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Owen Tang, Po-wan Sun,

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Anti-competition of ocean shipping alliances: a legal perspective

Owen Tang and Po-wan Sun
Department of Logistics and Maritime Studies, The Hong Kong Polytechnic University, Hong Kong, China

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Abstract

Purpose – Antitrust exemptions to shipping alliances in the liner shipping sector have prevailed for many years. This study aims to examine anti-competition of ocean shipping alliances from a legal perspective of the USA, the European Union (EU) and People's Republic of China (PRC).

Design/methodology/approach – Adopting the standard "doctrinal approach to legal research and analysis" in legal literatures, this paper reviews landmark court cases and legislations in the USA relating to shipping conference system from its beginning to its erosion, followed by its latest transition to non-ratemaking agreements, with discussions on the EU and some PRC treatments on shipping conferences.

Findings – Although antitrust exemptions to shipping conferences in the liner shipping sector were eliminated in the trades to/from the USA and the EU, there is a lack of evidence of the deterioration found in the viability of liner shipping carriers in both parts of the world trades. For the USA, shipping alliances will shift the focus to sharing resources for improvement of collective operational efficiencies, whereas the shipper groups in the EU have worried that a protected system of sharing information may lead to price fixing conducts among the carriers.

Practical implications – Through the discussions on the legal treatments of shipping conferences from the USA, the EU and PRC perspectives, this paper provides legal researchers with not only a new research direction on raising collective operational efficiencies through resource sharing but also an insight into shifting their research focus from purely price determination to the area of merger.

Originality/value – This paper reviews landmark court cases and related legislations about the treatments of different regulatory regimes, including the USA, the EU and PRC, to explore the illegitimacy of anti-competition conducts in ocean shipping alliances.

Keywords Anti-competition, Dual-rate system, Shipping alliance, Shipping conferences

Paper type Research paper

Introduction

To enhance performance in profit, firms adopt the approach of cost minimization and value maximization. Container shipping firms, also known as liner shipping carriers, provide scheduled, common-carrier type services over fixed geographical trade routes (Ng, 2012). Malcom McLean was the first transporter using containers for commercial sea voyage; his first container vessel *Ideal X* commenced its first voyage in 1956, which carried cargoes between American ports (Farthing and Brownrigg, 1997; Fayle, 1933). Since then, container shipping rapidly spread to every corner of the world (Lun and Browne, 2009).

To earn a nice profit for growth or for survival, firms in the container shipping industry need to make many correct decisions, but the two essential choices are relating to gross

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revenue, namely, price and quantity. In liner shipping, the freight rate represents the price, and the quantity refers to the spaces used in a container vessel. A shipping firm needs to:

- maintain the freight rate at a reasonable level; and
- find sufficient cargoes to fill up the spaces of the vessels they own.

Shipping firms need a reasonable freight rate to cover all kinds of expenses of maintaining the day-to-day shipping operations and pay ship mortgages. Once on voyage, spaces unused represent revenue losses (McConville, 1999). To enjoy the benefits from economies of scale, ocean carriers form alliances to maintain freight rate and fill up the spaces more effectively (Cullinane and Khanna, 1999).

Maintaining freight rate by alliances rather than by market forces may constitute illegal anti-competition conducts; however, different countries passed shipping conference legislation to shield the practices of forming shipping alliances from the challenges of the competition laws (Benacchio *et al.*, 2007). The issue is whether the liner shipping industry should subject their business operation to competition, just like any other industry. The objective of this paper is to examine anti-competition of ocean shipping alliances from a legal perspective of the USA, the EU and PRC, and show the different arguments for and against these shipping conference legislations.

This paper will adopt a very similar approach of legal positivism from Frank Jerome; in other words, it will investigate the law as it is rather than what it ought to be. Wrote Jerome:

> [...] law is what the Court has decided in respect of any particular set of facts prior to such decision, the opinions of lawyers and legal scholars are mere speculations and cannot be treated as law (Jerome, 1930).

Instead of strictly following Jerome's approach to view laws solely as decisions from courts, this paper also include legal pronouncements from legislatures. In investigating the legal perspectives of the anti-competition law, this paper also follows Hart's general observation that law could not be made valid by one single decision. In Hart's opinion, "the validity of law is a matter of collective practices of the courts," and an individual's decision rarely suffices to create a judicial practice of recognition (Hart, 1958).

Ocean shipping alliance

Historically, ocean carriers needed not to cooperate with one another to reach new markets, and probably the only form of cooperation among the liner companies was limited to establishing rates through the conference system.

Shipping alliances, such as liner conference, are rational responses to practical problems faced by the ocean shipping industry. A liner conference system was first used on the Britain–Calcutta trade in 1875 (Kirkaldy, 1914). The object of the conference system is to regulate uneconomic competition. The British liner companies discovered that few carriers could afford to operate on trade lanes that are experiencing imbalanced trade flows, and even fewer carriers can afford unilaterally to expand their networks. These British carriers have realized that they must cooperate despite their desires to operate independently.

Under the ocean shipping context, alliances can be loosely referred to a cooperative operational arrangement between two or more non-arms-length ocean carriers to combine their assets to implement a mutually beneficial strategy. Under such arrangement, sensitive information, such as trade secrets, is not shared because the allied carriers remain separate corporate entities that compete against one another (Das, 2011).

In the USA, another form of shipping conferences emerged. Senator Wesley Jones (1863-1932) proposed a law that mandates only US-built, US-citizen manned and US-flag vessels

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operate in the US coastwise trade, and as a result, the USA passed the Merchant Marine Act of 1920, also known as the Jones Act. Section 27 of the Jones Act deals with "cabotage." Cabotage is a shipping term which refers to the transport of goods between two points in the same country, alongside coastal waters, by a vessel registered in another country (Farthing and Brownrigg, 1997). Section 27 requires that all goods transported by water between US ports must be carried on US-flag ships, constructed in the USA, owned by US citizens and crewed by US citizens and US-permanent residents (Sheppard and Seidman, 2001). The Jones Act even specified requirements for US-flag ships using foreign repair work, which requires that the steel of foreign repair work on the hull and superstructure of a US-flagged vessel be limited to 10 per cent by weight. As a result, the only way for foreign carriers to extend their ocean transportation services to the US coasts is to team up with US carriers through alliances.

Current shipping alliances

The world liner shipping sector has adopted an expansion strategy since the early 1990s, and after 25 years of alliancing and capacity-sharing activities (1992 to 2017) among ocean carriers, the world liner fleet is dominated by a few carriers. In 1992, 30 shipping companies controlled 63 per cent of the world fleet capacity in twenty-foot-equivalent unit (TEU) terms (Sanchez and Mouftier, 2017). To enhance economies of scale to lower the operating cost, liner carriers have used the tools of alliances or mergers and acquisitions to accomplish this end.

Strategic alliance among liner carriers is in essence a form of horizontal integration, and the goal is to increase the capacity utilization rate of those cooperated carriers on certain routes. The common activities include joint use of terminals and empty container repositioning on a large scale. Furthermore, alliance membership imposes restrictions on a member's use of a non-member carrier, and alliance members also enter into agreement concerning terms for severance (withdrawal) via advance notice (Slack *et al.*, 2002).

Even alliance members (unlike conference members) do not engage any common tariff fixing; by the end of 1990's, 50 per cent of the world fleet in terms of TEU were being controlled by six alliances (Varbanova, 2017).

By 2011, maritime researchers agreed that there was a clear net shift and an exponential growth of the concentration. While total fleet capacities were increasing, they were managed by fewer groups (UNCTAD, 2017). To calculate the concentration, maritime researchers tend to use the Herfindahl–Hirschman Index (HHI) to judge whether the control was fairly distributed in the market. A market is qualified as moderately concentrated when the HHI is between 1,500 and 2,500 points. However, the HHI would increase when the numbers of companies in the market are decreasing (Sanchez and Mouftier, 2017).

It seems that when carriers recorded an operation loss, it would move them to the path of fusion. For example, in 2014, the operating losses of CSAV and Hapag-Lloyd were one of the key factors that drove their fusion. In the same year of 2014, CMA CGM, Maersk and MSC proposed the P3 alliance.

Two new alliances were formed between 2016 and 2017, namely, the Ocean Alliance and "The" Alliance. Together with the existing 2M Alliance, the three alliances, which include the top 10 container shipping lines plus the K-Line – the 14th largest container shipping line in the world – collectively control 77 per cent of global container ship capacity (Baltic and International Maritime Council, 2017), leaving a 23 per cent market share for the world's other container shipping lines.

Looking at the regional perspective, the three alliances also control as much as 92 per cent of all East–West trade. As indicated from the following bar chart, the Ocean Alliance will be the dominant player on the East–West routes, with about 34 per cent of total capacity

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deployed on these trade routes, followed by the 2M Alliance, with a share of 33 per cent, and "The" Alliance, 26 per cent (UNCTAD, 2017) (Figure 1).

Shipping economists have observed that the increase in fleet capacity was moving in line with the alliancing activities. Between 2000 and 2010, as the combined capacity of the fleet capacity of the top 30 carriers has been multiplied by 2, reaching 10.81 million TEU, three main alliances, *Grand Alliance* (NYK, Hapag-Lloyd and OOCL), *CKYH Alliance* (Cosco, K Line, Yang Ming and Hanjin) and *New World Alliance* (APL, MOL and HMM), have controlled almost 50 per cent of the fleet capacity as of 2010 (Sanchez and Mouftier, 2017). By April 2017, three main alliances, *The Alliance*, *Ocean Alliance* and *H2M*, controlled a total fleet of 15,862,743 TEU, representing at least 76.6 per cent of the operational market before including the fleet capacities of APL and CSCL in TEU terms (Alphaliner TOP 100, 2017). Besides, two new associations were formed in 2017, namely, COSCO merged with CSCL and CMA CGM acquired APL (NOL); with a decreasing number of companies integrating into fewer but larger alliances, the HHI will be expected to rise exponentially.

During these 25 years, Zim remained the only major carrier that had not joined any alliance, and it has maintained its profitable position by forming partnerships on various routes to avoid the most important trades where the alliances operate, such as Asia–North Europe (JOC.com, 2016).

The low demand and high overcapacity have carried from 2016 to that of 2017, which led to low profitability; as a strategic response, mega alliances were established in 2016 and 2017. The goal is to improve fleet utilization. Some regulators have worried about the risk that shipping lines may exert market power to constrain supply and raise prices in the long run.

Nature of agreement on shipping conferences

The agreement that set up the shipping conference is called the "inter-carrier agreement." Ocean carriers normally create shipping conferences during the era where the carriage capacity surpassed demand. The objective of the shipping conference is to prevent future rate wars that would drive many carriers out of business. The ocean carriers group into associations according to the specific trades or routes they are operating, and they cooperate to minimize competition in freight rate. The contents of the inter-carrier agreement may include provisions that setting common tariffs to control prices, limiting the tonnage

Sources: UNCTAD (2017), Review of maritime transport; MDS Transmodal (2017), www.mdst.co.uk/articles/pages/container_shipping_may_17

Figure 1. Market share by alliances in April 2017 (in terms of deployed capacity) on the East-West container trade

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available in their trade route, distributing shared revenue and/or offering rebates to loyal shippers (Cariou, 2008; Parola *et al.*, 2014).

In essence, shipping conferences belonged to a practice that prevented effective competition among carriers (Kauper, 2002). To investigate whether the shipping conference was by nature anti-competitive and whether it could provide benefits to the international and US shipping sectors, the US House of Representatives committee launched an investigation, namely the Alexander Committee (named after its chairman Joshua W. Alexander), to study whether the inter-carrier agreement should be subject to US antitrust laws. The Alexander Committee concluded that shipping conferences were undeniably anti-competitive. However, the Committee also concluded that the shipping conference did provide substantial benefits in three aspects:

(1) stabilizing the freight rate fluctuations for shippers;
(2) cost reductions; and
(3) improved investment climate for ocean carriers.

On the other hand, the Alexander Committee also pointed to the harmful monopolistic nature of the shipping conferences as they represented an anti-competitive influence toward the non-conference carriers.

Accordingly, the Alexander Committee recommended the justification of the shipping conferences, their advantages outweighed the disadvantages; but, the Committee called for some forms of legislative protections for the shippers.

The 1916 Shipping Act and the Federal Maritime Board

The views of the Alexander Committee were highly regarded by the drafters of the 1916 Shipping Act (1916 Act). The 1916 Act created an independent agency (later known as the Federal Maritime Board) to oversee the ocean shipping industry.

Under the 1916 Act, the shipping companies have to file their inter-carrier agreements with the Federal Maritime Board for approval. The approval conferred antitrust immunity on the filed inter-carrier agreement; without the antitrust immunity, the US courts have the power to dismantle the shipping conference for violation of the antitrust laws. To obtain the approval, Section 15 of the 1916 Act requires the agreement to pass the following inquiries:

- Is the agreement "unjustly discriminatory or unfair as between carriers, shippers, exporters, importers, or ports, or between exporters from the United States and their foreign competitors?"
- Does the agreement operate to the detriment of the commerce of the USA?
- Does the operation of the agreement would violate the relevant chapter under the 1916 Act?

The remaining question will be: After getting the approval from the Federal Maritime Board, can a shipper challenge the Board's decision in court? The answer is yes, as illustrated in the 1958 US Supreme Court decision in *Federal Maritime Bd. v. Isbrandtsen Co.* (356 USA 481).

In Isbrandtsen, a non-conference ocean carrier (Isbrandtsen) started legal proceedings for reviewing the decision made by the Federal Maritime Board about approving a dual-rate system of a shipping conference.

The shipping conference was a voluntary association of 17 shipping carriers serving the ocean trade from Japan, Korea, and Okinawa to ports in the US Atlantic and Gulf Coasts. Five of the carriers were American lines, eight were Japanese and four were of other nationalities.

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The inter-carrier agreement that set up the shipping conference was signed in 1934. After the Second World War, Isbrandtsen entered the trade as a non-conference carrier.

The shipping conference membership was open to any ocean carrier regularly operating in the trade; however, Isbrandtsen has refused to join. Between 1947 and 1953, Isbrandtsen maintained a freight rate at about 10 per cent below the rate set by the shipping conference. As a result, Isbrandtsen captured 30 per cent of the total cargo in the trade.

During the early 50s, the Japan-Atlantic and Gulf trade was overtonnaged, and both Isbrandtsen and Conference vessels faced substantial unused cargo space after loading cargoes in Japan. The re-entry of the Japanese ocean carriers after the Second World War greatly contributed to the excess of tonnage. In late 1952, Isbrandtsen announced a plan to increase sailings from two to three or four sailings a month, and the Conference decided to make a 10-per cent reduction in the rates in 1952. Isbrandtsen immediate announced that it would reduce the freight rate by 10 per cent under the new Conference rates.

On December 24, 1952, the Conference proposed a dual-rate system and filed its plan with the Federal Maritime Board. The Board was hoped that "the rate war would lead to Isbrandtsen's joining the Conference." In the resulting rate war, the level of freight rates eventually dropped to about 30 per cent of the pre-rate war period, and the freight rates fell below the level of handling costs. As a result, Isbrandtsen filed a legal petition to review the decision of Federal Maritime Board on approving a rate system proposed by the Japan-Atlantic and Gulf Freight Conference.

The US Supreme Court made a favorable decision on the side of Isbrandtsen. The judicial reasoning is as following: Any dual system of international steamship freight rates that tied to an inter-carrier agreement that was designed to meet outside competition, regardless of the agreement's justification as a reasonable means of counteracting cutthroat competition, would violate Section 14 of the 1916 Act. Accordingly, the Federal Maritime Board cannot give approval pursuant to Section 15 of the 1916 Act.

Legislative responses of the 1958 *Isbrandtsen* decision

The 1958 Supreme Court decision in *Isbrandtsen* was highly controversial. Three Supreme Court judges (Justice Frankfurter, Justice Burton and Justice Harlan) who heard the case, filed dissent opinions, and there were 64 law review articles citing the case.

Although the Supreme Court's 1958 decision in *Isbrandtsen* ruled that dual-rate contracts were unlawful because they were used to drive competitors out of business, Congress subsequently legislatively overrode the *Isbrandtsen* decision.

However, the judicial reasoning of *Isbrandtsen* affected drafters when they wrote the 1961 Amendments of the Shipping Act. Two committees responsible for investigating the provisions of the 1961 amendments: Bonner Committee from the House Merchant Marine and Fisheries Committee and Celler Committee from the House Judiciary Committee. Both committees found that traditional antitrust principles should not be applied to the ocean shipping industry.

The Celler Committee voiced an opinion that there existed a direct relationship between the power of shipping conferences and their competitive abuses, and the society may suffer once a healthy competition between conference and non-conference carriers was missing. One additional point opined by the Celler Committee was that shipping conferences may be run by foreign carriers that have little motivation to protect US economic interests, and the Committee called for a greater regulation of the maritime industry.

The Congress took the views of the Celler Committee and made two important amendments to the 1916 Act. First, the 1961 Amendments set up a new independent agency, the Federal Maritime Commission, with the sole responsibility to regulate the maritime

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industry. Second, it added another approval requirement for the inter-carrier agreements: Is the agreement contrary to the public interest?

Major American and foreign steamship lines which compete for traffic along the same routes have long joined together in conferences to fix rates and other charges, allocate traffic and in other ways moderate the rigors of competition. Despite traditional hostility to these anti-competitive arrangements, after conducting extensive investigation, the US Congress concluded that the cooperative activity of these shipping conferences was to some extent in line with the public interest.

The House Committee that conducted the primary inquiry reported that the conferences promoted:

> [. . .] regularity and frequency of service, stability and uniformity of rates, economy in the cost of service, better distribution of sailings, maintenance of American and European rates to foreign markets on a parity, and equal treatment of shippers through the elimination of secret arrangements and underhanded methods of discrimination (H.R.Doc. No. 805, 63d Cong., 2d Sess., 416).

Based on this "public interest requirement," Congress granted the Federal Maritime Commission the legal authority to disapprove freight rates that were "unreasonably high or low as to be detrimental to the commerce of the USA." In other words, the Federal Maritime Commission could regulate freight rates because the 1961 Amendments required **ALL** ocean carriers to file their tariffs with the Commission.

Ocean carriers' responses to the *public interest requirement*

The ocean carriers made a judicial challenging against the public interest standard. The issue was settled by the 1968 US Supreme Case *FMC v. Aktiebolaget Svenska Amerika Linien* (390 USA 238).

The *Svenska* case involved two provisions in the inter-carrier agreement. One provision prohibited travel agents from selling passage on competing, non-conference lines (the tying rule). Another provision required unanimous action by conference members before the maximum rate of commissions payable to travel agents may be changed (the unanimity rule).

Federal Maritime Commission disapproved both the tying and unanimity rules and ordered them eliminated. The shipping conference filed a court action and the Court of Appeals set aside the order of the Federal Maritime Commission. The Court of Appeals moved the case back to the Federal Maritime Commission for more detailed explanations. The Commission again disapproved both rules. The Commission opined that both rules would detrimental to the commerce of the USA, unjustly discriminatory as between carriers, and contrary to the public interest.

When the decision went back to the Court of Appeals, the judges set aside the order again and decided that the new opinions from the Federal Maritime Commission did not change the defects noted in the prior decision on appeal. The case finally went to the US Supreme Court; it reversed the judgment of the Court of Appeals and approved the order of the Federal Maritime Commission.

In explaining its decision, the US Supreme Court opined that the inter-carrier agreement was originally evaluated on only three grounds, namely:

(1) unjust discrimination;

(2) detriment to commerce; or

(3) illegality under one of the specific provisions of the Act.

In 1959, however, Congress began an extensive review of the 1916 Act, and passed the amendments in 1961 which added included a provision which granting a broader authority

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to the Federal Maritime Commission in the approval process – to disapprove any inter-carrier agreement found to be "contrary to the public interest." The decision requires the Federal Maritime Commission to:

> [. . .] adduce substantial evidence to support a finding under one of the four standards of §15, but once an antitrust violation is established, this alone will normally constitute substantial evidence that the agreement is "contrary to the public interest", unless other evidence in the record fairly detracts from the weight of this factor. It is not unreasonable to require that a conference adopting a particular rule to govern its own affairs, for reasons best known to the conference itself, must come forward and explain to the Commission what those reasons are. We therefore hold that the antitrust test formulated by the Commission is an appropriate refinement of the statutory "public interest" standard. (FMC v. Aktiebolaget Svenska Amerika Linien [390 US 238]).

This broad antitrust immunity given to shipping conferences carried to the 1984 Shipping Act.

The 1984 Shipping Act: replacing the *public interest requirement*

The US Shipping Act, was signed into law by President Ronald Reagan on March 20, 1984, and one of the stated legislative purposes of the 1984 Shipping Act (1984 Act) was to provide an efficient and economic transportation system in the ocean commerce of the USA that is, insofar as possible, in harmony with, and responsive to, international shipping practices. The 1984 Act reaffirmed the need for shipping conferences and granted them broad antitrust immunity. The 1984 Act provides that all inter-carrier agreements, including conference and inter-conference agreements, filed with the Federal Maritime Commission would become effective and receive antitrust immunity.

The new aspect of the 1984 Act was Congress gave the Federal Maritime Commission the power to seek an injunction to prevent the implementation of agreements that are "substantially anti-competitive." This provision replaces the "public interest standard", stating:

> If, at any time after the filing or effective date of an agreement, the Commission determines that the agreement is likely, by a reduction in competition, to produce an unreasonable reduction in transportation service or an unreasonable increase in transportation cost, it may, after notice to the person filing the agreement, seek appropriate injunctive relief under subsection (h) of this section (§1705(g) of the 1984 Act).

Furthermore, the 1984 Act strengthens the broad antitrust immunity given to shipping conferences by specifying that:

- an inter-carrier agreement will automatically become effective within 45 days after its application unless the Federal Maritime Commission seeks more information from the proponents or moves for an injunction to block the agreement; and
- the Federal Maritime Commission bears the burden of proving that a proposed agreement is likely to be substantially anti-competitive.

As a result, the 1984 Act helped to create a liberalized regime for the operation of shipping conferences.

Liberalized regime and overinvestment in carriage capacity

A number of research studies have shown that a liberalized environment for shipping conferences may prevent the exit of inefficient capacity from the market (Global Insight, 2005). Most important carriers (Alphaliner, 2016) tended to favor the strategy of adding additional capacity, while not excluding the possibility that the results follow from the "core

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emptiness" (Fusillo, 2006). Wu (2009) found that there was a correlation between the strategy of holding excess capacity for maintaining market power and the fleet size of ocean carriers. The maintenance of excess capacities may reduce the economic incentives of other ocean carriers to enter in a given market, and may serve to limit potential competition.

In the legal side, it seems that the Federal Maritime Commission has failed to use the *substantially anti-competitive* provision to ensure healthy competition in the ocean shipping section, as the statistics from the courts showed that the Federal Maritime Commission has never sought any Section 6(g) injunction to prevent the implementation of any inter-carrier agreements. Social sentiments inclined to search for ways to weaken the anti-competitive elements of the inter-carrier agreement, and the Congress decided to enact the Ocean Shipping Reform Act (OSRA) in 1998.

The 1998 Ocean Shipping Reform Act – creating the *confidential service contract*

The 1998 OSRA introduced the "confidential service contract" as a means to weaken the anti-competitive elements of the shipping conferences. Under the confidential service contracts, the key terms – such as freight rates, intermodal origin and destination points – will no longer be public information. The Federal Maritime Commission will hold the filed contracts confidential. By keeping the key information from public, the ocean carriers cannot police each other as they did in the past.

As a result, for the first time in the history of the US shipping policy, it is possible for any ocean carrier, including conference members, to negotiate independent service contracts with shippers, with an inability of conferences to prevent their members from entering into such contracts. In addition to keeping some key information from the general public, the parties to a contract can agree to keep all, or a portion, of the contract confidential from their competitors, and conferences may not deter them in any way.

The creation of confidential service contract has maintained antitrust immunity status for the shipping conferences, but has limited the permissible activities subject to such immunity. The inter-carrier agreements may no longer limit or prohibit service contracting by their members, and the agreements could not contain provisions requiring members to disclose their service contract negotiations or the details of any contracts into which they have entered. An agreement may publish general guidelines applicable to members' individual contracting practices, but these guidelines must be non-enforceable by the agreement and filed confidentially with the Commission.

According to a 2001 Federal Maritime Commission Report on the Impact of OSRA, after two years of operations, OSRA was generally achieving its objective of promoting a more market-driven liner shipping industry. During the same period, there was a rapid and vast switch (a 200 per cent increase) to service contracts and very little traffic (e.g. less than 10 per cent of the USA–Europe traffic) took place directly under conference terms. In practice, conferences have disappeared on routes to and from the USA (Federal Maritime Commission, 2001).

The 2002 OECD report

In 2002, the Organisation for Economic Cooperation and Development (OECD) published a report about its research findings on three aspects related to anti-trust exemptions for liner shipping:

- how they affect both the carriers and shippers;
- what are the impacts of common pricing under anti-trust exemptions; and

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- what are the possible effects stemming from the removal of anti-trust exemptions for liner shipping.

The report recommended that countries should review their laws and reduce the protection granted to liner conferences for the following reasons:

- The ocean carriers in liner sector had failed to demonstrate that price fixing was indispensable to the provision of regular, efficient and sustainable liner shipping services.
- Customers had not shared in the benefits of price fixing.
- Other alternative mechanisms are available to the formation of shipping conferences, including individual confidential contracts.

Erosion of the shipping conference system

The US Congress aimed to transform the alliances based on freight rates to that of improving operation efficiency, such as sharing of vessels, terminals, equipment and containers. Instead of setting the freight rate above the market level by collective efforts, the ocean carriers are encouraged to use their management knowledge and financial strengths to improve operational performances (Tan and Thai, 2014).

Sagers conducted a research on how the 1998 OSRA affected the competition performance on ocean liner firms. He opined that the opportunity to analyze the before and after competition performances of the 1998 Act provided a "rare opportunity for natural experiment on the behavior and effectiveness of collusive cartel pricing" (Sagers, 2006). His research findings indicated that competition is capable of generating favorable outcomes in liner shipping markets, contrary to the long-standing claims that competition performs poorly in the ocean shipping industry owing to cost and capacity peculiarities (Button, 1999). In his paper, Sagers reported that within seven years of the enactment of the 1998 OSRA, the Federal Maritime Commission received about 50,000 new service contracts filings annually. Before the enactment, the number of yearly filings was averaged between 2,000 and 4,000. Sagers (2006) concluded that the new service contract design led to an erosion of the shipping conference system.

After the 2002 OECD Report, the European Commission initiated a review to check whether the price fixing conducts of the shipping conferences could still be justifiable under changing market circumstances. The reviewers found no causal link between price fixing and reliable liner shipping services, and they estimated that a repeal of the exemption would improve lead only to a moderate drop in prices and considerable reductions in charges and surcharges (European Commission, 2005).

Consequently, the EU Council adopted Regulation 1419/2006, and with effect from October 18, 2008, shipping conference activities such as price fixing and capacity control were no longer legal under the EU legal regime – shipping conferences can no longer engage in any anti-competitive practice on freight rate maintenance on trades to/from ports of the EU.

Moving from conference system to an information exchange system

Economic data have shown that the role of conferences has further declined; as of 2015, only 18 per cent of existing conference agreements involves the main routes, and half of them involve the North–South routes. In Europe, the liner shipping industry had enjoyed legal protection from making price fixing agreements through the EU Regulation 4056/86. With the knowledge that such antitrust exemptions would going to be abolished very soon, European liner carriers

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have proposed the setting up of an information exchange system as the new "regulatory instrument" to replace the existing EU Regulation (Marlow and Nair, 2006).

The new system suggested by the European liner carriers were consolidated into the European Liner Affairs Association Proposal (ELAA Proposal, European Commission, 2004). The contents of information sharing include:

- data relate to aggregated capacity utilization and market size both on a trade and on a region/zone to region/zone basis;
- information relates to commodity developments by trade;
- aggregate supply and demand data by trade/commodity;
- forecasts of demand by trade and commodity;
- information about own market share by trade, by region and by port;
- price index differentiated by type of equipment (e.g. reefer, dry) and/or trade; and
- surcharges and ancillary charges based on publicly available and transparent formulae

The European liner carriers were seeking legal exemption of this new information exchange system on the ground of two justifications. First, the information contents of 2004 ELAA proposal would not include any matter relate to "price fixing" or "supply regulation," both of which are the principal elements of Regulation 4056/86. Second, to facilitate the quality of investment decision in ship building, it needs the sharing of some essential information. In fact, the ideas of 2004 ELAA proposal in this regard were in line with that of the World Shipping Council.

The World Shipping Council observed that the investment in liner shipping industry could be hindered by the following five factors:

(1) high fixed costs;
(2) relatively inelastic demand for services (rate reductions can very rarely increase the demand for services);
(3) significant fluctuations in demand;
(4) inelastic supply (carriers must maintain supply at consistent levels sufficient to meet peak demand); and
(5) "lumpy" supply (capacity must be added or withdrawn in large units - namely entire strings of vessels, unlike a railroad which can add or subtract wagons from a train based on variation in demand) (World Shipping Council, 2001).

Accordingly, the ELAA opined that the information sharing would reduce the risk of miscalculating the capacity requirements, so that European liners can continue to invest in ships to maintain adequate capacity in the trade.

Moving from conference system to a horizontal collaboration network

After the EU removed the block exemption granted to European liner carriers under Regulation 4056/86 in October 2008, Maersk Line, Mediterranean Shipping Company and CMA CGM proposed a horizontal collaboration, namely, a "P3 Network Vessel Sharing Agreement" (P3 Network). The routes would cover the arterial routes of transpacific, transatlantic and the Europe–Far East, and the P3 Network would comprise 255 vessels with some 2.6 million TEU of capacity; the entire fleet would operate from a London-based office. This section uses the P3 Network case to inform the readers about the PRC view of horizontal collaboration from the perspective of the PRC competition law in the field of ocean liner carriers.

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Under the rules in the EU, the P3 Network must conduct a self-assessment to ensure it would not abuse a dominant position. However, PRC has adopted another perspective, and the PRC Ministry of Commerce (PRC Ministry) concluded that such P3 Network was in its very nature a merger.

Unlike the EU which had authorized the P3 Network without condition, the PRC Ministry issued the decision in June 17, 2014, and rejected the application of the P3 Network on the legal ground of violating the PRC Anti-Monopoly Law (Yang, 2014). The PRC Ministry opined that the P3 Network Agreement would build up a capacity that may lead to greater concentration in the industry from the perspectives of market share, market access. The opinion wrote:

> [. . .] if completed, the concentration will enable the operators to become a close-knit alliance, commanding 47 per cent market share in Asia-Europe container liner service and will result in a significant increase in market concentration rate (NAIR, 2016).

In making its decision, the PRC Ministry referred to the HHI, which estimated that the Asia Europe container shipping market may rise from 890 to 2,240 if the P3 Network is formed. Besides, the P3 Network would have a combined capacity share of 46.7 per cent, with Maersk Line, MSC and CMA CGM commanding 20.6, 15.2 and 10.9 per cent, respectively. Accordingly, the PRC Ministry worried that the P3 Network carriers "may take advantage of the increased market share to undermine shippers' interest" and from the perspective of port operation, the PRC Ministry also concerned about the concentration may reduce the bargaining power of the PRC port operators. To vie for calls, PRC port operators "may be forced to accept lower handling charges, which will cast adverse impact on the development of ports" (Yang, 2014).

In fact, the close-knit characteristics of the P3 Network were reflected in the following aspects:

- instead of calculating the operational costs by each individual members, the P3 Network would set up a co-ordination center to calculate the operational costs, to split the costs among the three liners and to set the voyage costs;
- instead of selling the spare slots by each individual members, the P3 Network center in London would be responsible for selling the unused slots;
- the London center would make decision on service suspensions; and
- The London center would set up as a separate legal entity.

The China Shippers Association supported the decision, and its Vice-Chairman Mr Cai Jiaxiang said:

> China's situation is different from that of the US, where there are no international lines. If P3 Network were being approved, the PRC exporters shall likely to bear the costs of the surcharges that always go up and never go down.

He estimated that the market share of the P3 Network in PRC trade will probably exceed 65 per cent, which is far beyond the 30 per cent cap set by PRC's international maritime regulation.

Moving from conference system to non-ratemaking agreements

As the role of conferences has further declined, shipping firms have move to consortia and strategic alliances that do not involve freight rate fixing arrangement. As of 2015, only 18 per cent of existing conference agreements involve the main routes, and half of them involve the North–South routes. Besides, the majority of the carriers that are part of conferences are small- to medium-sized companies. The main routes are largely served through strategic alliances (OECD, 2015; Parola *et al.*, 2014).

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Unlike conferences, consortia and strategic alliances aim to improve operational efficiency of their members by non-freight rate fixing arrangements, such as technical, operational and commercial arrangements. OECD refers consortia as:

> [. . .] agreements between liner shipping companies aimed primarily at supplying jointly organized services by means of various technical, operational or commercial arrangements (e.g. joint use of vessels, port installations, marketing organizations, etc.) (OECD, 2002).

Research studies have been conducted to investigate the underlying motives and impacts for joining the alliance in container shipping industry. Lu studied the key success factors of shipping alliances from management perspectives, such as organization structures and shared cultures of the alliance members, their past collaborations and the likelihoods of risk and revenue sharing under the arrangement (Lu, 1999; Lu, 2007). Notteboom evaluated the impacts of the mega alliance formation of larger container ships toward container ports, and he observed that the collective pressures created by the alliance forces terminal operators to make improvements on total turnaround time and efficiency (Notteboom, 2016). Other researchers focused on the economies effects provided by the marketing network of strategic alliances, and they found that Japanese liner shipping companies have achieved cost reductions through the network extension through the alliances (Yoshida *et al.*, 2005).

Specific form of cooperation allows their members to mitigate risks from fluctuations in demand for shipping services. For example, vessel sharing agreements help the members to maintain:

> [. . .] a commercial presence on a specific maritime route, whilst allowing the members to withdraw a ship and to redeploy it by reserving space on the vessel of another member company, and that member in turn proceeding in the same way on another maritime route (WTO, 2010).

Although non-ratemaking agreements, by taking the forms of scale economies and coordinating sailing schedules, can certainly lead to important operating efficiencies, some small ocean carriers have expressed their concerns that the shipping community should need a harmonized regulatory system to monitor non-ratemaking agreements. There is a likelihood that the resulting operational efficiencies may create a few dominant players in the market, which may be detrimental to fair and healthy competition in the long run.

Conclusions

Antitrust exemptions to shipping conferences in the liner shipping sector have prevailed for more than a century and still exist in many countries today. After keeping the protected legal status of the shipping conferences, countries such as the USA have incorporated regulatory change to ensure healthy competition in the ocean carriage. The 1988 OSRA has led to a proliferation of individual confidential service contracts, with freight rates being set in bilateral negotiations, outside rules of shipping conferences.

In 2002, the OECD published a report that recommended the elimination of exemption status of liner shipping conferences. Shortly after the OECD report, the EU undertook an in-depth review and found no support for sustaining the exemption status; consequently, the block exemption was repealed in 2006.

In 2012, the Federal Maritime Commission published a report which showed that there were no deterioration occurred in the viability of liner shipping carriers in EU trades during the post-repeal period, relative to comparable US routes. One factor that contributed to that finding was that the introduction of confidential service contracts after the 1998 OSRA already weakened the impacts of the shipping conference system in the USA.

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Judging from the US perspective, it seems that the future research on shipping alliances will shift from evaluating its value on maintaining freight rate to the value on sharing resources to bring collective operational efficiencies. The legal scholars may also need to refocus their research from purely price determination to the area of merger because cooperative arrangements in the relevant trade lanes may lead to excessive concentration and interdependency after a merger.

However, strong political debates seem to just start on the Europe side. The OECD published a report in 2002 to recommend the elimination of exemption status of liner shipping conferences. Although shortly after the OECD report, the EU undertook an in-depth review and found no support for sustaining the exemption status, and when the block exemption was repealed in 2006, the European maritime community has been still unsure whether there would be a new system to replace the old one. European carriers have stressed the importance of setting up an information sharing system (with legal exemption status) to replace the old one, so as to sustain efficient investments in liner shipping. The shipper groups have voiced out the information sharing system proposed by the ELAA and they would require each European liner carrier to input most of the data from its bills of lading (including vessel loadings, vessel capacities and surcharges relate to currency, bunker and port congestion) into the system for sharing. With such insider information, there is a likelihood of leading to price fixing conducts among the carriers.

Although the world sees a strong political will to remove the legal protection from making price fixing agreements in Europe, it is not easy to envisage at this point what will replace it. The debate about the new replacement has only just started and it is not certain how long it will continue.

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Corresponding author

Po-wan Sun can be contacted at: brian.pw.sun@polyu.edu.hk

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