>
</tr>
<tr>
<td>COSCO</td>
<td>16%</td>
</tr>
<tr>
<td>Evergreen</td>
<td>13%</td>
</tr>
<tr>
<td>CMA CGM</td>
<td>9%</td>
</tr>
<tr>
<td>Hyundai</td>
<td>28%</td>
</tr>
<tr>
<td>Zim</td>
<td>19%</td>
</tr>
<tr>
<td>Hapag Lloyd</td>
<td>13%</td>
</tr>
<tr>
<td>CMA CGM</td>
<td>19%</td>
</tr>
<tr>
<td>COSCO</td>
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<td>Evergreen</td>
<td>19%</td>
</tr>
<tr>
<td>Maersk Sealand</td>
<td>19%</td>
</tr>
</tbody>
</table>

World Liner Shipping Fleet: Ships

World Liner Shipping Capacity: thousand TEU’s

Container Shipping Trends (1990-1999)
21. This snapshot reveals four important points that characterise the sector:

   - Fully containerised vessels represent an important part of the general cargo fleet and carry a large majority of containerised trade.

   - The top twenty liner operators account for 72% of world container capacity (measured in the industry standard twenty foot container unit or TEU) and the 5 largest operators account for 34% of the fully containerised fleet capacity.

   - The growth in the fully containerised fleet, both in number of ships and especially in capacity, have far outstripped growth in global economic activity and trade.

   - Ships have been getting larger as operators seek to benefit from economies of scale.

22. These and other characteristics of the liner shipping sector are described in this section.

### 2.2 Fleet development

23. There are important factors related to the development of the international liner fleet and the composition of the ownership of that fleet.

24. Not only has there been a sharp increase in the world fleet of fully cellular container vessels (in 2001 this stood at 2741 vessels with a total carrying capacity of 4.99 million TEU, up from 1.25 million TEU ten years earlier), but more importantly the size of the vessels themselves had also increased substantially. For example in 2001 container vessels in the 2-4 000 TEU range accounted for 41 per cent of total capacity, while 22 per cent of vessels were over 4 000 TEU (up from 15% in 1999)\(^3\). Container vessels have now reached 7 000 TEUs, and there is talk of plans for vessels up to 10 000 TEU.\(^4\)

25. It is possible that maintaining the capacity utilisation of such large vessels will require greater organisation of shipping networks around a hub-and-spoke structure. If there is pressure to move towards a hub-and-spoke structure, this will lead to pressure for further mergers, consortia or alliances. Also, relatively few ports can handle such ships, leading to a concentration of major services to a limited number of major ports, implying an increase in feeder and transhipment services to other terminals.

26. More importantly, the capital intensive nature of the container shipping industry means that in 2001 the top twenty container service operators accounted for about 72 per cent of the world fully containerised shipping fleet and for 33 per cent of all vessels carrying containers. The importance of this factor is that again there is pressure on liner operators to exploit economies of scale, and that through various consolidations it is likely that ownership (and therefore control) of the world’s liner shipping fleet will drift to an increasingly smaller number of hands.

27. Finally, the majority of the fully containerised fleet’s capacity is deployed along three main trades (see Figure 2.2). However, all three of these trades display imbalances between their separate legs (see table 1) which leads to an oversupply of capacity on the weak trade direction in order to provide adequate service on the strong leg. In particular, the imbalance on the Trans-Pacific route is approaching

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3. These figures refer to the overall container fleet including roll-on/roll-off vessels and partial container ships, the growth in capacity for fully containerised ships is even greater.

4. While large vessels are being deployed on all of the main trades, it is the Europe-Asia trade that has seen the arrival of the largest of these, in part due to a need to provide efficient services along the long trunk routes. The latter are fed through a dense network of shorter feeder routes.

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DSTI/DOT(2001)1
70 per cent, while on other routes the imbalance is around 30 per cent. Directional variations in demand, however, are a common feature of many passenger and freight transport markets. In most cases, transport service providers ensure that both their pricing policies and the levels of capacity that they devote to those markets reflect those imbalances.

**Figure 2.2: Containerised fleet deployment: TEU share on main trades in 2001**

![Diagram showing TEU share on main trades in 2001]

**Table 2.1: Cargo Movements: Major Trade Routes 1995-2000**

(000’s of TEUs)

<table>
<thead>
<tr>
<th>Trans-Pacific</th>
<th>Asia-Europe</th>
<th>Transatlantic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Asia to USA</td>
<td>USA to Europe</td>
</tr>
<tr>
<td>1995</td>
<td>4009</td>
<td>3471</td>
</tr>
<tr>
<td>1996</td>
<td>4104</td>
<td>3520</td>
</tr>
<tr>
<td>1997</td>
<td>4662</td>
<td>3615</td>
</tr>
<tr>
<td>1998</td>
<td>5221</td>
<td>3326</td>
</tr>
<tr>
<td>1999</td>
<td>5840</td>
<td>3370</td>
</tr>
<tr>
<td>2000</td>
<td>6130</td>
<td>3540</td>
</tr>
</tbody>
</table>

*Please Note: Figures for 2000 are forecasts
Source: Review of Maritime Transport 1999, 2000 UNCTAD*

### 2.3 Growth in container trade

28. Global traffic in containerised cargoes has expanded rapidly during the 1990’s, rising from an estimated 83 million TEU in 1990 to 198 million TEU between in 2000. This equates to an average growth of about 9% p.a. Such a gain has been closely associated with the industrialisation of the Asia-Pacific economies, with traffic in that region growing annually by 10.8% to over 97 million TEUs in 2000. This destination thus accounted for 50% of total container traffic in 2000, against 21% for Europe, 15% for North America and 14% for other regions (Figure 2.3). Containerised cargo accounts for approximately

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54% of world-wide trade in general cargo in 2000, up from 48% in 1995 and 37% in 1990. Given that the likely saturation point for containerised cargo has been estimated at 65% of world cargo trade, there remains considerable room for growth by substitution for other forms of cargo and by growth in traded goods.

**Figure 2.3: Growth in World Containerised Trade**

* data for 2000 and 2001 are forecasts

**Source:** Drewry Shipping Consultants, 2000.

29. The figures given for global and regional container traffic refer to the movement of containers at ports – these therefore include the movements of containers from one ship to another (transhipment), the movement of partially filled containers and the re-positioning of empty containers. The latter accounted for 41 million TEU in 1999, up from 30 million in 1996 and stems from significant imbalances in trade flows between the different legs of the main trading routes.

30. Current estimates for transhipment movements show these to be approximately a quarter of all container port throughput, although in some specialised ports such as Singapore and Colombo, transhipment accounts for up to 70% of port throughput. These movements have grown in importance as liner operators have invested heavily in larger capacity ships on the main trunk routes. These ships are serviced by a number of smaller vessels operating regional feeder routes connecting the main hub ports to their surrounding region. While this “hub and spoke” system remains a dominant feature in many regions, certain global carrier alliances have recently started to offer a blend of main trunk services calling on major ports along with second-level services calling on a string of secondary ports.
2.4 The organisation of the liner industry: a bit of history

31. The principal, and crucial, organisational feature of the liner sector is the ability of operators to enter into a variety of co-operative arrangements and agreements which in most industry sectors would contravene laws intended to ensure competitive behaviour. While these organisational arrangements in liner shipping have traditionally taken the form of liner conferences, with the advent of containerisation, new forms of co-operation, such as consortia, strategic alliances, capacity accords and discussion agreements have also emerged.

32. This co-operative behaviour has historic origins going back to the 1870s, and is based on the early history of liner service operations in the late 19th century. At that time the appearance of fast steamships on liner trades brought a considerable amount of instability into the relatively young liner shipping sector. In addition to an imbalance between legs of certain key trades, the industry was characterised by cut-throat competition between obsolescent sailing ship operators (who represented the majority of capacity offered) and the emerging steamship companies. Rates dropped sharply from 1874 to 1878 as sailing vessels offered rates that were far below what would have been a reasonably compensatory rate for the capital intensive steamship companies. Technical advances in steam engine design allowing steamships to carry yet more cargo in the 1880’s further exacerbated the intense competition between steamship and sailing vessels. Finally, steamship operators also engaged in competition amongst themselves and shippers of the day took advantage of the over-supply of capacity to set one carrier against the other and obtain lower freight rates. Rather than limit their services to those instances when carriers could expect compensatory returns (e.g. by providing irregular services based on full ship-loads), the liner operators of the day opted for formal arrangements amongst themselves to limit capacity and fix rates. In this way, they felt they could still provide the value of a fixed port rotation while reducing their exposure to destructive competition. Despite 130 years of economic, political and social changes, these formal arrangements – the Conference system (and other forms of industry co-operation to limit capacity and set common rates) – have characterised and still serve as an organising principle for many in the industry today.

2.5 Rationale for capacity limitation and rate-fixing agreements

33. Based on the experiences of liner operators in the 19th century, carriers argue there is a real need for capacity control and rate-fixing in the international liner shipping sector in order to ensure stable international shipping services. The rationale for these practices can be found in some of basic characteristics of the liner sector. In particular, liner operators operate an almost common-carriage service where ships must sail at set times irrespective of the amount of cargo they have on board. Failure to provide such a regular service would undermine the value provided to shippers and these would turn to other operators who could ensure steady sailing schedules. In order to provide these scheduled services at a relatively frequent interval (~ weekly), carriers must be able to field several similar ships on any given trade route. Purchasing and operating these ships requires a substantial capital outlay and subsequent financing charges. Furthermore, carriers face unbalanced trade flows and therefore capacity deployed in sufficient quantity for the dominant flow will often be far in excess of the amount needed for the return leg. Finally, carriers operate in a relatively uniform product market where there has traditionally existed little differentiation between operators. These market conditions, in aggregate, are not unique to the liner shipping sector but are faced by any capital intensive industry providing a guaranteed and/or scheduled service (e.g. air cargo, power generation, etc.).

34. Without capacity limitation and price-fixing arrangements, carriers fear that the industry would re-live the destructive competition of the late 1800’s that would result in a profoundly destabilised industry. In particular, they argue that Conferences and other similar arrangements have several important beneficial effects.
Carriers can earn a compensatory rate of return on their investments allowing them to continue to provide scheduled shipping services.

These arrangements avoid destructive competition leading to an ever-dwindling number of super-carriers with much greater potential for monopolistic behaviour.

Shippers are thus ensured that regular predictable services will always be able to transport their goods.

Shippers can also expect that sufficient capacity will be deployed to transport all of their goods, and finally.

Shippers can expect that rates will remain stable and predictable.

35. Shippers however, generally remain unconvinced of the benefits of price-fixing and have repeatedly complained that carriers’ rate-fixing and manipulation of capacity leads to abuses of power and freight rates above what they would otherwise be in a fully competitive market. Shippers have therefore asked governments and courts to intervene and protect their interests. However, despite documented (and sometimes prosecuted) cases where carriers did indeed take advantage of their position, governments of all major trading nations have provided carriers with exemptions to from national anti-trust statutes governing price and capacity fixing. These arrangements are continuously under review in OECD member countries, and although there has been tightening of these provisions in a number of jurisdictions, no member country has yet removed these exemptions. Rather than doing away with price- and capacity-fixing arrangements altogether, governments have typically sought to bolster shippers’ defences and recourses against abuses of carrier power.

2.6 Liner conferences today

36. There is great diversity in the nature and practical effects of conference agreements. Some have written agreements and secretariats responsible for their day-to-day operation. A few may have no written agreement at all, although they are still called conferences. Others may be called “associations” or something similar, although they are universally regarded as being conferences in the accepted sense of the word, at least for the purposes of anti-trust legislation. Conferences consisting of different members may be present on both directions of a given route.

37. Today, there are less than 150 liner conferences operating throughout the world, with membership ranging from two to as many as 40 separate lines. They operate only in the general cargo field (liner trades), as conferences do not transport bulk cargoes.

38. Statistics of world cargo liner trade are not complete, nor is it known precisely what share of such trade is carried by conferences. Analysis of available data indicates that in the late 1990’s, Conferences accounted for approximately 60% of the TEU capacity in the major trades (see Box 2.1 and Table 2.2) -- although conference shares have been steadily declining in recent years. However, conferences account for dominant shares of specific trades and/or certain port-pairs (e.g. United States to Asia or Japan-Europe).

39. The growing participation of non-conference operators can be attributed to a number of large, independent carriers that have sufficient resources to duplicate the capacity, frequency and level of equipment that has generally been the province of the conference carriers. Also, there are “niche” markets available to smaller or lower cost operators, who can offer lower standards of service for cargoes that are low value and/or not time sensitive.
Box 2.1 Do conferences have market power? Market definition and market share.

One standard test of anti-competitive behaviour is the degree to which one, or several market actors, can dominate a market and thus independently or unilaterally impose prices that would not otherwise be possible within a dynamic competitive environment. Thus the issue of market definition is important and attribution of market share becomes a useful indicator of potential for market abuses.

Market definition:
In order to understand the market in which carriers operate, one must have a good feel for its outer boundaries – e.g. are there substitutes for container ships that can effectively help to provide shippers with cost-effective alternative transport? Liner operators carry containers that contain a wide variety of goods ranging from relatively low-value agricultural products to high value electronics and machinery. The European commission has determined that on certain routes (e.g. the trans-atlantic trades), air, tramp and breakbulk shipping do not present an alternative to liner shipping and cannot be substituted for the latter. This is not the case on all trades and there is evidence that for some (e.g. Africa-Europe) these may sometimes present alternatives. Despite some substitution possibilities for either high and/or low value goods, the bulk of cargo transported by containerised ship cannot be cost-effectively shipped by alternative means. For certain goods, such as refrigerated products and/or products requiring sensitive handling and specialised treatment, it may be worthwhile to look at conference vs. non conference shares to determine the power of the former to control some niche markets.

While shippers often do not have the possibility of shipping by other means, they do have the option of choosing among carriers who may propose different routes and port combinations. Therefore, route and port substitutability can give an indication of the geographic boundaries of the market. For example, the trans-pacific trade is composed of several dozen routes and port pairs, the degree to which these overlap can be seen to define the market (e.g. to what extent are Seattle-Southern China routes substitutes for Vancouver- or Long-Beach-southern China routes?) One element to consider when looking at port/route substitutability is the extent to which shippers in the hinterland have access to the former. Two nearby ports may not be part of the same market if multi-modal access is good to one and not to the other or, conversely, two distant ports may indeed be in the same market if both are easily reached from the same hinterland.

The complexity of defining geographic markets can be seen in the case of United States vs. Canadian routing for shipments originating and/or terminating in the central portions of the United States and Canada’. Shippers theoretically have several options available to them including shipping from United States eastern seaboard ports (e.g. Baltimore and New York) with either conference or non-conference carriers or shipping via Canadian ports (e.g. Montreal or Halifax) again, through either conference or non-conference carriers. In reality, however, a number of issues must be examined before concluding that these alternative routes constitute one market. Indeed, many Midwestern American shippers feel that Montreal is not in the same market as the US ports because of the extreme winter weather that has the potential to interrupt services. Canadian shippers, on the other hand, will argue that US routing does not present a realistic alternative for them as they feel that US customs will unreasonably hold up their shipments. What is clear is that the trade lane is one of the most important elements of market definition and shippers perceptions serve to define these markets.

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6 Brooks, 2000, p. 201
7 Described in Brooks, 2000, 204-205
8 In this example, some lines that operate as conferences for US ports, operate as non-conference carriers for the Canadian routes.
40. It should also be recognised that while closed conferences (e.g. conferences that can restrict membership) exist on trade routes outside the USA (where they are not allowed), in practice entry has not been difficult, and since the early 1980s there have been few cases where membership to closed conferences has been refused to applying parties. In part this reflects the falling influence of conferences, as independent operators have captured increasing shares of the market. Also, the growing range of looser, co-operative arrangements available to liner operators has tended to reduce the incentive to enter into the tightly controlled conference agreements.

41. Although there is a great diversity in the details of individual conference agreements, they are typically constructed around rate-fixing agreements. In closed conferences, these agreements may also go so far as to allocate market shares among Conference carriers. Other conference arrangements may include one or more of the following major provisions; rebates to shippers; joint services, and door-to-door services.

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9 A better option is to fully define a relevant route/port market for the hinterlands involved as described earlier thus China-Canada might become Southern China-Northwest US/Western Canada.
42. Until recently, another important feature of conferences was the way in which members adhered to (and enforced) relatively strict rate discipline. Carriers willing to offer certain shippers below-conference rates had to make specific requests to the conference and file these with national administrations. The passage of the United States Ocean Shipping and Reform Act (OSRA) in 1998 did away with these cumbersome procedures and allowed shippers and carriers active in the US trades to enter into confidential contracts without prior notice. The result of this has been a rapid and massive switch (200% increase) to such confidential agreements which have the potential to undermine the dominance of conference tariffs (at least for shippers with the power to negotiate lower rates). Very little traffic (e.g. less than 10% of the USA-Europe traffic) now takes place directly under Conference terms.

43. This movement towards service contracting between individual shippers and carriers underscores a generalised erosion of Conference power. This decline is supported by data from individual trades and is the result not only of the regulatory changes governing conferences in many OECD countries, but also from the arrival of large and efficient independent operators. This new breed of independent operators is qualitatively different from the small independent operators of the past:

“[Traditionally] the typical model was one of a dominant conference service ... with a long-term commitment to the trade, with a small contingent of opportunistic outside lines attracting a comparatively small market share by offering an inferior service at discounted prices. This model is no longer applicable.”  

<table>
<thead>
<tr>
<th>Trade</th>
<th>Conference/discussion agreement share</th>
</tr>
</thead>
</table>
| Far-East to Europe      | In the 1970’s, the FEFC accounted for 85% of the capacity in the Europe Far-East trade. By 1990, this share had dropped to 57%. It has since risen to approximately 60%.

| Trans-Atlantic          | The dominant Conference (TACA) had dropped to 48.7% of available capacity in 1990 before subsequently rising to 63% in 1998. An unfavourable judgement from EU competition authorities has led to departures from the Conference and the Conference now estimates its share to be approximately 46% of the North-Atlantic to United States trade in 2000.

| Trans-Pacific           | In 1990, the dominant conference accounted for 56.7% of the capacity in the east leg and 68.9% of the capacity in the west-bound leg. By 2001, the TransPacific Stabilization Agreement accounted for slightly over 80% of the market.

| Australian Trades       | Data for these trades shows that the aggregate Conference share of available capacity has declined from 74% in 1984 to 55% in 1999. However, if the available capacity of discussion agreement members is added, the share rises to approximately 70%.

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10 Meyrick 1999, p. 15 and Productivity Commission, 1999, p.10
11 TACA, 2000 p. 3 and Meyrick, 1999, p.15
12 Meyrick, 1999, p.15 and Transpacific Stabilisation Agreement, 2001, p.4
13 Meyrick, 1999, p.17
It is important to note, however, that Conferences still remain an important factor in many trades and the growth in alternative forms of organisation (consortia, alliances, discussion agreements) have raised the potential for sensitive trade data to “bleed” across Conference boundaries and to other market actors. Also important is the observation that a decline in Conference share (and a corresponding rise in non-Conference market share) does not necessarily translate into appreciably greater competition since many independent operators have every incentive to price off Conference rates rather than competing vigorously and independently with Conferences on price (see section 4). Furthermore, many smaller independent operator services may be inferior to those offered by Conference lines in terms of geographic scope and frequency of service.
2.7 Other forms of Liner Shipping organisation: Capacity Stabilisation and Discussion Agreements

45. These include Capacity Stabilisation and Discussion/Talking Agreements, and this is the area where the greatest divergence exists in their treatment under competition policy laws.

46. In Australia, Japan, New Zealand, Norway and the United States, conferences or individual members of conferences are allowed to enter into agreements with non-conference shipping lines; and no
special provisions for such agreements are laid down. In Australia, however, if these agreements have anti-competitive provisions, they must be registered to obtain the exemptions available under Part X of the Trade Practices Act 1974. In the US, such agreements are subject to the regular oversight procedure by the FMC which is applied to every form of agreement between carriers. In Canada, agreements between conference members and non-conference operators are not exempted by the Shipping Conference Exemption Act, 1987, although inter-conference agreements are.

47. In the case of EU, agreements between conference and non-conference members do not benefit from a block exemption and the Commission scrutinises these agreements with great attention since these can serve to undermine competition between independent and conference carriers – competition which the commission views as a necessary balance for granting conferences anti-trust exemptions.

48. Such agreements between conference and non-conference operators may occur when efforts by conferences to regulate capacity are ineffective due to the presence of a large number of non-conference operators or where conferences are open. Such situations have sometimes resulted in “stabilisation agreements” across a trade or a region, or in looser agreements such as “discussion/talking agreements.” “Stabilisation” agreements attempt to control freight rates and regulate capacity through a binding agreement covering all or most operators of the trade or a region. These have appeared in two forms: either as a separate “stabilisation” agreement between conference and non-conference ocean carriers or as a formal agreement among conference members. Discussion/talking agreements attempt to reach an understanding among operators (conference and non-conference) about these topics, but are not binding.

2.7.1 Consortia

49. Consortia are agreements/arrangements between liner shipping companies aimed primarily at supplying jointly organised services by means of various technical, operational or commercial arrangements (e.g. joint use of vessels, port installations, marketing organisations, etc.). In many cases, members of a consortium are also members of a conference.

50. The development of consortia was a response to the technical requirements needed to launch container services. For example, member lines of the same conference (whether all or only some of them) usually formed a consortium at the beginning of containerisation to smooth the way for the introduction of rationalised conference services. Consortia arrangements also offer advantages to participating shipping companies through cost reductions derived from economies of scale.

51. These agreements take a considerable variety of forms, given that the degrees of co-operation and the extent of the common activity that they envisage are different, depending on the needs and the circumstances of the trades in question. For example a consortium can be composed entirely of otherwise independent lines, or, they may be members of the same conference. In some instances conferences have members that participate in several consortia, and there are consortia composed of both conference and non-conference lines. The principal difference between consortia and conferences is that the former addresses the rationalisation of container shipping service operations, whereas conferences extend their co-operation to uniform or common freight rates.

52. The treatment of such consortia under competition policy is variable. For example, in Australia, Canada, Japan, New Zealand and the US, consortia agreements seem to be entitled to immunity from anti-trust law, without reference to whether the agreement provides that ship operators should operate under uniform or common freight rates.

53. In the European Union only certain categories of consortia, based on the share of the market which they cover, profit from a block exemption from the prohibition of restrictive arrangements contained
in Article 81(1) of the EC Treaty. Therefore, a consortium which has a market share higher than 50% will not automatically benefit from the group exemption and would require an individual exemption. Where the consortium has a market share of between 30% or 35% and 50% (the second level) the consortium will come within a simplified procedure in accordance with which it will benefit from the group exemption unless the Commission opposes it within six months of its notification. On the other hand, a consortium having a market share below the second level (30% or 35% depending on whether or not it operates within a conference) can automatically benefit from the group exemption.

2.7.2 Strategic/global alliances

54. The purpose and intent of the participants in strategic/global alliances, which became operational at the beginning of 1996, is to establish co-operative agreements on a global basis among a group of companies. These agreements (see Figure 2.4 for their recent evolution) apply not to one trade route, and not with different carriers on different trade routes, but with the same carriers over certain major routes which can be described as global.

55. In these terms, a strategic/global alliance embraces at least two of the major east/west trade routes (Europe/Asia, Asia/US, or US/Europe) served either by combined services on each route or in a round-the-world service. In some jurisdictions global alliances are treated as just another consortium or carrier agreement, and would be covered by the general definition of “conference” (and therefore be covered by general exemptions from competition policy laws). However, in terms of operation and commercial implications, strategic/global alliances are an entirely new form of operation.

56. Because of differences in the regulatory regimes or transportation conditions on each route, parties have thus far implemented these new alliances by a series of route agreements. These agreements cover the employment and utilisation of vessels, including joint vessel route assignments, itineraries, sailing schedules, the type and size of vessels to be employed, additions and withdrawal of capacity, ports and port rotations, and operations over the whole global system. They agree on charters, space/slot charters, the use of joint terminals, co-ordination of containers, pooling of containers and establishment of container stations, vessel feeder routes and co-ordination (where permitted) of inland services. The parties may agree on information exchanges and procedures. In other words, they look to full operational integration of each participant’s services into one whole.

57. An agreement may place restrictions on a participant’s use of third party carriers on specific routes without prior consent of the members, it may impose provisions for withdrawal, including notice and penalties, and may contain provisions with respect to ownership changes during the agreement. The initial duration of the agreement is normally up to five years.

58. However, strategic/global alliances do not cover:
   - Joint sales, marketing, or joint maritime/multimodal pricing.
   - Joint ownership of vessels or maintenance or insurance.
   - Joint or common bill(s) of lading.
   - Common tariffs or the sharing of profits/losses.
   - Joint management and executive functions.
   - Revenue pools or cargo pools.
59. Each member retains their own identity and the agreements do not create mergers. However, the absence of a common tariff is unlikely to lead to substantial differences in the tariff prices of the parties. First, by the more efficient use of capacity the parties will better control the “supply side.” The carriers argue that this has a stabilising effect on prices, which can assist shippers by providing certainty for their own contractual obligations. Second, the agreements generally permit the members to discuss and agree on common positions in alliance matters, and where there is no conference or an open rate, they are permitted to discuss and voluntarily agree on rate and service matters. Third, if any of the parties attempt to capitalise on circumstances by “dumping” freight rates, this would be considered as an inherently destabilising factor in the alliance, and would be acted upon. Finally, it should also be observed that the more the services become integrated, the more difficult the task of marketing and sales would be to establish qualitative differences.

**Figure 2.4: Alliances in Liner Shipping: 1995-2001**

<table>
<thead>
<tr>
<th>Alliance</th>
<th>1995</th>
<th>2001</th>
<th>Capacity (2001)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global Alliance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(New World Alliance)</td>
<td>APL</td>
<td>APL (NOL)</td>
<td>360,972 TEU (88 Ships)</td>
</tr>
<tr>
<td></td>
<td>Mitsui-OSK</td>
<td>Mitsui-OSK (Hyundai)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OOCL</td>
<td>NCL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nedlloyd</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Alliance</strong></td>
<td>Hapag Lloyd</td>
<td>Hapag Lloyd (MSC)</td>
<td>492,122 TEU (113 Ships)</td>
</tr>
<tr>
<td></td>
<td>NOL</td>
<td>NYK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P&amp;O</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maersk-Sealand</strong></td>
<td>Maersk</td>
<td>Maersk-Sealand</td>
<td>637,684 TEU (255 Ships)</td>
</tr>
<tr>
<td>(United Alliance)</td>
<td>Sealand</td>
<td>Sealand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Safmarine</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tricon/Hanjin</strong></td>
<td>Cho-Yang</td>
<td>Senator</td>
<td>306,355 TEU (80 Ships)</td>
</tr>
<tr>
<td>(United Alliance)</td>
<td>DSR-Senator</td>
<td>Hanjin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hanjin</td>
<td>Hanjin (UAS)</td>
<td></td>
</tr>
<tr>
<td><strong>Cosco/K-line/Yangming</strong></td>
<td></td>
<td>Cosco K-line</td>
<td>300,612 TEU (87 Ships)</td>
</tr>
<tr>
<td></td>
<td>Yangming</td>
<td>Yangming</td>
<td></td>
</tr>
</tbody>
</table>

2.8 **Industry Structure: major issues for competition policy**

60. This section has highlighted a number of issues; container trade is growing and becoming more consolidated, ships are becoming larger and therefore capital inputs are growing, trades remain unbalanced and carriers are seeking to restructure themselves and seek alliances to minimise the impacts of these imbalances and cyclical variations in trade. In short the liner-shipping sector is undergoing a considerable amount of change to cope with a changing world. As described in a recent government overview of the liner industry:

“No longer can the structure of liner shipping be viewed as fifty or so major carriers operating autonomously. It is more appropriate to view the industry as blocs of operational
partnerships with criss-cross ties via space charters between and among different members of
different partnership blocs.”

61. Two issues in relation to competition policy for the sector emerge from an overview of these
trends:

Absolute (based on the size of the top operators) and relative (based on the size of the top
alliances) concentration is increasing in the industry. While mergers, acquisitions and
partnership-building has been a normal response to increased competition in the major trades
and some niche markets, it also has the potential to ultimately lead to a reduction in
competition – especially as those market actors retain anti-trust exemptions. Increasingly, the
cost of fielding the fleet of ships required to be a global player or partner will be such that
only those operators with the deepest pockets will be able to survive in the industry. In this
respect, a regulatory framework that affords carriers blanket anti-trust exemptions may be ill-
suited to an environment where independents are confined to niche markets, feeder services
and or secondary roles – or are integrated into global partnerships with Conference/discussion
agreement carriers.

A second and related concern is that the potential for sensitive market information to be
shared between conference and non-conference carriers is high as long as certain market
actors are afforded anti-trust exemption for fixing rates. Confidential contracting, in theory,
allows for shipper/carrier agreements to remain confidential in the United States trades. In
practice, however, relatively few confidential contracts expressly prohibit the sharing of
information and even fewer provide for strong sanctions for breaching confidentiality.

62. The response of most carriers and some government regulators to the growing gap between
industry structure and the regulatory framework under which it develops has been to fall back to remedies
proposed five generations ago during the infancy of the liner-shipping sector. These remedies are based on
the basic tenet that blanket anti-trust exemptions remain the best way to ensure broad public welfare. The
next sections will assess whether this tenet still holds true.

3 INVESTIGATION OF THE POSITIVE AND NEGATIVE IMPACTS OF COMMON PRICING UNDER THE ANTI-TRUST EXEMPTIONS

Shippers and carriers disagree on the positive and negative aspects of price fixing

63. Table 3.1 sets out the sometimes disparate views that carriers and shippers have regarding the features of the Liner shipping sector, of the relative benefits for price-fixing and their assessment of the reasons serving to justify the continued recourse to price-fixing in the sector. The major points of disagreement will serve to focus the discussion in the following two sections.

<table>
<thead>
<tr>
<th>Features of Liner Shipping</th>
<th>Carriers</th>
<th>Shippers</th>
</tr>
</thead>
<tbody>
<tr>
<td>No regulatory barriers to entry</td>
<td>agree</td>
<td>agree</td>
</tr>
<tr>
<td>No economic barriers to entry</td>
<td>agree</td>
<td>Mostly agree</td>
</tr>
<tr>
<td>Wide array of service options</td>
<td>agree</td>
<td>reserved</td>
</tr>
<tr>
<td>Market-driven competition</td>
<td>agree</td>
<td>disagree</td>
</tr>
<tr>
<td>Ample capacity</td>
<td>agree</td>
<td>agree</td>
</tr>
<tr>
<td>Efficient capacity</td>
<td>agree</td>
<td>disagree</td>
</tr>
<tr>
<td>Investment in innovation</td>
<td>agree</td>
<td>reserved</td>
</tr>
<tr>
<td>Efficient operation</td>
<td>agree</td>
<td>disagree</td>
</tr>
<tr>
<td>Unique challenges (e.g. lumpy costs, below average cost pricing, etc.)</td>
<td>agree</td>
<td>disagree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benefits of price-fixing in Liner Shipping</th>
<th>Carriers</th>
<th>Shippers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allows for competition and market rates to emerge</td>
<td>agree</td>
<td>disagree</td>
</tr>
<tr>
<td>High quality service</td>
<td>agree</td>
<td>reserved</td>
</tr>
<tr>
<td>Stable commercial environment</td>
<td>agree</td>
<td>disagree</td>
</tr>
<tr>
<td>Stable service delivery</td>
<td>agree</td>
<td>agree</td>
</tr>
<tr>
<td>Allows to mitigate effects of excess capacity</td>
<td>agree</td>
<td>disagree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Justifications for price-fixing</th>
<th>Carriers</th>
<th>Shippers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allows for a “pool” of lower-performing carriers to remain solvent in order to deliver service strings</td>
<td>justified</td>
<td>not justified</td>
</tr>
<tr>
<td>Counteracts destructive marginal cost pricing that would otherwise be below real costs</td>
<td>justified</td>
<td>not justified</td>
</tr>
<tr>
<td>Prevents consolidation of industry into a few monopolistic actors</td>
<td>justified</td>
<td>not justified</td>
</tr>
<tr>
<td>Exchange and discussion of market information is necessary to better develop future strategies</td>
<td>justified</td>
<td>not justified</td>
</tr>
<tr>
<td>Commonly-set prices act as a benchmark for negotiated rates</td>
<td>justified</td>
<td>not justified</td>
</tr>
</tbody>
</table>

Data is lacking to make an objective arbitration between shipper and carrier views
Analysis of the impacts of these arrangements requires data. Ideally one would dispose of detailed and historical real freight rate information for a broad cross-section of carriers in a number of sub-markets (e.g. North America-Asia Eastbound, Mediterranean-North America westbound, etc.). This information could then be compared to historical data on carrier participation in rate and capacity agreements and adjusted for external market and political factors. The ensuing analysis would then enable an arbitration between the two contrasting views on the impact of anti-trust exemptions. However, such dis-aggregated information concerning real ocean liner freight rates (e.g. those actually negotiated between carriers and shippers, including specific surcharges) is extremely difficult to come by. Indeed, neither carriers nor shippers contacted by the OECD for this review provided such information. This section principally relies therefore on publicly available information in order to address these issues.

3.1 What has been the positive/negative impacts of anti-trust exemption on the evolution of freight rates?

As seen in section 2, proponents of anti-trust exemptions for price- and capacity-fixing agreements argue that these do not lead to abuses of market power (and, in their rationale, to higher freight rates). Indeed, they cite evidence of falling freight rates as proof of adequate and balanced competition in liner trades. They further argue that these arrangements are necessary to provide a stable price environment for shippers and therefore to protect the latter from excessive rate variability.

In a sector as complex as the Liner shipping industry, it would have been difficult to define a causal relationship between anti-trust exemptions and positive and/or negative movements in freight rates. This task is rendered impossible by the lack of detailed data regarding actual costs faced by carriers. This section cannot therefore answer to what extent anti-trust exemptions have resulted in positive/negative movements in freight rates but only observe what these movements have been. It is important, however to keep in mind that whatever the observed trends, they have played in an environment characterised recently by a weakening of the power of Conference carriers.

Freight rate information is available from a number of sources – notably from Containerisation International’s on-line database of freight rates charged in the three major trades. Other sources for rate information include the German Ministry of Transport’s time-series on freight rates to and from German (and Dutch) ports, the United State’s Department of Labor Statistics price index for inbound maritime freight and the Bank of Japan’s Corporate Service Price Index. These time series provide a broad overview of trends in rates and are presented below. These series, however, cover a relatively short period from the early to mid-1990’s onwards during which liner operators experienced a great deal of change.

This section will first examine short-term rate trends in a number of trades and compare these to price trends for other commercial service sectors. However, the impact of Conferences on ocean freight rates extends considerably beyond the past few years. In order to place recent rate trends into perspective this section will examine longer-term trends in liner service prices. Finally, this section will consider to what extent conferences and other price and capacity-fixing arrangements have contributed to price stability by drawing on surveys from US and European shippers.

3.1.1 Short-term evolution of liner freight rates and prices:

Average liner freight rates have decreased in all of the main trade leg segments over the past decade in constant dollar terms. Data covering published rates in the three major trades (outlined in Figures 3.1 to 3.3) illustrates these aggregate trends. However, liner price indices (figures 3.4-3.6) show that these general trends do not uniformly apply to all countries involved in international maritime trade.
3.1.1.1 Freight rate movements:

70. Asia-US eastbound rates in 2001 were almost 12% lower than 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\(^\text{15}\). These rate movements are for average freight rates in these trades. Rates for specific commodities may be significantly different from these and may have experienced different trends.

71. The rate imbalance between the different legs of the Asia-US trade can be observed in the Europe-Asia trade as well\(^\text{16}\). These imbalances are the natural result of changing trading patterns between the regions involved and are a consequence of changing demand for maritime transport to and from these areas (as can be confirmed by table 1.1 illustrating vessel utilisation rates in these trades). The Asian economic crisis of 1997 caused demand for US and European goods to dry up within that region freeing up capacity on Asian in-bound routes (US-Asia westbound and Europe-Asia eastbound). At the same time Asian exports towards the United States and, to a lesser extent Europe, were buoyed by growth in the latter two regions. 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). Overall capacity was also growing over this period as Liner operators were receiving delivery of larger ships ordered under 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. The drop in rates was exacerbated by competition from many independents that faced the same need to fill their ships in these unbalanced trades.

72. The Europe/US/Europe Trade has experienced relatively less rate imbalance between the east- and west-bound legs reflecting a generally healthier trade balance.

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\(^{15}\) Figures calculated from Containerization International’s on-line freight rate database. Notes: rates cover six of the trades’ major liner companies. All rates are all-in, including the inland intermodal portion, if relevant. All rates are average rates of all commodities carried by major carriers. Rates to and from the US refer to the average for all three coasts. Rates to and from Europe refer to the average for North and Mediterranean Europe. Rates to and from Asia refer to the whole of South East Asia, East Asia and Japan/South Korea.

\(^{16}\) A similar imbalance can be observed to be growing in the Europe-US trades from 1999 onwards.
3.1.1.2  Freight rate index trends for ocean liner services:

73. Price trends illustrated by three national commercial service price indices\(^{17}\) show a slightly different picture. Data from Japan (figure 3.4) shows that the cost of Liner shipping to Japanese companies in 2001 had decreased approximately 24% from 1995 values in terms of the contracting currency (typically US dollar) although on a yen basis, the cost was essentially unchanged. Data for the price of liner services to and from German and Dutch ports shows an overall increase in price of 21% from the 1995 index year (figure 3.5). While it is difficult to compare these indices to CI’s freight rate database (since both the Japanese and German data reflect prices in multiple trades), the German data is noticeable in that one might have expected a decrease in prices since the CI freight rate data shows price decreases in the four European trade legs over the same period (the fourth trade leg was essentially unchanged).

74. Data for US inbound liner services from both the Atlantic and Pacific indicate that the aggregate price of these liner services had increased in real terms from 1991 to 2001 for both segments (figure 3.6). This index is relatively easier to compare to the CI freight rate data since each inbound segment in the price index more or less corresponds to the trade legs covered by the freight rate data\(^{18}\). Compared to the

\(^{17}\) The United States Bureau of Labor Statistics (BLS) International Price Index, the Bank of Japan’s Commercial Service Price Index and the German Ministry of Transport’s Liner Price Index.

\(^{18}\) The BLS’s Atlantic inbound segment is roughly equivalent to CI’s Europe-US westbound leg since most trade coming into the Atlantic façade of the US comes from Europe. Likewise, the BLS’s Pacific inbound segment is roughly equivalent to the CI Asia-US eastbound leg since most trade coming into the US Pacific coast originates in Asia.
1995 index value, first quarter 2001 prices had slightly decreased in the Atlantic (-2%) and considerably increased (+29%) in the Pacific segment. While the Atlantic inbound figure is similar to the Europe-US westbound figure compiled from Containerization International’s data (-5%), the Pacific inbound figure is several orders of magnitude greater (CI data show only a 2% increase).

**Figure 3.4 (1995=100)**

Cost of Liner services to Japanese Companies
(Yen basis 1995.07=100)
Figure 3.5 (1995=100)

United States Inbound liner freight price index
3.1.2 Long-term evolution of liner freight rates and prices:

75. In a comprehensive recent study\textsuperscript{19}, D. Hummels of the University of Chicago examined to what extent technological and institutional changes have reduced the real price of ocean shipping services. The study uses long-term time series (from 1952) data provided by the German Ministry of Transport for liner cargoes loaded and unloaded in Germany and the Netherlands\textsuperscript{20}. In order to evaluate the real evolution of shipping prices over time, the study adopts two deflators to establish the outer bounds of the real price range: a US GDP deflator (most rates are quoted in dollars) and a German GDP deflator (Consumer price index) to account for Liners’ practice of applying a currency adjustment factor (CAF).\textsuperscript{21} The resulting indices are presented in figure 3.7.

76. In relation to the baseline year (1954) the study shows prices rising steadily through 1970, after which they increase strongly through 1985. It is only since 1985 that prices decrease. In looking at the long-term evolution of liner prices, it is interesting to note that that, by 1998, the German-deflated prices were still substantially above the index year and the US-deflated price was only slightly below the index year value. As these represent the outer bounds of the real price range, one can conclude that, on average, the real prices of liner shipping services have only slightly increased since 1954.

77. This would appear to be a counter-intuitive finding since the study period covers the adoption and spread of containerisation within the industry. Indeed, the widespread adoption of containers allowed

\textsuperscript{19} Hummels, 1999.

\textsuperscript{20} The German statistics heavily emphasise general containerised cargo over bulk commodities and is therefore representative of the evolution in world containerised trade.

\textsuperscript{21} Liner operators apply a currency adjustment factor (CAF) to compensate for fluctuating exchange rates (e.g. when the dollar fluctuates, the CAF adjusts accordingly to hold the foreign currency price constant.
for decreased handling costs, more efficient loading and off-loading and greater economies of scale. Normally, one might have expected these changes to contribute to increased productivity and lower shipping prices. However, this is not reflected in the Liner price index.

78. There are several possible explanations for this. The first is that this trend may only be specific to the German trades. The study investigates this possibility by analysing non-German liner rates, vessel operation and port costs. Data from the UNCTAD’s Review of Maritime Transport does not support the hypothesis that the German trades represent an anomaly. Indeed, this data indicates that annual nominal increases of 10-15% were commonplace across all routes in the 1970’s. At the time, these increases prompted several national and international investigations in order to determine the source of these changes. Analysis of the North Atlantic Trades carried out in the context of these investigations concluded that prices had increased by a range of 21% to 26% (adjusted with a dollar deflator) – supporting the data found in the German Statistics. Other data from the Royal Netherlands Shipowner’s Association show important real increases (average 67%) from 1970 to 1980. Based on these analyses, the study concludes that the trend observed in the German data appear to be a generalised trend within the industry.

79. Another explanation may be that liner vessel and service operating costs (including port costs) have increased. Evidence from the 1970’s indicates that the liner industry was faced with significant increases in operating costs -- particularly due to increases in fuel prices and new ship construction costs. Increases in fuel prices, however, were not unique to the Liner shipping sector. When comparing liner to

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Sletmo and Williams, 1981.
tramp prices, the study finds that despite a common increase due to the energy crisis of the early 1970’s, real Liner prices continue to trend upwards while Tramp prices decline during the 70’s. This difference can be partly explained by looking at newbuilding costs for containerships which rose at twice the rate of general cargo newbuilding costs during that period. Increases in port costs resulting from new investment in container-specific port infrastructure seems also to have played a factor – especially as these costs are typically accounted for in liner freight rates, unlike tramp time charter rates.

80. The study concludes that these factors, alone, are possibly insufficient to account for the general increase in Liner shipping prices. It hypothesises that prices may have risen either despite, or alternatively, because of containerisation. In the latter case, the advent of containerisation in the sector meant that relatively fewer ships could carry the same amount of trade leading to a greater potential market power for conferences on containerised routes. Testing this hypothesis is problematic and is beyond the ability and purview of the present report. However, the Hummel report’s principal conclusion, that the costs of Liner shipping services have in fact tended to be stable or even increase over time, provides a strong counterpoint to assertions that recent downward trends in freight rates are indicative of a generalised long-term decrease in liner freight rates.

3.2 Impact of conferences/discussion agreements on the price of liner services:

81. Little can be conclusively drawn from the recent data on liner freight rates and prices with respect to the specific impact of conferences on the former. In some trades, rates and prices have trended downwards in recent years as overcapacity and competition from independents and new entrants have eroded conference/discussion agreement market power. In others aggregate prices have increased. Shipper responses to the OECD questionnaire regarding recent trends in freight rates confirm this ambiguity. For example, while more shippers in the North American trades experienced a decrease, as opposed to an increase, in rates from 1995 to 2000, this finding varied considerably according to the specific trade with some trades seeing more increases than decreases.

82. However, freight rates have generally declined from high levels achieved in the late 1970’s and early 1980’s where conferences were better able to dictate rates. Liner prices, in real terms and over the long run, show little evidence of moving in either direction. It is perhaps significant that the steepest declines in real prices have occurred in the past few years following on the heels of regulatory changes allowing more flexible pricing mechanisms and the arrival of strong independent operators.

83. Little can be concluded from comparing trends in the liner sector to price trends in other industries (figures 3.7 and 3.8). In the United States liner prices have increased inbound from the Pacific and decreased in the Atlantic -- but not by as much as airfreight prices have. In Japan, the prices of liner services have generally followed movements in the prices of other maritime transport services although liner prices have decreased relative to many of these. However, despite greater volatility, the general trend in liner prices is on par with the general decrease in all commercial services (-4% from 1995) in Japan. Based on this, it is difficult to conclude that liner prices decrease at a faster rate, or display significantly different characteristics, than prices in other like industries.

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23 So much so that many countries opened investigations into Conference abuses of market power leading to a changed regulatory structure in many instances.

24 Hummel finds that, unlike liner shipping, air freight prices have experienced significant real decreases in the long term.
Figure 3.8 (1995=100)

Figure 3.9 (1995=100)

Commercial Service Price Index for Japan: Transportation
One can generally conclude that liner freight rates currently respond to supply and demand conditions in the market—they decrease when demand drops and increase when supply is limited. In most cases, conferences and discussion agreements have not been able to push through the full extent of coordinated price increases (carriers refer to these as "rate restoration") in trades experiencing falling demand. However, the simple fact that prices decrease (or show reactivity to supply and demand) does not necessarily mean that a market is operating efficiently (see box 3 and discussion in section 4). While the dynamics of the liner service market appear to be functioning, the same cannot be said for the level at which it operates or its efficiency given the ability of carriers to set prices and capacity. Conferences and discussion agreements note that these arrangements serve to dampen downward rate movements—e.g. they keep rates from falling so low as to force carriers into bankruptcy and potentially destabilise the trade. On the other hand, shippers argue that these arrangements allow carriers to charge higher prices than otherwise would be possible when supply is tight. Furthermore it is not at all clear that price and capacity fixing arrangements have served, if at all, to buffer rate change movements in the liner trades.

3.2.1 Liner rate-setting practices

Responses to the OECD questionnaire relating to rate-setting in the liner-shipping industry issues reveal a varied picture.

European shippers report very little divergence in rates quoted amongst carriers of the same conference. This contrasts with the recent experience of US shippers where not only do shippers find that conference carriers offer a wider range of rates amongst themselves but that these rates also tend to
compare more favourably with those offered by independent operators. This difference is due to the introduction of confidential contracting in the US trades following the passage of OSRA. Since confidential contract terms can no longer be automatically shared among carriers under this legislation, liner operators now find themselves having to set rates closer to their real costs in order to ensure that they remain competitive. According to one Conference, published tariffs now largely serve as “benchmarks” for rate negotiations in the US trades. Indeed, a recent review of the impacts of OSRA indicated that 90% of contracted rates linked to a tariff. This finding confirms (at least for Conference rates) that current rates are set in more in relation to the fixed Conference tariff rather than on individual firm’s ability to perform efficiently. The reliance of the industry on “benchmark” tariffs begs the question as to why such “benchmarks” are needed in an era where commercial survival is often predicated by a firm’s ability to track, control and price on the basis of its own real cost.

3.2.1.1 Ancillary surcharges

87. Shipping Associations responding to the OECD questionnaire reported that all of the members they polled indicated that carriers rarely deviate from one another when asked if conference and discussion agreement members differ from each other in the type and level of surcharges charged. While some surcharges (e.g. bunker or currency adjustment factors) can reasonably be seen to apply across all carriers, it is more difficult to understand why others such as equipment repositioning charges and paperwork filing charges should be identical in firms operating at different levels of efficiency. Furthermore, shippers report a general lack of transparency relating to these charges, which raises questions as to their real basis. Some industry observers feel that these may indeed be a “back-door” price-fixing mechanism – especially as these are presented to shippers as linked to direct costs and therefore (unlike rates) generally non-negotiable in nature (and open to re-assessment during the life of a service contract, unless otherwise stipulated). In this respect, it is telling that nearly all shippers polled in the context of this review indicated that the total number of surcharges applied by carriers was increasing.

88. Many have questioned the particular risk management strategy prevalent in the liner shipping sector where most of the risk associated with the major variable charges (such as currency and fuel price fluctuations) are passed fully through to shippers. Menachof and Dicer, in their investigation of risk management strategies in liner shipping, remark:

“...liner firms have been able to pass many costs of doing business to to the shipper with the major variable charges listed as separate charges...shippers are then faced with rates that vary highly from the published tariff, and they cannot rely on the rate to be the same from one month to the next...this variation makes it difficult to conduct business with a long-term outlook...”

25 TACA, 2000
26 United States Federal Maritime Commission, 2001b
27 As an example, the Singapore National Shipper’s Council (SNSC) carried out a survey of their shippers regarding terminal handling charges (THC). Shippers reported that carriers would justify THC increases as being a result of increased port charges. However, the concerned port authority (PSA) confirmed that over the same period, port charges actually decreased leading the SNSC to conclude that carriers used THC’s as a way surcharges rather than cost-recovery mechanisms. (CI, “Frustrated Shippers”, 2001)
28 CI, “Shippers rail against ‘boilerplate’ clauses”, 2001
29 Menachov, 2001
They suggest that both carriers and shippers can benefit if the liner shipping industry develops a more balanced risk management strategy implicating both sides. In particular they point to the benefits other industries have reaped from the implementation of futures markets as a hedge against uncertainty in bunker and currency fluctuations.

3.2.1.2 Independent carriers

There is little direct evidence that independent carriers price off conference rates although it is widely recognised that many independents have done so in the past and continue to do so now. At least in two instances involving the Europe-Asia-Europe trades have competition authorities documented and reprimanded conference carriers for seeking to manipulate prices and capacity with independent lines. More recently, EU competition authorities were prompted to open an investigation of six independent lines in the North Atlantic trades after these simultaneously imposed the same empty equipment repositioning surcharge as the dominant conference in that trade. Shippers responding to the OECD questionnaire confirm these impressions – their experience is that in the majority of cases, independents apply the same surcharges as conference carriers.

3.2.1.3 Rate variability

Governments have upheld anti-trust exemptions for price and capacity-fixing arrangements partially on the understanding that these would serve to provide a stable price environment for shippers and ensure supply stability. While there can be little argument with the latter assertion (shippers rarely complain that there is a lack of overall capacity to transport their containers), shippers responding to the OECD questionnaire strongly questioned whether these arrangements have served to stabilise rate variability.

European shippers pointed out that rates could vary considerably from year to year -- especially in those trades where there is less competition. Rate changes of over 30% were not uncommon with some shippers reporting changes as high as 200% from one year to the next. North American shippers in both Canada and the United States report similar findings. US shippers report average annual rate changes of over 5% in almost every case with changes of over 10% from year-to-year not being uncommon. Canadian shippers report significant volatility in average rates with some individual shippers reporting changes of 50%-95% from one year to the next.

The evidence of rate volatility provided by shippers concerns a relatively small sample of shippers (an undetermined number of responses from the ESC and 15 responses each from the NITL and CSC questionnaires) and therefore can only been considered indicative of trends in rate movements experienced by shippers in general. It should be noted that the rate volatility reported by shippers concerns both upward and downwards movements in rates. When compared to trade data, one can conclude that these price movements are indicative of a market responding to supply and demand conditions. Carriers assert that capacity and price fixing arrangements have “buffered” the market from potentially greater rate volatility although this is an unsupported and very difficultly tested assertion. Data from shippers indicates that the opposite might even be true as some trades experiencing greater competition show relatively more

30 Industry observers have pointed out the difficulty independents currently are experiencing in developing pricing policies for the US trades now that they can no longer easily peg their prices to those of conference carriers since the advent of confidential contracting. Also Lloyd’s Shipping Economist, October 2001.

31 In both the EATA and FETTCSA decisions.
stability than others (e.g. the Europe-Mediterranean trade where ocean liners face competition from short-sea shipping, inner waterway shipping and overland rail/road transport).

3.3 Economic Performance of the Liner Shipping Industry

Carriers often point out that theirs is an industry characterised by poor economic performance and returns so low as to be nearly non-remunerative. While average industry figures might lend some credence to these statements, it would be wrong to believe that all liner operators are faring so poorly. Table 3.2 and Figure 3.10 illustrate that not all carriers are performing badly and that some are doing rather well compared to other transport industries. The average top five performances in liner shipping are consistently as good if not better than the average performance of companies in the Dow Jones Transportation 20 Index. Even the rather low average financial performance of the liner sector is within the range of performances one might expect from the transport sector (which is characterised by low returns). In fact, liner shipping outperforms both US rail companies at large and rail companies in the in the Dow Jones Transportation 20. The only exception is the liner sector’s net profit margins that are at the lowest end of the transportation industry’s range.

### Table 3.2 Financial ratios for selected Liner Operators and Industries

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Return on Investment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liner Shipping</td>
<td>4.24</td>
<td>5.97</td>
</tr>
<tr>
<td>Liner Shipping (average of top 5 results)</td>
<td>15.12</td>
<td>12.26</td>
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<tr>
<td>Dow Jones Transportation Sector average</td>
<td>9.54</td>
<td></td>
</tr>
<tr>
<td>Dow Jones Rail</td>
<td>2.48</td>
<td></td>
</tr>
<tr>
<td>Dow Jones Airline</td>
<td>7.23</td>
<td></td>
</tr>
<tr>
<td>Dow Jones Trucking</td>
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<td></td>
</tr>
<tr>
<td><strong>Average Return on Equity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liner Shipping</td>
<td>9.45</td>
<td>14.28</td>
</tr>
<tr>
<td>Liner Shipping (average of top 5 results)</td>
<td>16.48</td>
<td>25.55</td>
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<tr>
<td>Dow Jones Transportation 20</td>
<td>16.73</td>
<td>18.90</td>
</tr>
<tr>
<td>Dow Jones Transportation 20 (Railroads)</td>
<td>8.54</td>
<td>6.19</td>
</tr>
<tr>
<td>Dow Jones Transportation Sector</td>
<td>17.94</td>
<td></td>
</tr>
<tr>
<td>Dow Jones Rail</td>
<td>7.66</td>
<td></td>
</tr>
<tr>
<td>Dow Jones Airline</td>
<td>16.46</td>
<td></td>
</tr>
<tr>
<td>Dow Jones Trucking</td>
<td>26.89</td>
<td></td>
</tr>
<tr>
<td><strong>Average Return on Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liner Shipping</td>
<td>4.89</td>
<td>7.23</td>
</tr>
<tr>
<td>Liner Shipping (average of top 5 results)</td>
<td>6.79</td>
<td>10.43</td>
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<tr>
<td>Dow Jones Transportation 20</td>
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<td>6.03</td>
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<td>Dow Jones Transportation 20 (Railroads)</td>
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<td>4.13</td>
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<tr>
<td>Dow Jones Transportation Sector</td>
<td>7.19</td>
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</tr>
</tbody>
</table>

Compiled from financial reports, Worldscope annual report summaries, Containerisation International Online for top-40 (in fleet capacity) Liner operators publishing financial records. Other index ratios from Dow Jones online.
Dow Jones Rail | 2.26  
Dow Jones Airline | 5.41  
Dow Jones Trucking | 11.81  

### Average Net Profit margin

| Liner Shipping | 2.33 | 4.29 |
| Liner Shipping (average of top 5 results) | 3.86 | 7.92 |
| Dow Jones Transportation 20 | 4.96 | 4.80 |
| Dow Jones Transportation 20 (Railroads) | 5.71 | 10.33 |
| Dow Jones Transportation Sector | 6.78 |
| Dow Jones Rail | 6.13 |
| Dow Jones Airline | 5.83 |
| Dow Jones Trucking | 8.30 |

**Figure 3.10**

ROI Performance: Published Accounts of Liner Operators

95. Carriers put forwards many reasons as to the industry’s propensity for poor economic returns. These include the investment necessary to implement liner shipping services, the vagaries of international trade, the fact that unsold slots are forever lost and the general commoditised nature of the liner shipping product. Despite these factors, it is clear that some carriers are able to generate a reasonable return on their investments. Why this should not be the case for more carriers may be more linked to management and accounting practices than to industry-specific characteristics.
3.3.1 Cost Control

96. Carriers point to wide-ranging efforts within the industry to cut costs and increase overall productivity. Strategies range from seeking operational savings through mergers, alliances and slot chartering arrangements, cutting staff and overhead costs, introducing new container tracking and asset management information systems to deploying larger and more advanced ships (see discussion on this below). However, a recent overview of pricing trends within the liner industry finds that most carriers have been slow to reap savings from detailed activity-based costing, explaining partially why the best managed carriers have performed better than others.33.

97. Pricing regimes based on average costs (e.g. such as the net contribution to vessel programme) fail to provide detailed information on how specific activities and/or transactions generate costs. Without this information, it may be difficult for carriers to correctly identify sources of specific costs savings and price transactions accordingly. As illustrated in Table 3.3, real costs can vary considerably such that any operators pricing on average costs may rapidly find themselves in trouble if the true costs they incur are more along the upper ranges of the distribution. In a context where many carriers were content to price off more inefficient or expensive operators, those carriers accurately tracking specific costs could expect to reap substantial benefits. This also explains the success of some independent carriers who used activity-based costing to identify and target more profitable cargoes. According to this study, many ocean carriers still lack the ability to accurately track and assign costs on a specific, rather than average, basis. This weakness may also go a long way towards explaining shipper frustration with carrier pricing regimes since many of the former have long since implemented detailed activity based costing accounting in order to remain competitive.

Table 3.3: Analysis of average liner service cost distribution for North American Trades ($ per TEU)

<table>
<thead>
<tr>
<th></th>
<th>Lowest</th>
<th>2nd quartile</th>
<th>3rd quartile</th>
<th>Highest</th>
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<tr>
<td>Corporate overhead:</td>
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<td></td>
<td></td>
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<tr>
<td>Sales cost</td>
<td>5</td>
<td>10</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Customer service</td>
<td>5</td>
<td>10</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td>Vessel costs</td>
<td>90</td>
<td>100</td>
<td>700</td>
<td>2800</td>
</tr>
<tr>
<td>Terminal costs</td>
<td>100</td>
<td>125</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Inland transportation</td>
<td>0</td>
<td>150</td>
<td>1500</td>
<td>5000</td>
</tr>
<tr>
<td>Equipment costs</td>
<td>100</td>
<td>200</td>
<td>450</td>
<td>1500</td>
</tr>
<tr>
<td>All costs</td>
<td>300</td>
<td>595</td>
<td>2910</td>
<td>9880</td>
</tr>
</tbody>
</table>

3.3.2 Over-investment in Capacity

98. The liner shipping industry has a record of investing heavily in new capacity. As outlined in section 2, many carriers follow the route of ordering new and larger ships in order to achieve economies of scale which would hypothetically allow them to cut costs. Providing new capacity, especially when in the form of new service strings often requires not one but several new ships in order to provide a reasonable and attractive sailing schedule. While some of this capacity can be obtained through slot exchange/charter agreements or in the ship charter market, most carriers still have recourse to building new ships.

33 Containerisation International, “Easy as ABC”, 01/03/01
99. Long-term projections for world trade growth give reason to carriers who seek to expand their fleets. However, in many instances, the overall level of new capacity added to trades has outstripped short-term growth in trade – most recently during the Asian financial crisis and in the second and third quarters of 2001 as the US and European economies slow down. Many industry observers have noted that the tremendous amount of new capacity ordered in recent years as carriers experienced strong financial results and low newbuilding prices (see figure 3.11) will come on-line just as trade growth slows leading yet again to a cycle of overcapacity, falling rates and falling returns on many trades. According to Drewry Shipping Consultants, global containerised trade will grow by 8.1% in 2001 (down from 10.8% in 2000) while the global containership fleet will grow by 12.5% in 2001 and 13.8% in 2002. This growth will likely be

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34 CI, “Trigger happy lines shoot themselves in the foot”, 2001 – The new capacity added to the Pacific trades in 2000 and 2001 has triggered a cycle of rate cuts and diminished returns which, in turn, has prompted the dominant conference (FEFC) to envisage “parking” 10-20% of their capacity (CI, “Nervous FEFC clutches at capacity management straws”, 2001)

weaker given the aftermath of the terrorist attacks on New York city and their chilling impact on US trades.

100. Carriers argue that this type of overcapacity is endemic to the industry since strong trade flows in one direction are not necessarily matched in the other – in order to provide for demand in the outward leg, carriers must necessarily oversupply capacity on the weaker return leg. However, many carriers are seeking alternative strategies to reduce the need to run unbalanced service strings. In particular, the increasing use of slot charter agreements across all trades and increasingly, between conference, alliance and independent operators, represents a less capital-intensive way of responding to growth in demand\(^{36}\). It is also telling that a growing proportion of the top 20 operator’s fleets is made up of time-chartered vessels, indicating a trend away from self-ownership to relatively more flexible asset management arrangements.

101. Furthermore, it is not at all clear that the industry’s conventional wisdom regarding the economies of scale brought about by larger and larger ships necessarily is as well founded as carriers might hope to believe: In a 1997 speech, Theodore Prince, senior vice president and chief operating officer, of K Line America pointed out that

> “one of the major contradictions within the shipping industry is the concept of 'scale versus scope'. (Prince) pointed out that it was the industry convention at present to build larger vessels that necessitate ever larger and more sophisticated terminals, supported by physical infrastructure with increasingly advanced technologies. Although this may look impressive, such an asset-intensive approach will only lead to higher fixed costs and an inability to survive in today's competitive, de-facto deregulated trading environment. 'Scale is an opportunity to invest and you have to question whether these investments will pay off,'” \(^{37}\)

102. This view is also echoed by Martin Stopford, Managing Director of Clarkson Research, who points out that economies of scale brought about by larger ships diminish after a certain point and can easily be wiped out by increased transhipment costs\(^{38}\). In an environment where overall capacity is sufficient to carry available cargo, one might question whether new capacity construction is necessarily the most efficient route towards increasing operator’s profitability.

103. Finally, one complicating factor in the capacity equation has been the low cost of newbuildings in recent years. Ships being delivered in 2001 and 2002 are between 30% and 40% less expensive than in 1991 tempting carriers to renew their fleets with more efficient ships before prices rise\(^{39}\). There are many reasons for current low prices in the shipbuilding sector and state support of certain shipbuilding industries are certainly an important factor in the current low prices for newbuildings. However, competition in the shipbuilding sector is a separate issue from competition in the liner sector and should be addressed accordingly. Shippers should not have to bear the costs of overcapacity in liner shipping that result from market failures in the shipbuilding sector.

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\(^{36}\) CI, “Scale vs. Scope”, 2001  
\(^{37}\) CI, “Scale vs. Scope”, 2001  
\(^{39}\) CI, Freight rate indicators, 9/21
Summary Section 3:

- Absent detailed data on real freight rates and carrier costs, it is impossible to prove/disprove a causal relationship between the price of liner services and the anti-trust exemptions afforded to Conference carriers.

- Average freight rates in all of the major trades have decreased over the past decade. The drop in freight rates has not been uniform between individual legs of these trades nor between the trades themselves.

- The observed decrease in freight rates, however, is from a historical high reached in the mid-1980’s. Over the long-term, there is strong evidence that freight rates are essentially the same or just slightly higher than they were in the mid-1950’s.

- The steepest declines in observed freight rates have coincided with a generalised decrease in Conference power in the face of competition from strong independent operators and the implementation of competition-enhancing legislation in the United States trades.

- Ancillary surcharges such as those charged by carriers represent a method of passing the most important variable costs (currency fluctuations, fuel costs and terminal handling charges) on to shippers. Shippers assume most of the risk associated with these costs. In some cases, lack of transparency regarding the basis for these costs raises serious doubts as to whether they only serve to recover costs.

- Freight rate movements in liner markets are generally responsive to supply and demand conditions. The extent to which these movements are “buffered” by price-fixing is difficult to determine. Shippers’ experience in fact, shows that trades open to greater competition (and therefore less Conference control) show relatively more rate stability than trades where Conferences have greater power.

- Many carriers, especially the top performing ones, are able to generate financial returns at least as good as, if not better, than other transport industry service providers. Poor financial performances in the liner sector may have as much to do with management decisions linked to cost control and investment in capacity as with any inherent structural problems within the industry.
4 DISCUSSION OF THE IMPACTS OF PRICE-FIXING AND CAPACITY AGREEMENTS ON BOTH CARRIERS AND SHIPPERS.

4.1 To what extent does anti-trust immunity for price-fixing deliver benefits to shippers by improving supply chain performance and enhancing business efficiency

104. Supporters of price-fixing arrangements argue that these are a necessary pre-condition to the provision of continued and uninterrupted high-quality ocean shipping services. Carriers claim that without such arrangements, shippers would experience difficulty getting their goods shipped as sailing schedules would likely be perturbed by the bankruptcy of weaker carriers. According to this view, the sudden exit of these carriers from published service strings would strand containers dockside and would render shipping a much more uncertain exercise than it is currently. Anti-trust immunity for price-fixing, so its proponents explain, allows conference carriers to achieve adequate returns on their investment (irrespective of their differing operating and management efficiencies), avoid bankruptcy and thus allows shippers to benefit from stable services.

105. The line of reasoning exposed above is perhaps one of the most contentious issues surrounding the continuation of anti-trust immunity for price-fixing. The argument for retaining immunity is based on the belief that there is no natural short or long-term market equilibrium in liner shipping and that without collusion among service providers, there will be an overall decrease in welfare as supply becomes uncertain and trade becomes negatively impacted. Supporters of this view point out the spectre of “cut-throat” or “destructive” competition (such as that which occurred over a century ago with the arrival of the first steamship liner operators) as reason enough to artificially stabilise prices in these markets in order to ensure adequate and predictable supply. Many, however, disagree and argue that liner markets, like other markets, can and will reach an efficient outcome through more competition. They argue that it is completely normal that inefficient operators drop out of the industry leaving only those most able to provide cost-effective services. Supporters of this view note that while some short-term interruptions in trade may come about from time to time, welfare gains from a long-term reduction in shipping prices would end up have an overall beneficial impact.

106. Defenders of anti-trust immunity urge regulators to not attempt to “fix what isn’t broken” and argue that the benefits of price-fixing outweigh any eventual costs. However, their arguments have a strong theoretical and somewhat untested underpinning. It was hoped that in the context of this report, carriers and shippers might provide detailed cost and rate data either supporting or refuting the need for anti-trust immunity. Unfortunately this information was not forthcoming. This section will therefore focus on the theoretical models and assumptions underlying the retention of anti-trust immunity and attempt to supplement this analysis with real data and observations culled from various sources.

107. The following sections will examine to what extent anti-trust immunity for price-fixing in liner shipping has benefited shippers by allowing carriers to deliver high quality services and avoid disruptions from “destructive” competition.
4.1.1  Has anti-trust immunity allowed carriers to provide adequate liner services?

108. Not necessarily. Industry data and responses from the OECD questionnaire certainly support the contention that carriers deliver an adequate and reliable amount of capacity in the face of growing world trade. Containers are rarely left at dock and, if anything, the industry is characterised more by over, rather than under, capacity. The real question is to what extent would these services have been provided anyway without the protection from anti-trust immunity. Indeed, if anything, the trade press and shipper’s organisations all point to an improvement in the responsiveness of carriers to shippers’ needs as conferences have lost their importance and strong independent carriers have emerged. More shipper-responsive strategies such as integrated supply-chain logistics services, simplified and/or single freight rate structures, better co-ordinated multi-carrier services, etc. have all come about not because of Conference power to fix prices but precisely because this power has waned in recent years and carriers have had to seek new strategies to remain viable in a more competitive environment.

4.1.2  Has anti-trust immunity allowed the market to deliver an efficient outcome?

109. Another related question might be: to what extent has anti-trust immunity allowed the market to deliver an efficient outcome? Economic efficiency has a number of aspects. One element is productive efficiency which relates to suppliers’ ability to produce a set level of output at the least cost. However, a market can include many efficient suppliers and yet still exhibit productive inefficiency if the other suppliers are inefficient. In addition, in its broadest sense, efficiency means that markets meet two further conditions: 1.) each unit of output is consumed by those most willing to pay for it and 2.) the right amount of output is produced so that prices reflect costs.\(^\text{40}\) A strong case can be made that the current liner shipping market (with price-fixing among carriers) fails on both the first (Conferences and other price-fixing arrangements expressly protect the least efficient operators) and third counts (there is a distinct trend towards over-capacity in the industry). Many shippers would strongly argue that it fails on the second count as well given that they feel that freight rates are above what they might be absent anti-trust protection.

4.1.3  Does anti-trust immunity prevent destructive competition?

110. In order to answer this question we need to address two prior questions: What might we mean by “destructive competition”? Is the liner shipping sector prone to this “destructive competition”? Having addressed these questions we can then determine whether or not anti-trust immunity can prevent “destructive competition”. Even if destructive competition exists in the liner shipping sector, is harmful and can be prevented by anti-trust immunity, this does not imply that anti-trust immunity is the correct public policy response. Anti-trust immunity may not be the sole and/or most effective recourse against this phenomenon.

111. The answers to these questions are determined by how one views the organisation of liner shipping markets. This section will examine these assumptions, the models of market structure that underlie them and will address the more pertinent question of to what extent has anti-trust immunity contributed to the most efficient market outcome in liner shipping.

112. The inefficiency inherent in the Conference system is often described as the price to be paid for stability. Carriers argue that shippers would not have access to regular and frequent liner services if they could not fix prices. The reasoning behind this view is that the “unique” economics of liner shipping lead

\(^{40}\) (Stoft, 2001)
to pricing at short-term marginal costs that are often below average costs. This in turn would lead to the sudden withdrawal of ships from service strings as their owners decided to cut their losses and exit from the trade. On the other hand, shippers have tended to view this argumentation as flawed since their view of market structure in the liner sector does not support the notion of “destructive” competition and/or the existence of “destructive” competition in the current market. This section will examine some of the theories of market structure underpinning these views starting with the shipper view first.

4.1.3.1 The Neoclassical Monopoly/Oligopoly model:

113. This is both the simplest and most controversial model to be used to analyse Conferences. According to this model, Conferences act as strong oligopolies exercising de facto monopoly power in the trades where they operate. According to this model, Conferences charge “higher-than the monopoly maximising rates” which are negotiated downwards by the shipper so that in the end carriers earn the highest possible returns. This theoretically results in “maximum profits for carriers, tight control of capacity and suppressed demand for liner shipping services.” However, many critics of this theory have pointed out that industry returns are not so high as to provide evidence of massive profiteering on the part of carriers (on the other hand, this paper has shown that returns are not necessarily as low as carriers portray them to be and aggregate data on profits might mask excessive returns on particular routes). This has led many supporters of this theory to postulate that the industry disperses their monopoly profits by engaging in expensive and unnecessary service competition and through investment in over-capacity.

114. In particular some have sought to explain the propensity for over-capacity in liner trades through a variant of the classic monopoly model – the “Open Cartel” model. In this model, carriers are viewed to act initially as collusive oligopolies that restrict capacity below what the market would provide and by setting prices above average costs. However, since carriers cannot compete on price, they are soon drawn into a spiral of service competition based on either better quality or more frequent services. In the latter case, the resulting overtonnage leads carriers to agree on new remunerative rates in the face of overcapacity. The cycle continues as new capacity is drawn into the industry by the new freight rates.

115. While shippers and many anti-trust regulators share this view of the industry, both variants of the Monopoly/Oligopoly model face problems when confronted with empirical evidence concerning the recent evolution of freight rates and the action and attitudes of independent operators in trades where Conferences are active. In recent years overcapacity has been accompanied by declining, rather than stable, freight rates. This implies that conferences, when operating in periods of overcapacity, are not able to effectively dictate or maintain excessively high freight rates in face of independent operators and Conference defectors. However, this drop in rates must be seen both in the context of a drop from a peak in the 1980’s and of an environment where competitors have every incentive to price off the conference “benchmark” rate rather than the rate quoted by the most efficient operators.

116. A second criticism of the “Open Cartel” model is that empirical evidence presented in a study examining capacity in Conference trades fails to support the link between Conference control and overcapacity. However, the Conferences in question were “closed” Conferences and were therefore presumably able to better restrict their member’s scheduling decisions than the typical “open” Conference (e.g. one that any carrier could join). While certain “closed” conferences still exist today (they are not allowed in the United States trades), there is a general consensus that they exercise much less restrictive

41. Shashikumar 1995, p.11
42. Meyrick, 1999, p. 29
43. Meyrick, 1999 citing Deakin and Seward, 1973
entry practices than in the past and more or less operate as “open” conferences. Therefore, the central hypothesis of the model, that Conferences contribute to overcapacity in the trades where they are active, is still a plausible hypothesis.

4.1.3.2 “Rationalisation” View:

117. This view, along with its variants, is the one that carriers feel most accurately depicts the liner shipping market. According to the proponents of the “rationalisation” argument, the liner industry is characterised by a unique set of circumstances that justifies regulation by either industry members themselves or by government regulators in order to stabilise the otherwise chaotic liner shipping market.

118. This view has several underlying assumptions that are worthy of being examined in more detail. The foremost of these are that the liner shipping industry displays significantly different characteristics than any other industry thus requiring special treatment under anti-trust statutes, the second is that normal competitive pricing would lead to “destructive” competition and the third is that price-fixing represents the best response to the challenges it faces.

4.1.3.3 Uniqueness of the Liner Shipping Industry:

119. When targeted by anti-trust regulation, industries almost invariably cite the fact that, unlike other industries, theirs is so unique that they should be exempt from laws prohibiting collusion. The liner shipping industry is not the only transport industry to have put forward this defence and, like airfreight and many rail and road carriers in the past, they have spent considerable energy and resources protecting the exemptions that allow them to collectively set prices. However, unlike these other transport industries, liner shipping is the only major international goods transport industry that has retained comprehensive anti-trust immunity for price-fixing.

120. The unique features of the liner shipping industry cited by carriers include high and “lumpy” capital investment costs, uneven demand (both seasonally and directionally), marginal costs below average costs in periods of excess capacity, chronic and necessary overcapacity and the need to avert trade-disrupting “destructive” competition. This list of features could be used to describe the principal challenges faced by any industry providing guaranteed and/or scheduled services – and certainly describes the situation of all fixed-schedule transport providers. Companies in the pipeline, rail and air transport sectors also face proportionally large capital outlays (e.g. rail companies in several OECD countries must pay for their rolling stock and the rail networks on which they run) and considerable seasonal and directional fluctuation in demand (figure 4.x illustrates capital outlays of three transport sectors). With the notable exception of carriers, there seems to be a growing consensus that, as stated in a US Department of Transportation study, “(the) technological characteristic(s) of liner shipping (are not) so unique as to receive its current special treatment”.

121. In particular, shippers are quick to point out that the other transportation intermediaries they work with have faced deregulation without experiencing the disastrous consequences that Conference carriers say are inevitable. While United States freight rail deregulation has resulted in large-scale consolidation, increased efficiency, lower rates and greater customer responsiveness, it has not experienced the downward spiral of “destructive” competition that rail operators predicted. Similarly, price-fixing in the road haulage sector of both the United States and the United Kingdom has been dis-allowed since deregulation and

neither of these countries have suffered from the wide imbalances in service provision that many road operators said would result. While capital costs are typically proportionally smaller in the trucking sector, the variety of specialist vehicles requiring higher investment outlays and uneven seasonal and directional goods flows has parallels in the liner shipping sector. The European Shipper’s Council points out that the road haulage industry illustrates that “active price and service competition is not inimical to the provision of reliable services”\(^{45}\). Finally, shippers world-wide can depend on regular and efficient air-freight services without this industry having recourse to price-fixing among competing firms.

**Figure 4.1**

Cost Structure: Examples from the Transport Sector

Source: Compiled from Transportation Canada, Stopford, 1997 and CI online

4.1.3.4 **“Destructive” Competition: Marginal vs. Average cost pricing**

122. A transport provider offering an advertised regularly scheduled service must deliver that service regardless of the number of “clients” it has at the time of departure. In the Liner shipping case, a ship scheduled to depart must depart irrespective of the number of containers it has on board. In times of over-capacity, any additional container that takes an otherwise empty place will be accepted and the price will be set at a price that could be as low as the marginal cost of handling that container. However, when supply exceeds demand, it is likely that this short-run marginal cost is below the average cost of providing the service string.

\(^{45}\) ESC, 2001
123. Figure 4.2 illustrates the marginal pricing problem as described by supporters of anti-trust exemptions. In this case the only additional cost of accepting another container is the cost of handling that container ($400/TEU) until the ship reaches full capacity at which point, the marginal cost rises to $2300/TEU which accounts for the cost of chartering a new vessel and/or hiring slots with a competing firm. At 77% capacity (3500 TEU’s out of a maximum of 4500 TEU’s) and in a market characterised by more supply than demand (Demand 1), carriers may be tempted to fill their remaining slots by bidding against other carriers until they reach their marginal cost ($400)/TEU. At this point the carrier would lose $700 per container carried since the average cost of handling a container (taking into account the costs of operating the ship) is $1100. When demand outstrips capacity (Demand 2), however, carriers will align their rates on the higher marginal cost of $2300/TEU since this is what they would face if they would accept the 4501st container. At this level, the company faces average costs of $700/TEU therefore ensuring a surplus of $1600/TEU.

4.1.3.5 Average costs: Vessel Purchase vs. Slot Chartering

124. As illustrated in the above example (and as described by carriers), carriers’ marginal costs are assumed to be flat until the full capacity of the ship is reached at which point they jump up to a much higher level that takes into account the addition of a new vessel (or vessels). The average cost of providing a service string is also calculated on the assumption that capacity can only be added in whole-ship units (e.g. by adding the full capacity of a new or time-chartered ship at a time). However, carriers are increasingly turning towards more flexible arrangements to add capacity in less-than-whole-ship units, in particular through the use of slot charter or slot exchange agreements. When a market is characterised by
overcapacity, it makes more sense to purchase slots on existing vessels than to build and/or charter a whole string of new vessels. The World Shipping Council argues that these slot purchase agreements are an important aspect of the industry since they:

“...produce operating efficiencies and reduce costs. They have allowed participating lines to expand their service networks, reduce operating costs and optimise capital investment. They have also made it possible for carriers to enter new trades by sharing space with other lines rather than having to incur 100 percent of the costs and risks of developing their own string of ships in a liner service.”46

125. Slot chartering allows carriers to respond flexibly to demand without necessarily purchasing a new vessel. While the average cost of providing a service string based on the purchase of one or several vessels is indeed high, carriers have the option of chartering space at a much lower average cost curve thus enabling them, in theory, to close the gap between average and marginal costs.

4.1.3.6 Price variability and cost recovery on average

126. The market cycle that the liner shipping industry faces is fundamentally the same as that faced by other capital-heavy industries. Inefficient capacity and/or carriers would be forced out of the market in times when forecast future demand is low. This would reduce overall capacity and increase utilisation of the remaining capacity. When forecast future demand becomes sufficiently high, new capacity from existing and/or new carriers would come on-line to take advantage of the higher rates. When carriers are considering adding new capacity they make an assessment whether the money gained in times of high demand will allow the carrier to see through periods of low demand.47

127. Although the price for a marginal unit of cargo may vary widely according to the economic climate and the imbalances in trade, short-term fluctuations in price signals are irrelevant for decisions about whether to add or remove capacity. In addition, carriers and shippers – can seek to reduce the disturbances linked to supply/demand cycles through various means (e.g. by chartering space and/or “fixing” prices contractually through carrier-shipper service agreements). Historically, however, carriers have sought to mitigate the negative impacts by bypassing discussions with shippers and fixing prices amongst themselves.

128. Figure 4.3 illustrates the effect of price-fixing in a situation where marginal costs are below average costs. Rates are fixed at a level such that the carrier can expect to reap what it deems a reasonable rate of return. Since other carriers agree to this tactic, carriers will not seek to underbid each other and rates remain at this level. At the same capacity as in the previous case, the carrier can expect to make a slight surplus (P1-AC) since the rate charged is above the carrier’s average costs. As demand goes up, the carrier can expect to make more of a surplus until the ship is full. However, unlike in the previous case, as demand outstrips supply the carrier finds itself operating under its new marginal cost of $2300 (at P2). The carrier has a strong incentive to revise the fixed rate upwards (or find an alternative strategy for increasing the amount paid per TEU moved). Price-fixing is said to smooth out the price volatility inherent in the marginal cost-pricing scenario. The theory is that the inefficiencies inherent in fixed-pricing are the “price” to pay for frequent, scheduled and stable ocean shipping services.

46 WSC, 2001
47 Although, alternatively, carriers might choose to “cushion” their losses with revenues from other sources (from other revenue streams and/or subsidies.
However, three points must be stressed when looking at the theoretical benefit of Conference price-fixing. The first relates to the reality of price-fixing in a non-homogeneous conference, the second relates to the inherent instability of such a system in the real world, and the third relates to liner shipping’s historical dependence on this strategy.

**Figure 4.3**

Liner Pricing: Single Carrier with Price Fixing

At 77% capacity and with a fixed rate of $P_1$, carrier operates at a surplus ($P_1 - AC$).
4.1.3.7 Not all carriers are equal...

130. As explained above, Conference pricing, in theory allows carriers to charge rates more in line with their average rather than marginal costs in times of low demand. However, not all Conference members are operating at the same efficiency and they therefore face different average (and to a certain extent, marginal) cost curves as illustrated in figure 4.4. Figure 4.5 illustrates, for example, the return on investment performance of those members of the Far Eastern Freight Conference (FEFC) publishing their accounts. One can see that notable differences exist between the ability of the best and worst performing lines to produce economic returns.

131. Indeed, within any given conference (or amongst the members of any given discussion agreement) significant differences exist between the performances of individual lines. Conferences have historically aligned their rates on their least efficient members\(^\text{48}\) thus allowing inefficient operators to ensure their livelihood while efficient operators reap benefits stemming from rates that are above their costs. This is clearly inefficient because the savings achieved by efficient lines are not reflected in final prices.

\(^{48}\) CI, “Easy as ABC” 03/2001 – quoting a former K-Line Executive.
In the illustration given in figure 4.3, at 77% capacity and conference rate P1, all carriers except for carrier A (especially carriers D, E and F) come out covering at least as much as their average costs – hence the attractiveness to them of price-fixing. In this example, all carriers except A could theoretically charge less and therefore their surplus represents a commensurate loss for shippers – unless one views this surplus as the “price” of fielding all the disparate ships necessary for the Conference’s service schedule. This argument can be turned around by saying that this surplus is in fact the price of keeping inefficient tonnage in the industry. With freight rates more in line with efficient carrier’s costs, inefficient ships would be scrapped and the withdrawal of inefficient operators would liberate their tonnage to charter and second-hand markets. Certainly fewer carriers would remain although their rates would be more competitive. Some argue that this would give rise to quasi-monopoly power among the remaining industry actors. This is a valid concern yet it is hard to see how the current system where multiple actors are allowed to fix prices is preferable to an industry characterised by fewer actors and strong anti-trust enforcement. Many industries are indeed characterised by such a system (a few economic actors operating in an effective regulatory framework) and OECD countries (and others, through the WTO process) are equipped to deal with possible market abuses through national anti-trust legislation and international arbitration.

Ultimately, however, the inefficiency of this type of pricing mechanism is only relevant if the resulting prices are able to “stick” in the market. For this to happen, one of two things must occur. Conferences must either have enough market power and internal discipline to impose their prices, or independent operators must tacitly or overtly construe to “peg” their prices on the conference/discussion agreement rates.
Box 4.1: What Do We Mean By “Destructive Competition”? 

One key argument put forward by the supporters of anti-trust immunity for conferences is the notion that co-operation amongst carriers is essential to prevent “destructive competition”. It is therefore essential to understand this notion of “destructive competition”. What is it? How does it come about? Is it harmful to the consumers of shipping services (i.e., the shippers)? Did it occur in the past, and does it still occur today?

Unfortunately, the economic models of “destructive competition” put forward by supporters of antitrust immunity are unconvincing. This box seeks to set out a simple coherent economic model which seems to capture the important features of destructive competition.

_The Shape of the Marginal Cost Curve_

Let’s start by looking at the economic models of destructive competition put forward by supporters of antitrust immunity. As this paper has discussed, one line of argument is based on the shape of the marginal cost curve. The marginal cost of carrying an additional container is very low until a vessel reaches its capacity. At capacity, the marginal cost of an additional container is very high. Therefore, if competition is intense the price for marginal cargoes will fluctuate and, if demand is low, may not cover the average costs of operating a vessel. Proponents of this line of reasoning argue that shipowners will add capacity when prices are high. Conversely, when demand is low, with price below average cost, shipowners will make a loss, leading to bankruptcies and withdrawal of capacity. In this model, “destructive competition” refers to the tendency to cycle between episodes of over and under capacity with prices alternatively above and below average cost.

The problem with this model is that it assumes that carriers behave myopically. In practice, the decision to add capacity does not depend on the price today but rather on the forecast of price in the future, over the lifetime of a new vessel. Temporarily high prices today are no more an incentive to invest in new capacity than temporarily low prices are an incentive to withdraw capacity. In a stable industry, prices may fluctuate widely from year to year without inducing either widespread bankruptcies or excessive new entry. Of course, in practice, bankruptcies may occur. But these are the result of either inefficient operation or surprise events. Bankruptcies due to inefficient operation are not undesirable – on the contrary they are an essential part of the competitive process. Bankruptcies due to unusual events that could not be foreseen by investors are, by definition, exceptional events. In other words there is no reason to believe that, in an industry with capacity constraints such as liner shipping, there is a systematic tendency towards cyclical over or under-investment.

_The Notion of the Empty Core_

Another line of argument put forward by the supporters of antitrust immunity is that destructive competition arises because of the presence of the so-called “empty core” in the liner shipping market. A market has a “core” if there is a set of transactions between buyers and sellers such that there are no other transactions which can make some of the buyers or sellers better off. Such an outcome is “settled” in the sense that no group of buyers and sellers can get together and come to some agreement which disrupts the original agreement. In a market with an empty core no matter what outcome is proposed there will always be some buyers and sellers which can get together and make a deal which disrupts the original proposal.
It is clear that the empty core problem might apply to the liner shipping sector. Suppose a particular trade is such that when two ships service the route, the market price is above average cost, while when three ships service the route, the market price is below average cost. Suppose that three different carriers want to serve this route. Since demand is such that only two carriers can survive in the market, one firm will always be left out. If the other firms are making profit, the firm that is left out could (in this theory) seek to negotiate a deal with the customers of the other carriers, disrupting the original arrangement. The only possible stable outcome is when all firms are making zero profits, but, by assumption when all three firms are in the market, all must make a loss.49

Two studies stand out among the attempts to model Liner markets using the “empty core” approach. The first, made in 1989 by Sjostrom, relies on a highly simplified model of liner markets and tentatively finds that:

“The results [of the econometric analysis], although certainly not definitive offer further evidence for the proposition that market arrangements that appear to be cartels may be attempts to solve the problem of the empty core”.50

The second body of work by Pirrong, supports Sjostrom’s findings and points to the longevity of Conferences in the face of relatively easy entry as support for the theory that price agreements are a response to the “empty core” situation.

“the ability of cartels to survive the constant pressure of entry is clearly at odds with the view that cartels are inefficient monopolisers… As long as the Conference attempts to raise prices above the level that generates normal profits for the efficient set of vessels, new firms will enter profitably. Unrestricted entry implies that colluders will earn only normal profits. So why collude in the first place? Core theory answers that riddle: collusion is an efficient response to competitive chaos”51

Both of these studies, and more generally, the applicability of the “empty core” approach to liner shipping have faced significant criticism on the part of certain government regulators and economic theorists.52 The principal difficulty faced by this approach is the fact that it is difficult to find real-world empirical support for its conceptual appeal. For example Sjostrom points to price fixing as an efficient response to the “empty core” problem, however, price-fixing, at least hard-core price-fixing as practised by Conferences, is on the wane due to new regulatory frameworks in many trades, and in the United States trades in particular. Whereas in the past, carriers sought to provide trade stability by setting prices among themselves, this same stability, as expressed in one-year service contracts, is being achieved through negotiated agreements with shippers. Current industry trends certainly do not support the antiquated notion that price-fixing is the only and or most efficient strategy for ensuring stable and efficient liner services.

Another example of the difficulty in applying the “empty core” hypothesis to liner shipping is the fact that the model postulates that the longevity of the Conference system is strong evidence of its necessity in order to respond to structural instability in the sector. While it is true that Conferences have been a feature of liner shipping for over one hundred years, this longevity only relates to the institutional arrangement itself and not to individual conferences (that typically only last a few years) and/or individual conference membership (that fluctuates along with carriers’ business strategies).53

49 . The empty core problem can arise in a market where “(1) Demand is uncertain or periodic; (2) Plant capacities are large relative to demand; (3) Plants exhibit increasing returns to scale; (4) Plants have fixed capacities; (5) There are avoidable fixed costs; (6) It is costly to store the produce”. McWilliams, 1990

50 . Sjostrom, 1989

51 . Pirrong, 1992

52 . See, for example, United States Department of Justice, 1990

53 . Shashikumar, 1995
More generally, however, the problem with the empty core notion is that, in the case of liner shipping, proponents make the assumption that the presence of the empty core implies a particular and undesirable form of market behaviour. For example, proponents might argue that the absence of a core in the market just described will lead to an endless cycle of price fluctuations and entry of new capacity and exit of bankrupt firms as the three firms seek to contest this market. The empty core concept is a theoretical notion of equilibrium which says nothing about what behaviour will arise in practice. What is the most likely outcome in the market just described? The two existing firms in the market are unlikely to passively give up their market share in the face of new entry. Foreseeing this, the third firm will not enter the market, even though the existing firms are making excess returns. This is an illustration of result which has long been recognised by industry economists. What is important for the entry decision of the third firm is not the existing market price but the market price post-entry. If the third firm can foresee that its decision to enter will force the price down below average cost he will not enter. There is no cycling of entry and exit.

Are we then left without a model of destructive competition? Not necessarily. Consider the following model:

Suppose we have a port which is served by a number of shipping lines. Assume that cargo arrives at this port continuously and uniformly over time. Assume also that the cargo owners care only about the time required to get their cargo to its destination and not the ship or the shipping line that carries the cargo. All of the ships are assumed to travel at the same speed. Given these assumptions, the cargo owners will put their cargo on the first ship at the port going to the correct destination.

In this market, is it possible for any one shipping line to maintain a fixed schedule? Let’s assume that one shipping line does decide to sail its ships on a fixed schedule. It then makes an investment in its schedule by advertising the schedule and making it known to cargo owners and shippers. Other carriers can then profit from this investment by running their own ships in such a way that they leave just before the scheduled ships. In this way other carriers can steal all of the cargo of the scheduled ships.

It is straightforward to verify that in this market, it will never be possible for a shipping line to operate according to a schedule – it will not only lose any investment it makes in advertising the schedule, it will also lose cargo to competing lines which time their ships to depart just before the scheduled ships.

In our view, this model captures some of the key elements of “destructive competition”. In particular, competition under these conditions prevents shipping companies from offering a key service that shippers require – a reliable, predictable service. It may also lead to economies of scale – larger shipping lines, with more frequent service are more likely to capture a larger share of the cargo than lines with a smaller number of ships. Shipping lines are also forced to operate smaller, less efficient ships in an attempt to increase the number of sailings. Many of these effects have been seen in the local deregulated bus industry in the UK.

Is there a solution to this problem? There are two possible solutions – one is to ensure that ship departures are spread out in time – to prevent one ship from encroaching too closely on the departure time of another. A variant of this approach was imposed in the bus market in the UK. The other solution is the use of cargo bookings or space reservations. Once a shipper has committed to place its cargo on a certain ship, that cargo is no longer vulnerable to being captured by a ship with a slightly earlier departure time.

This last point makes clear that although this model may have once applied to the liner shipping industry, its relevance for today is limited. Over one hundred years ago, cargo booking procedures were limited. Mail travelled no faster than the fastest ships, making advance reservations difficult. In other words a large
proportion of cargo at the dock was uncommitted to a particular vessel, making it vulnerable to capture by
the first suitable vessel to arrive. Today, with modern sophisticated cargo management systems the bulk of
cargo is committed to a particular vessel. Destructive competition of this type, if it were ever a problem, is
unlikely to remain an issue today.

134. The preceding sections have dealt with the theoretical justification for price-fixing in Liner
shipping and its ramifications for Conference carriers. However, it is difficult to use these theoretical
models of liner shipping to prove or disprove whether or not, absent price-fixing among competitors, the
liner shipping industry would necessarily devolve into “destructive” competition. Liner shipping, as an
industry, has not been exposed to the full extent of free markets for over one hundred years when, as
explained in section 2, the industry faced a unique set of conditions linked to the demise of the sailing ship.
Many have even questioned whether the theoretical problem of “destructive” competition is indeed a
“problem”—citing the similarities between the latter (as described by proponents of price-fixing) and what
many have observed to be beneficial market cycles leading to greater industry efficiency and lower prices
for consumers in other situations. In any case, making the case for or against the claim of “destructive”
competition and below-average-cost marginal pricing would require detailed cost and rate information that
was not forthcoming from either carriers or shippers. Two observations, however, can be made regarding
the link between the theory supporting price-fixing arrangements among Conference operators and the
reality of the liner market.

Observation #1: Conferences are increasingly unable to make their prices “stick”.

135. Efficient Conference carriers have a natural incentive to underprice less efficient carriers in times
of low demand and overcapacity. This situation is illustrated in figure 4.4. As in the previous figure, it
illustrates a typical Conference where several carriers operate at different levels of average costs. The most
efficient of these (for example, Carrier F) can envisage charging a lower rate (P_f) than the Conference rate
(P_C) and still earn a surplus (Carrier F’s freight rate minus Carrier F’s average costs or P_f-AC_f in the
figure). The lower rate would allow this carrier to increase the load factor of its ships (from CAP1 to
CAP2), partly to the detriment of less efficient carriers in the Conference. The same mechanism holds for
the case of an independent operator underbidding Conferences.

136. This model explaining downward pressure on prices assumes that price discipline is weakened by
the ability for opportunistic Conference members to get away with deviating from the official Conference
rate and/or the presence (or threat of entry) of independent operators in the trade. The lack of barriers to
Conference defection (even if temporary) and to market entry is, therefore, a necessary pre-condition for
this model to hold true. A great deal has been said about the “contestability” of liner shipping markets and
most of it points to the fact these markets are not characterised by important barriers to entry. This is not
to say that the markets, as such, are perfectly contestable but rather that important segments of the market,
and in particular, specific trades display relatively few and small barriers to the arrival of competing
carriers.

54. In one econometric study conducted in 1995 (Clyde & Reitzes, 1995), researchers from the United States
Federal Trade Commission estimated that trades where such deviations from Conference pricing were
allowed would experience an approximately 19% drop in average freight rates. This finding is consistent
with the model outlined in figure 4.6 and is supported by recent trends in freight rates.
55. Meyrick, 1999 and Shashikumar, 1995
The downward pressure on rates predicted in figure 4.6 can be confirmed by looking at developments in the industry over the past 15 years. The arrival of the first strong independent operators in the 1980’s signalled the end of a prolonged era of Conference power in the world’s major trades. These newcomers typically underbid Conference carriers and rapidly gained new markets. Faced with this competition, Conference carriers increasingly departed from the agreed-upon conference rate in order to retain or increase their own market share in the face of competition. This trend increased as regulatory changes in certain OECD countries (especially in the United States) have made it easier for carriers and shippers to negotiate service contracts including confidential freight rates. In an environment characterised by the presence of strong independents, more supply than demand and confidential contracting, the power of Conferences to make their rates “stick” has considerably eroded – especially in times of weak demand. Adding to this situation has been the industry’s propensity to build significantly more capacity than demand would warrant.

Conference price-fixing is becoming less and less relevant to many carriers’ business strategies as they seek more effective ways of ensuring their survival in a changed environment. The explosion of Alliance agreements, slot charter arrangements and mergers and acquisitions all point to carriers seeking market alternatives to the traditional conference price-fixing agreement (see figure 4.7). However, the price-fixing reflex has not been set aside by some carriers as they seek to “discuss” and suggest common pricing and incidental charge levels through discussion agreements.
139. The second observation is really a question.

Observation #2: If Conference power is waning, why retain anti-trust immunity for price-fixing at all?

140. Given that traditional rate-fixing Conferences no longer seem to be able to ensure and/or enforce strict rate compliance, why are carriers so intent in protecting their immunity from anti-trust regulations? Again, without specific input from carriers on their particular cost models, it is difficult to provide a detailed answer to this question.

141. Preserving the ability to fix prices allows Conference carriers to set a common “benchmark” off which to price. Preserving the ability to discuss sensitive rate information among members of a discussion agreement similarly allows carriers to signal to each other a non-binding “benchmark”. As pointed out by carriers:

“insofar as published tariff rates are concerned, they largely serve nowadays as benchmarks for the negotiation of steep discounts reflected by confidential service contracts, time-volume rates and, in the case of TACA, independent action rates. The market nevertheless whispers and if one’s ears are attuned, one hears them…”

56

142. First off, in the case of discussion agreements, “market whisperings” as alluded to above, seems a rather understated and innocuous description of the rate discussions that take place among competitors within the structured setting provided by these agreements – the market isn’t whispering, carriers are. And there are other reasons why carriers would wish to retain anti-trust immunity for price fixing.

143. The full “benchmark” rate principally applies to occasional shippers who do not have the size or regularity necessary for a longer-term service contract where discounts can be granted. Anti-trust immunity also allows carriers to agree on common ancillary surcharges. Also, from a carrier’s perspective, retaining anti-trust immunity in less competitive trades may allow them to keep rates from falling as they might under competition.

144. Most importantly, however, is the fact that competition in a market where price-fixing is allowed will not necessarily ensure a fully competitive outcome. As can be seen in figure 4.4, efficient Conference and independent operators have every incentive to price below the Conference rate and above their average

56. TACA, 2000
costs thus still ensuring a surplus over the competitive outcome. Pricing off the *conference rate* will enable many inefficient carriers to still ensure adequate returns (given overcapacity), pricing off the *most efficient operators* would force inefficient capacity out of the market and ensure a competitive outcome.

145. Another important issue to consider is that the downward pressure on rates illustrated in figure 4.4 is only valid when the market faces overcapacity. In “tight” markets where demand outstrips supply, carriers can seek to increase their surplus over and beyond what might have been possible without anti-trust immunity. On some occasions, carriers have even sought to take advantage of tight market situations to impose rate hikes on shippers with signed service contracts. In general, rate “spikes” allow carriers to recover their average costs in the long run. However, the downward pressure on rates that comes about in periods of overcapacity is actively resisted by Conferences. One can imagine that carriers are able to benefit more from rate increases in times of high demand than shippers can benefit from rate decreases in times of low demand – precisely because the role of the Conference price-fixing is to avoid marginal cost pricing in those situations. The competitive result, where rate spikes would annul rate troughs, does not come about since there is downward friction on rate decreases imposed by the ability of carriers to fix prices.

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**Box 4.2  When Price-fixing has another name… Capacity Discussion Agreements**

The way in which a company organises itself to deliver services typically is of no concern to competition authorities except in those instances where a monopoly exists. It follows that individual carriers who do not represent a significant share of the market should be able to make decisions as to what level of capacity they wish to make available and modify this supply as trade conditions warrant. It also seems normal that competition authorities should be interested in these actions in those instances where one company’s decision has a significant impact on the entire market.

As pointed out, however, in section 2, decisions to withdraw capacity from a trade are often made collectively on the part of carriers under the aegis of Conferences, Discussion Agreements, Consortia or Alliances. In some cases these decisions involve otherwise independent operators. While it is reasonable to assume that such carrier groupings need to address operational issues, including the co-ordination of capacity offered, it is less understandable why these decisions, when they account for a significant share of the market, should not be open to scrutiny from competition authorities.

Indeed, the more carriers involved and the greater market share represented by the capacity agreement, the less the agreement can be said to be a purely “operational” arrangement. When these agreements impact entire trades, one can reasonably ask whether the intent (or outcome) is simply to manipulate prices by cutting supply relative to demand. The further these agreements stray from single operators and small market shares, the more authorities should seek to restrict their application in order to avoid an anti-competitive outcome.

This is especially true as shippers do not have the same ability to manipulate demand as carriers can potentially manipulate supply under these agreements.
4.2 To what extent is price-fixing the best option for efficient Liner Markets?

Many capital intensive industries (e.g. the power-generating sector, telecommunications, rail and air cargo transport) have in the past argued that they should retain the same anti-trust immunity for price-fixing still afforded to the liner shipping sector. The same issue of below-average cost marginal cost pricing was raised in many of these sectors as authorities sought to deregulate markets and bring about greater efficiencies. In many of these, suppliers sought to band together and set prices amongst themselves for the same supposed “greater benefit” of stability over economic efficiency. Setting aside for the moment that there is evidence that the opposite may be true, at least in certain Liner trades (section 3.2.1.3), it is not at all clear that price-fixing per se is necessary to deliver consistent and co-ordinated services. Indeed, in virtually all of these sectors, governments have seen fit to prohibit price-fixing among competitors. Firms have come up with other, more market-oriented strategies to resolve supply/demand imbalances and consumers have benefited from greater and truer competition. Could it be that liner shipping is the unique exception to this rule?

Many carriers, through their actions are implicitly recognising that price-fixing may no longer be the most effective response to the market conditions they face. Indeed many carriers already operate as either Conference members or independents depending on the particular trade in question. Carriers are under pressure to decrease costs on the one hand and stabilise or increase revenue on the other. Retaining anti-trust immunity in this context can be seen as a stop-gap measure to put off the inevitable – the alignment of rates towards the costs of the most efficient carriers. On the cost side, carriers have sought to achieve lower operating costs through scale (both in ship and in fleet) effects and through broadening the scope of their services through partnerships and mergers (13 of the top 20 operators have formed some sort of strategic partnership). Importantly, carriers have resorted to chartering less-than-shipload space on other partner and, in some cases, competing independent, vessels.

On the revenue side, carriers have sought to better capture shipper value by negotiating service contracts more suited to individual shipper needs. These are significant since they represent a co-operative mechanism whereby carriers and shippers can seek to stabilise market conditions to their mutual benefit. Many carriers have or are developing more value-added services such as logistics management in order to generate other forms of revenue and retain market shares. All of these represent alternative approaches to address the pricing and revenue challenge in liner shipping. One can imagine that as this trend continues, there will be relatively fewer liner operators left. However, all of the changes towards consolidation and greater efficiency in the industry will only lead to greater overall efficiency and consumer benefit if the regulatory framework within which carriers operate disallows anti-competitive practices such as price-fixing among erstwhile competitors.

More generally, a substantial weakness with the current state of affairs is that the ability to fix and discuss prices is not counterbalanced by regulatory control over those prices as is typically the case in other non-competitive sectors. If the argument is that price-fixing is necessary and that more competition is undesirable (a questionable view) then economic regulation by an independent regulator should also be required. This seems a less desirable outcome than removing anti-trust immunity.
### Summary: Section 4

- Carriers have delivered better quality and more shipper-responsive services in recent years. This improvement in shipping services has not come about because of price-fixing, but, rather, has accompanied a decline in Conference power and an increase in competition.

- Marginal-cost pricing is unsustainable only as long as overcapacity exists in the market. As inefficient capacity exits the market, marginal costs become more in line with average costs and carriers cover their costs. Conference pricing, by its nature, acts to reduce the exit of inefficient capacity.

- As competition increases in many trades, Conferences are becoming less and less relevant to carriers’ business strategies. Price-fixing is no longer a sustainable option (in the sense that Conferences can make their prices “stick”) and only serves to act as a brake to keep freight rates from becoming aligned with those of the most efficient carriers.

- Conference price-fixing seems to be less and less a feature of liner markets as carriers have sought to address potential instability in the sector by actively negotiating medium-term service contracts with shippers. This represents a break with past practices where Conference carriers fixed prices among themselves without seeking shipper involvement.

- Current trends in the liner shipping sector (e.g. increased participation by independent operators, greater ease of “independent” action by conference carriers, increase in slot chartering agreements, massive rise in service contract negotiations, etc.) all support the contention that price-fixing is not an inevitable feature of a stable liner shipping industry.

- The ability for competing carriers to discuss, agree on and/or fix prices detracts from the ability of shippers and carriers to reach an efficient negotiated outcome when discussing service contracts. Price-fixing, when it remains as an industry “benchmark” does not allow an efficient outcome insofar as rates are still oriented towards inefficient rather than efficient operators’ costs.
5 ASSESSMENT OF THE EFFECTS STEMMING FROM THE REMOVAL OF ANTI-TRUST EXEMPTIONS FOR LINER SHIPPING.

150. Any attempt to assess the impact from the removal of anti-trust exemptions in the liner shipping sector is bound to be speculative, as this sector has co-evolved with these exemptions for its entire history. As described in the previous sections, the relative weakening of the ability of Conferences to fix prices can give some indication as to the probable evolution of the industry absent these exemptions. In the end, however, there is no certainty as to the specific form the industry will take under a different regulatory framework and one can only make educated guesses as to the impacts of these changes on both shippers and carriers.

151. Shippers, carriers and regulators each have their ideas as to the impact of removing anti-trust exemptions. These serve as a useful starting point to assess how the industry might change in a more competitive market environment.

152. Many carriers, consistent with their views on the utility and necessity of anti-trust exemptions for price fixing and rate discussions, feel that the removal of these would have severe and lasting impacts on world trade and consumer welfare. In particular, they believe that the removal of anti-trust exemptions for liner shipping would lead to increased rate volatility and, consequently, service disruptions as below-cost pricing would lead to bankruptcies. Another fear is that a more competitive liner shipping market ultimately would not benefit the most efficient carriers but those best poised to cross-subsidise their liner operations with other sources of revenues. This, they argue, would benefit state-owned and supported carriers and/or large diversified shipping groups. Finally, some carriers and regulators feel that the removal of anti-trust exemptions would lead to further consolidation of the industry resulting in a more monopolistic/oligopolistic market environment.

153. Many anti-trust regulators and a majority of shippers believe these fears to be unfounded. While recognising the possibility of greater rate variance (which, in itself, is not necessarily a negative outcome), proponents for the removal of anti-trust exemptions generally feel that any pro-competitive development of the liner shipping market will lead to lower overall rates and have little impact on service. Furthermore, they point to the experience with regulatory reform and increased competition in other sectors as being generally positive and do not share carrier’s view that their industry is so fundamentally different that more competition will not lead to a similarly positive outcome. They believe that the weight of evidence gathered from past experiences with more competitive markets overwhelmingly supports their contention that competition, not collusion, delivers greater public welfare in the end.

154. It is difficult to arbitrate between these two views but given that there is a general trend towards more competition in the liner market, one can reasonably assume that an extrapolation and acceleration of current trends would result in an approximation of an anti-trust exemption-free market. These trends cover issues of service provision and capacity, rate variance and stability, and concentration and anti-trust scrutiny.
5.1 Service Provision and Capacity

As pointed out in previous sections, the past ten years have been characterised by a reduction of Conference power, a relative increase in competition from both independents and Conference defectors and a generalised decrease in freight rates across all trades. Contrary to what might be expected from carriers’ fear vis-à-vis more competition, these trends have been accompanied by more, rather than less, service quality. This can be seen as a natural outcome of market competition where carriers attempt to attract and retain market share from other competitors by offering the most customer-oriented services. One can reasonably expect that shippers and consumers would continue to benefit from service competition among carriers if anti-trust exemptions for price fixing were removed and markets became even more competitive.

Shippers presently benefit from a “buyer’s” market in liner shipping given current levels of overcapacity. As pointed out in sections 2 and 3, there are many underlying reasons for this overcapacity, including state support for shipbuilding leading to exceptionally low (and attractive) costs for newbuildings. Carriers are also seeking to achieve greater economies of scale through the purchase of larger vessels. However, The attraction of low rates and the need for greater economies of scale are not, in themselves, sufficient reasons for carriers to purchase new capacity. Their experience and market research must also lead them to expect that the new capacity will ultimately pay for itself.

Market forecasts are notoriously tricky and companies can often miss the mark. It seems, however, that several bouts of new ship ordering in the recent past have occurred despite many industry observers’ warnings of impending and lasting overcapacity. One can assume that in the past, many carriers have made new capacity purchasing decisions under the implicit assumption that they would have some control over prevailing freight rates through Conference price-fixing and/or rate discussions. While most carriers can no longer expect to set precise rate levels for an entire trade, they can reasonably assume that market rates will not completely bottom out as long as competing carriers can discuss and suggest mutually beneficial pricing guidelines for freight rates and ancillary surcharges. Were anti-trust exemption for rate discussions removed, it would follow that many carriers would think twice before taking advantage of low newbuilding costs.

Finally, it is becoming increasingly obvious that carriers no longer view the provision of new ships as their sole option for increasing supply—many now turn to more slot chartering or sharing agreements to more flexibly respond to new demand.

Given these trends, what might one conclude regarding the impact on supply of removing anti-trust exemptions for common pricing or rate discussions? Carriers would make investments in new supply only when they could make the commercial judgement that, in a competitive market environment, their investments would pay for themselves. This means that the level of oversupply seen in past years would likely diminish, especially as many carriers pursue slot chartering agreements to bring on new capacity at less-than-whole-ship (or service string) units. One might expect that liner shipping supply might come more in line with demand for services.

5.2 Rate Variance and Stability

Freight rates in the major trades already respond to competitive pressures— they rise when supply becomes tight and fall when demand relative to supply is low. As pointed out in section 4, however, the ability for carriers to fix and/or discuss pricing guidelines potentially biases the pricing towards the least, rather than the most, efficient operators. This means that rates never fall as low as they might in times of oversupply (to protect inefficient operators) and can rise much above where they might otherwise settle in
a more competitive environment (given that carriers covering a majority of concerned trades can discuss and suggest pricing structures).\textsuperscript{57}

161. Based on what can be observed in Liner markets as competition has increased over the past decade, one can reasonably imagine that rates will continue to fall to become more in line with the most efficient operators’ costs. Rates, however, will not fall indefinitely as supply gravitates more towards levels of demand. Ultimately, freight rates will vary following the supply/demand cycle. The lows will likely be lower in the past and the peaks not as high. This view is supported by evidence provided by the European Shippers Council indicating that the sea routes most open to competition tend to reflect the most, not the least, stability.

5.3 Concentration and Anti-trust Scrutiny

162. Several opponents of the removal of anti-trust exemptions point to the risk of increased market concentration that might occur in a more competitive environment. This concentration, however, has been underway for several years as carriers have sought to seek cost savings in the face of competition through alliances, mergers and other co-operative arrangements. In mid 2001, the top four alliances, plus the five or six other top twenty carriers control 80 per cent of fully cellular capacity. Given that in late 1997 the top 20 container lines at the time accounted for only about 48 per cent of the cellular fleet, it is clear that substantial concentration has taken place in the last four years – despite the existence of anti-trust exemptions.

163. Also, the announcement in late September of a possible new alliance between the shipping lines that currently participate in the United Alliance, and the Cosco/K Line/Yang Ming alliance would control a fleet of around 650,000 TEU, and would represent a substantial increase in concentration in the liner sector. The new alliance would challenge both the Grand Alliance and Maersk-Sealand in size, and would reduce the number of individual players in the sector.

164. One can reasonably assume that the removal of anti-trust exemptions in the sector would do little else than slightly accelerate an already existing trend towards greater industry concentration. This would likely have the following impacts:

165. On the positive side, carriers would continue to enhance the variety of services, and the coverage of those services, that are now available to shippers. The major operators, through their growing list of subsidiaries could also spread their service offerings to niche markets which earlier may have been subject to haphazard and unsatisfactory services. Greater economies of scale and of scope would enhance the ability of carriers to offer multi-modal door-to-door services.

166. However, as well as some positive aspects, greater concentration also carries with it some potential problems. First, any reduction in the number of participants in any given route or trade will also mean reduced choice, and fewer options for shippers. This, however, does not mean that there will be a reduction in competition insofar as the remaining operators strive to increase the attractiveness of their services to shippers and avoid the temptation to set and or otherwise jointly influence market prices. Many global industries are characterised by increased concentration and anti-competitive outcomes are kept in check through the action of competition authorities. Liner shipping would likely follow this trend as

\textsuperscript{57} These episodes are referred to as “rate recovery” in carrier parlance, a term that implies that there is a historic freight rate that the market should artificially gravitate towards – a freight rate that, incidentally, was often reached when carriers could better set market rates in the late eighties and early nineties.
industry oversight would be carried out by the appropriate national and/or international bodies that have responsibility for protecting consumers from industry abuses.

5.4 Overall Assessment

167. Current trends in the liner shipping sector are indicative of how increased competition might impact liner markets. One can reasonably expect that removing anti-trust exemptions for price-fixing and rate discussions, insofar as they contribute to more competition in the liner industry, would lead to an acceleration of current trends relating to service quality, decreasing rates and increasing industry concentration. The possible exception is that capacity might come more in line with demand and that rates might become more, rather than less, stable. Increasing concentration in the sector, in itself, would not necessarily have a detrimental impact as long as regulatory authorities treated liner shipping as any other globalised industry.
6 CONCLUSIONS AND RECOMMENDATIONS

168. This paper has sought to investigate three issues in relation to competition policy in liner shipping that emerged from the May, 2000 OECD workshop on Regulatory Reform in Maritime Transport. These were:

1. The positive and negative impacts to both carriers and shippers of common pricing under anti-trust exemptions.

2. The impacts of conference, discussion and stabilisation agreements on both carriers and shippers.

3. The possible effects stemming from the removal of anti-trust exemptions for liner shipping.

169. These are the conclusions that can be drawn from this investigation.

The world has changed since 1875...

170. The liner shipping industry is not what it was over one hundred years ago when the principle of Conference price-fixing was first institutionalised. The sailing ships that engaged in rate competition with new and more expensive steamships have long since become historical curios. The advent of containerisation and the arrival of new strong and efficient independent operators have successively disrupted relatively tight-knit Conferences. Countries that, at first, supported the principle of rate-fixing within Conferences, have increasingly sought to reduce the power of liner Conferences and provide shippers with countervailing powers.

171. Carriers, shippers and regulators have, in the past centred their discussions on the ability for carriers to collectively set and discuss rates. Today OECD countries generally provide liner Conferences with anti-trust immunity for rate-fixing and some extend this immunity for rate discussions and capacity agreements among competitors. However, over a century after the first Conference pricing agreements, one may reasonably ask whether such efforts to discuss, control and manipulate supply conditions in liner markets are justified and/or relevant to the pursuit of broad public welfare goals.

Liner shipping is as unique as any other industry...

172. Many have portrayed the liner shipping sector as “unique” and therefore requiring special treatment under competition law. This is true insofar as any industry is unique and certainly there are convincing reasons to allow carriers to co-ordinate certain operational aspects linked to the provision of ocean shipping services. However, it is more difficult to understand why liner shipping should be treated more favourably or even differently than other transport providers with respect to price-fixing and rate discussions. The cost structure of the industry is not significantly different from that of other transport industries and returns in liner shipping are similar to those of other scheduled transport providers. While it is true that ships cost considerably more than say, a new lorry or locomotive, each ship can also earn significantly more revenue. Seasonal and directional trade imbalances are not unique to the liner sector and...
must be faced by most transport service providers – in some cases these imbalances pose much more of a problem since some vehicles are not as standardised as container ships. In the end, liner shipping is about as “different” from other like industries as, for example, trucking is to freight air services or freight air is to rail freight – with the exception that price-fixing is allowed in liner shipping and nearly universally disallowed in these other industries.

No consensus exists as to liner shipping’s alleged propensity towards “destructive” competition.

173. It is difficult to address the issue of “destructive” competition in liner shipping without access to specific cost data from carriers. This paucity of data is not matched by an equal paucity of sometimes-contradictory theories on the matter. Indeed, while many models of liner markets have been developed, no consensus exists on the most appropriate one for describing the dynamics of liner shipping. Two points are important to keep in mind, however.

- Some have argued that the economics of liner shipping are unique in that overcapacity is an unavoidable feature of the sector and that this, in turn, leads to marginal cost pricing at a level below the average costs of providing the service schedule. The “problem” of marginal cost pricing in liner shipping only exists in times of overcapacity. As inefficient capacity exits the market, marginal costs become more in line with average costs and carriers can cover their costs. Conference pricing, by its nature, acts to reduce the exit of inefficient capacity.

- As competition increases in many trades, Conferences are becoming less and less relevant to carriers’ business strategies. “Hard-core” rate-fixing is no longer a sustainable option (in the sense that Conferences experience difficulty making their prices “stick”) and only serves to act as a brake to keep freight rates from becoming aligned with those of the most efficient carriers.

The recent fall in freight rates can be seen to have occurred precisely because Conference power has weakened.

174. Average freight rates in all of the major trades have decreased over the past decade. However, this decrease in freight rates is from a historical high reached in the mid-1980’s. The steepest declines in observed freight rates have coincided with a decrease in Conference power in the face of competition from strong independent operators and the implementation of competition-enhancing legislation in the United States trades.

In fact, liner shipping is now arguably more competitive than at any time in the past 126 years ... and predicted trade instability has not emerged.

175. Despite increased competition, many carriers, especially the top performing ones, are able to generate financial returns at least as good as, if not better, than other transport industry service providers. Widespread bankruptcies have not occurred and the industry is not becoming characterised by more service instability. More competition in liner shipping, far from leading to less reliable services has led to increases in service innovation and quality.

New carrier strategies are emerging in order to ensure the stable supply of liner services.

176. As Conference power has weakened, carriers have sought to develop alternative strategies to ensure their ability to deliver regular liner shipping services. New and more flexible inter-carrier relationships have emerged allowing carriers to reduce their costs, widen their scope and increase service quality. Consortia, alliances and mergers all seek to gain greater operational efficiencies and ensure carrier
profitability in the face of growing competition. Slot-chartering agreements have allowed carriers to flexibly address changes in demand at lower costs.

In particular, there is a emerging trend towards co-operation with -- rather than co-ordination against -- shippers

177. The changes brought about by the United States Ocean Shipping Act of 1998, and in particular, the emergence of confidential contracting, signal a significant change in the regulatory framework of liner shipping. Whereas in the past, carriers have sought to “stabilise” liner markets by fixing prices among themselves, under OSRA carriers and shippers seek to determine mutually agreeable terms. This means that price-setting in the market has shifted from the collusive sphere of carrier rate discussions to the contractual outcome of carrier-shipper negotiations. This seems a more commercially oriented and sensible method of setting liner rates.

Yet problems remain…

Residual price-fixing artificially keeps prices from aligning with the costs of the most efficient operators.

178. Conference and suggested discussion agreement tariffs and ancillary surcharges now serve principally as “benchmark” values for rate negotiations. Final negotiated rates are referenced to and influenced by these fixed rates rather than set in relation to the costs of the most efficient operators. Furthermore, independent operators have also been thought to use conference/discussion agreement rates and ancillary surcharges to set their own prices, which may be above their costs. Confidential contracting has made the “discount” off the conference/discussion agreement rate more opaque but it has not changed the fact that the price is set in relation to that tariff and not solely in relation to carriers’ own costs. The remnants of price-fixing in the liner trades, even in an environment of greater competition, introduces a distorting element in the liner rate-setting exercise that impacts shipper costs.

Carriers have not lost the price-fixing reflex:

179. This is especially true in regard to conferences in non-US trades, discussion agreements in non-EU trades and capacity agreements everywhere.

180. Non-US trade conferences are not concerned by the legislative changes brought about by OSRA. This means that conferences can still set rates more effectively than in the US trades. While competition from independents has also increased in many of these trades as well, the lack of one-on-one confidential contracting makes it more difficult for carriers to defect from conference pricing. In this environment, independents have every incentive to strongly price off of the conference rate, which represents a more visible and robust “benchmark”.

181. The EU does not extend anti-trust exemptions for Conferences to discussion agreements. This means that among the three trades, only in the Pacific do these agreements benefit from anti-trust exemptions. However this poses problems as this is also the world’s largest trade. The first is that competing carriers are given the ability to freely discuss all issues of concern to the trade, including rate and market information, and issue general “voluntary guidelines” for rate levels. This type of organisation bears a striking resemblance to a soft cartel where key messages can be communicated and acted upon by erstwhile competitors. This is unfortunate since, even if such interactions do not take place, carriers open themselves to this criticism by the very structure and scope of these discussion agreements. While it is true that shippers can contractually prevent carriers from discussing negotiated rates, the reality is that many carriers do not encourage the confidentiality of rate information and/or exempt themselves from this confidentiality when discussing rates with other carriers. Finally, the ability of carriers to discuss, in aggregate, rate levels emerging from negotiated agreements can still be seen as prejudicial to shippers.
182. Carriers also argue that they need to retain the ability to organise the operational aspects of running service strings with other carriers. This paper has not challenged that contention and indeed agrees that carriers should be able to discuss operational details. However, sometimes these operational discussions, especially those pertaining to the co-ordinated withdrawal of capacity, can have a direct impact on, market conditions and prevailing rates. Capacity agreements that involve one clearly-defined operational grouping (say a Conference, Consortia or Alliance) can be seen to deliver operational benefits. Capacity agreements that go beyond operational groupings (or, if within an operational grouping that has a large market share) can be seen to have the anti-competitive effect of manipulating rates through reducing overall capacity. In this case, such operational arrangements would benefit from anti-trust review.

Recommendations: A way out of the impasse

183. The debate on surrounding the anti-trust exemptions given to the liner shipping sector is a highly polarised one where neither party is likely to radically change their view. The positions are hardened and ingrained and, while certain individual shippers and/or carriers may be persuaded by the opposing sides arguments’, the existence of strong trade associations ensures that the voice of the lowest common denominator will generally prevail.

184. And who can blame them? Carriers generally feel they have everything to gain by perpetuating the century-old organisation of their industry – and this review indicates that they probably do benefit. Shippers, on the other hand generally feel they have everything to gain by doing away with the anti-trust exemptions granted to liner shipping – and this review indicates they are probably right. In fact, the best recommendation this report can make on the issue is that anti-trust exemptions for Conference price-fixing no longer serve their stated purpose (if they ever did), are no longer relevant and should therefore be removed.

185. By extension, voluntary and non-binding rate agreements and discussions would seem to fall under the same category. The ability for competitors to discuss sensitive market information regarding rates and to suggest pricing guidelines potentially serves to distort the market pricing mechanism, despite assurances from carriers to the contrary.

Recommendation:

186. Countries, when reviewing the application of competition policy in the liner shipping sector should remove anti-trust exemptions for common pricing and rate discussions. Exemptions for other operational arrangements may be retained so long as these do not result in excessive market power.

187. Carriers may have legitimate operational needs that require co-operation with other (sometimes competing) carriers. These needs may involve closer working synergies through global alliances and consortia or more trade-specific requirements such as the sharing of ship capacity through slot sharing/chartering arrangements. Countries have in the past recognised this need and have offered carriers protection from domestic anti-trust laws in those instances where these arrangements are not grossly anti-competitive. This report also recognises that some of these arrangements may be necessary and indeed, beneficial, and does not call into question the principle of limited anti-trust exemptions for operational arrangements in liner shipping. This review, however, has not found convincing evidence that the practice of discussing and/or fixing rates and surcharges among competing carriers offers more benefits than costs to shippers and consumers and recommends that limited anti-trust exemptions not be extended to price-fixing and rate discussions.

188. It would be naïve, however, to think that this finding will change carriers’ minds and/or that carrier counter-arguments to these findings will change shippers’ views. Given the degree of polarity in the
debate, it is also unlikely that countries will be able to continue the status quo or, alternatively, radically change it. And yet any commercial arena where such a disconnect exists between service providers and customers calls for resolution.

189. Perhaps a way forward out of this impasse can be built on those points that are mutually agreeable and recognised by both sides. In light of the findings of this report, countries should review their existing regulations and anti-trust exemptions, as appropriate, to ensure that they best take into account changed market circumstances. Such a review should focus on those points that are mutually agreeable and/or recognised by both sides. In particular four points stand out:

1. Both sides agree to the concept of direct negotiations between shippers and carriers.
2. Both sides, based on their acceptance of OSRA and individually negotiated rates and conditions, are not averse to contractually protecting (and rendering confidential) key elements of those negotiations.
3. Both sides are relying less on collectively agreed rates and conditions.
4. Both sides view that carriers can and should seek to co-ordinate with each other on the operational aspects of providing liner services.

190. These four points of agreement serve to frame the following principles that represent the “second-best” way forward on the matter of the organisation of liner markets.

**Principle 1: Freedom to negotiate**

191. *Rates, surcharges and other terms of carriage in liner shipping should be freely negotiated between shippers and carriers on an individual and confidential basis.*

192. Shippers should be able to seek direct one-on-one negotiations with carriers. One form or other of individual contract negotiation should replace Conference collective agreements. Conferences, in the past, have rendered such negotiations more difficult and in some cases have actively worked against this goal. The freedom for shippers and carriers to freely meet and discuss the terms of their relationship should not be constrained by outside parties.

**Principle 2: Freedom to protect Contracts**

193. *Carriers and shippers should be able to contractually protect key terms of negotiated service contracts, including information regarding rates.*

194. Carriers and shippers should be able to stipulate which details of their negotiations they wish to protect from other parties. Carriers should be able to agree that shippers will not reveal negotiated rates to other shippers and shippers should be able to ensure that carriers will not divulge or discuss negotiated rates with other carriers. If both parties can contractually agree on confidentiality terms, these confidentiality terms should be given robust protection. Breach of contractually agreed confidentiality terms should be treated with credible and deterring sanctions. Shippers and Carriers should have the freedom to protect their privacy. In this way, discussion agreements can still operate by focusing on matters that are not considered confidential by shippers or carriers.
Principle 3: Freedom to co-ordinate operations

195. *Carriers should be able to pursue operational agreements with other carriers so long as these do not include price-fixing or confer undue market power to the parties involved.*

Carriers should be able to rationalise their operations in order better to deliver services. However, capacity agreements beyond those necessary for operational reasons are tantamount to price-fixing. While capacity agreements within an existing operational grouping such as a Conference and/or Alliance, can be seen to have an operational character, arrangements further outside of such groupings can be seen to be increasingly anti-competitive. The ultimate expression of the potential anti-competitive impact of these arrangements would be a capacity agreement that covered all (or virtually all) of a trade. Such an agreement would be tantamount to manipulating an entire market and should not be allowed. Countries, therefore, should develop protocols (like the EU’s market share test for Alliances and Consortia) to determine the acceptability of such arrangements. The freedom for carriers to manage their affairs should not lead to abuses of market power.

196. The approach encapsulated in the three principles would go far to remedy the fact that shippers do not have the power to manipulate demand in the way in which carriers can potentially manipulate supply. Of course, an alternative solution to this problem would be to grant shippers anti-trust exemptions allowing them to rig prices in liner shipping markets thus paralleling carriers ability to discuss and/or set rates. This, however, is the worst possible solution. In our view, it is far preferable to remove from carriers the ability to discuss and/or set rates without shippers express consent than to grant parallel powers to shippers.