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THE GROWTH SPHERES OF THE WORLD FLEET СФЕРИ ЗРОСТАННЯ СВІТОВОГО ФЛОТУ

Alexey Kotlubay Котлубай А.М.

Розглядаються сучасні тенденції та напрямки розвитку світового флоту за основними типами суден та процеси глобалізації у судноплавстві щодо консолідації та інтеграції операторів флоту та судноплавних компаній. Робиться висновок про поступове зменшення ефекту масштабу у судноплавстві через збільшення витрат на розвиток та утримання берегової інфраструктури.

Recent trends in the development of merchant shipping directly relate to the increase in the average tonnage of the fleet operated and consolidation of vessels operators companies. At the same time the share of the fleet in the possession of countries and companies - exporters of raw materials are increased also, changed certain way the average age of vessels, which in some way affected the price formation.

In January 2013,2 per cent of all seagoing merchant ships were younger than 5 years, representing 40 per cent of the world's deadweight tonnage. Ships delivered in more recent years are on average larger than older ships. New container ships are on average three times the size of those built 20 or more years ago, and only 5 per cent of the container ship tonnage is older than 20 years. Oil tankers, too, tend to be replaced relatively early; only 4 per cent of the existing oil-tanker tonnage was built more than 20 years ago.

The average age of vessels in January 2013 was highest for general-cargo ships - more than 25 years, followed by other types about 23 years, oil tankers – almost 17 years, container ships – up to 11 years and dry-bulk carriers - almost 10 years. Following the surge of newbuildings in the dry-bulk segment, almost half of the dry-bulk dead weight tonnage is only 4 years old or younger, overtaking for the first time container ships as the youngest vessel category.

As a reflection of most recent ships being larger than older ones, the global average age per ship shows an age of more than 20 years, while the average age by dwt is up to 10 years. Their geographical distribution is also well balanced and ships registered in developing countries are now only two years older than those flying the flag of developed countries. Among the 10 major flag states, Greece has the oldest fleet, followed by Panama and China. The youngest fleets are those registered in the Marshall Islands, Hong Kong (China) and Singapore. On average, foreign-flagged

ships are slightly younger than nationally flagged ones. This situation and its rationale are discussed below.

The national concentration of fleet ownership, presented by [1], is illustrated that owners from five countries – in order of decreasing tonnage, Greece, Japan, China, Germany and the Republic of Korea – together account for 53 per cent of the world tonnage. Among the top 35 ship-owning economies, 17 are in Asia, 14 in Europe, and 4 in the Americas.

As published the Clarkson Research [2], another way to consider fleet ownership is in terms of ship value. Container vessels and gas carriers, for example, are more expensive than dry and liquid bulkers. The market value of a vessel also depends on its age and maintenance. Estimates for January 2013(CRS, 2013b) suggest that the Japanese-owned fleet currently reaches the highest value, amounting to almost \$100 billion, followed by the United States (\$92 billion), Greece (\$72 billion), China (\$61 billion) and Germany (\$60 billion). The total of the world fleet being estimated to be worth \$809 billion, the top five ship-owning countries by fleet value thus would control almost 48 per cent of the world fleet; the top 10 owner countries under this criteria would have a market share in value terms of 67 per cent.

From a registration perspective, most of the top 35 ship-owning countries have more than half of their tonnage under a foreign flag. Exceptions include countries with a large cabotage fleet, such as India, Indonesia or Viet Nam, and countries where the national register provides a competitive flag that is also used by many foreign owners, as is the case for example for Singapore, which thus effectively become an open register.

In accordance with [5], several oil- and gas-exporting countries are also important owners of oil and liquefied-gas tanker tonnage, both under their respective national as well as under foreign flags. Algeria, for example, has a high share of oil and liquefied-gas tankers; Argentina's fleet consists of mostly foreign-flagged oil tankers; Ecuador's oil tankers include the nationally flagged cabotage fleet (for example, to the Galapagos Islands) as well as foreign-flagged tankers servicing the international transport of Ecuador's oil exports. Other countries with a high share of oil and gas tankers are Egypt, the Islamic Republic of Iran, Kazakhstan, Kuwait, Libya, Malaysia, Mexico, Nigeria, Oman, Peru, Qatar, the Russian Federation, Saudi Arabia, the United Arab Emirates and the Bolivarian Republic of Venezuela.

By the same token, countries with important offshore investments also tend to own ships providing offshore supply services. Angola's fleet, for example, largely specializes in the oil and offshore business; Brazil, too, owns an important fleet of offshore vessels, in addition to its dry-bulk and oil-tanker fleet. Cameroun's entire fleet consists of nationally flagged offshore supply and storage vessels, as do most of Nigeria's and Tunisia's fleets. The offshore fleet of the Democratic Republic of the Congo, on the other hand, is fully foreign flagged.

Dry-bulk vessels are less often controlled by the cargo- owning countries [4] than is the case of the oil-exporting nations. Nevertheless, important owners of dry-bulk tonnage include major importers and exporters of iron ore and other dry commodities, such as Brazil (exports) and China (imports). Other economies with a high share of dry-bulk tonnage include Hong Kong (China), Taiwan Province of

China, Croatia, the Republic of Korea, Lebanon, Pakistan, the Philippines, Singapore, South Africa, Thailand, Turkey, and Ukraine.

Most container ships are foreign flagged. They engage in international trade, serving routes that connect several countries at the same time. On such routes, cargo reservation regimes have in practice shown to be difficult to enforce. Countries and territories with a share of foreign-flagged container fleets include Chile, Hong Kong (China), Kuwait, Morocco, Singapore and South Africa [6, 9].

Many of the nationally owned fleets serve the national (coastal or interisland) cabotage trades or benefit from other cargo-reservation regimes. These ships tend to be nationally flagged as foreign ships are excluded from certain markets by the national legislation. Examples here include parts of Bangladesh's bulk and general-cargo ships, some of Chile's dry- and liquid-bulk fleet, an important share of China's bulk and general-cargo ships, part of Cuba's general—cargo carriers, India's general-cargo and tanker fleet, and a wide range of different vessels engaged in Indonesia's inter-island transport. Other countries with important nationally flagged general-cargo fleets include Ethiopia, Myanmar, the Russian Federation, the Philippines and Viet Nam.

Panama, which is mostly known for its open register, also comprises of some national shipowners, mostly, albeit not exclusively, using the national Panama flag. The largest part of the Panamanian-owned fleet consists of general-cargo ships, and about half of them do not use the flag of Panama. Owners from Singapore also use both the national flag and foreign flags.

In accordance with [6], the largest container ship operators in 2013 continued to be Maersk Line (Denmark), MSC (Switzerland) and CMA CGM (France). Together, these three European companies operate one third of the global container-carrying capacity. On the main East–West route between Asia and Europe these same three carriers also deploy the largest ships and they cooperate with each other through slot-sharing arrangements, with plans to enhance their cooperation through a P3 alliance. Thus, P3 alliance will operate a fleet of 2.6 million. TEU (255 vessels), where approximately 42% (1.1 million. TEU.) will belong to Maersk Line, 34% (0.9 million. TEU.) will belong MSC and 24 % (0.6 million. TEU.) fleet from CMA CGM [6, 11].

The year 2012 saw the turn of the largest shipbuilding cycle, in terms of GT, in recorded history. Between 2001 and 2011, year after year, newbuilding deliveries reached new historical highs. Even after the economic downturn of 2008, the deadweight tonnage delivered annually continued to increase for three more years due to orders that had largely been placed prior to the crisis. Only in 2012, for the first time since 2001, was the fleet that entered into service during the year less than that delivered during the previous 12 months. In spite of this slowing down of new deliveries, the world tonnage continued to grow in 2012, albeit at a slower pace; year-on-year growth amounted to 6 per cent, compared to a 10 per cent increase the previous year. The world fleet more than doubled since 2001, reaching 1.63 billion dwt in January 2013. The turning point in the shipbuilding cycle there was more tonnage built in 2011 that is, 2 years old, than tonnage built in 2012. Such a large weakening has not been seen since the mid-1990s. The turning point is also shows that the order book had already started to regress in 2009. The numbers in the

shipping fleet react only slowly to a changing economic environment. While the downturn in demand became clear in 2008, the order book showed a decline in 2009, new deliveries went down in 2012, and the existing fleet still continues to grow in 2013. The order book, however, is rapidly decreasing, and the current schedule only provides for output of close to recent levels for this year and a little less so for 2014.

The world fleet in January 2013 consists of 42 percent dry-bulk tonnage (in dwt), a historical record for this vessel type. General-cargo tonnage, on the other hand, continued its decline; its share of the world total is now less than 5 per cent, down from a 15 per cent share 20 years ago. Oil tankers, too, saw their share decline, from almost half of the world tonnage in 1980, to 30 per cent in January 2013.

Following heavy scrapping and conversions of single-hull ships in recent years, most oil tankers are now double hulled [9], in compliance with relevant IMO environmental and safety regulations, as well as the Oil Pollution Act of the United States of America, which phased out single-hull tankers from United States waters in 2010.

After the renovation of the fleet, today only 18 per cent of tanker tonnage is 15 years or older [10].

When the last single-hulled very large crude carrier (VLCC) was delivered in 1996, there were 376 in service. In early 2013, there are only three. Only 243, however, were actually scrapped. Sixty were converted into floating oil production and storage facilities and 70 were converted into dry-bulk carriers. Some of the older VLCCs are deployed as FPSOs, as informed Shipping Intelligence Weekly in March of 2013.

The largest existing ships in operation for ocean transport are dry bulkers owned and operated by the Brazilian iron-ore conglomerate Vale, called "Vale-max". In April 2013, the latest vessel of this series, the Vale Korea, entered into service, with a capacity of 402, 303 dwt. While initially built to call in Chinese ports, Vale is now developing trans-shipment hubs in Malaysia and the Philippines as the ships are not allowed to enter ports in China fully loaded. Due to regulatory limitations in China, Vale-max ships that entered Chinese ports in early 2013 were registered as just under 300,000 dwt.

Clarkson Research Services, in early of 2013 informed, that in 2012, seven times more tonnage of bulk carriers was delivered than 10 years earlier. At the same time, the order book is dwindling, amounting today to just one fifth of the existing fleet.

Vessels of general-cargo, sometimes also referred to as "break-bulk" ships, have seen their importance decline over the last decades, largely to the benefit of container ships. As more and more goods are containerized, the market for carriage by break-bulk cargo ships has dropped.

Nevertheless, some goods, in particular dry cargo that is too large for containers, will always require transport as break-bulk. The specialized break-bulk fleet has been modernized in recent years, as most older ships were demolished. In accordance with a recent report by Dynamar of February 2013 [7], among the almost 800 ships deployed by the 25 largest specialized operators, fewer than 100 are older than 25 years, with only a small number still dating from the 1970s. With over 500 units built since 2000, the majority of the specialized fleet consists of modern, highly productive and multi-employable ships that carry a wide range of cargoes, from forest products to bags and project cargoes.

As the World Shipping Council informed, on the beginning of 2013, container ships carry an estimated 52 per cent of global seaborne trade in terms of value. Their share of the world fleet has grown almost eightfold since 1980, as goods are increasingly containerized for international transport. Apart from manufactured goods, more and more commodities (such as coffee) as well as refrigerated cargo (fruit, meat, fish) are today largely transported in standardized sea containers.

Most new container ships today are gearless, that is, they are no longer equipped with their own container handling cranes, but depend on the seaports to provide specialized handling equipment. This trend goes hand-in-hand with the delivery of larger vessels, as these are less often equipped with their own cargo-handling equipment. This poses a challenge for smaller ports, especially in developing countries, which may not have enough volume to justify investment in specialized and costly ship-to-shore cranes in their container terminals.

The share of gearless ships among the total deliveries of container vessels keeps increasing. In 2005, there were four times more gearless ships delivered than ships with their own handling equipment [3], while in 2012 the proportion was 6 to 1. Gearless container ships are on average more than twice the size than geared vessels, and the average size of both types of ships has gone up by almost 80 per cent since 2005.

The year 2013 also saw the delivery of the first "Triple E" container ships by Daewoo in the Republic of Korea to Maersk in Denmark. The Triple E stands for energy efficiency, economies of scale and environmental improvements. For a short period these ships, with a declared container-carrying capacity of 18,000 full TEUs, were the largest container ships, taking over from the 16,000-TEU vessels of CMA CGM, which were the largest container vessels until early 2013. In 2013, CSCL from China placed orders for even larger container ships, also in shipyards in the Republic of Korea, scheduled to carry 18,400 TEU and to be delivered in 2014.

In accordance with Fairplay, 2013 Nr 2 information, chemical tankers have seen a trend towards larger vessels, aiming at economies of scale. The share of ships above 36,000 dwt has increased from 23 per cent in 2005 to 28 per cent today, while the share of the smallest units (below 10,000 dwt) went down from 47 per cent to 40 per cent during the same period.

Thus, the trends established in the shipping industry to date that indicate an increase in the average deadweight and consolidation operators and shipping companies, will determine the requirements for the further development of the ports. The essence of this development affects on aspects, such as depth and size berths, as well as adequate of shore infrastructure.

The result may be that the positive effects of increasing scale in shipping will be absorbed by the increase in one-time and ongoing costs for the port component. Anyway, the point of equilibrium between them, already somewhere nearby.

References

1. China Trade Today – Online Magazine (2013). Shipyard capacity could be slashed by 40pc and still meet demand. March. See http://om.shippingazette.com/OM/OM4/index.asp (accessed 28 August 2013).

- 2. Clarkson Research Services (2013a). The Clarkson Shipping Review and Outlook. Spring 2013; CRS (2013b). World Fleet Monitor. January.; CRS (2013c). Container Intelligence Quarterly, Spring 2013. May.
- 3. Cullinane KPB, ed. (2005). Shipping Economics: Research in Transportation Economics. Elsevier, Amsterdam.
- 4. Dynamar B.V. (2013). Breakbulk III Operators, fleets, markets. Alkmaar. 244.
 - 5. Fairplay (2013). Chemical tankers on cusp of rates recovery. 11 April.
- 6. International Transport Journal (2013). Maersk, MSC and CMA to establish alliance. 18 June.
- 7. Journal of Commerce (2013). Drewry: Demise of small carriers cuts competition. See http://www.joc.com/maritime-news/container-lines/drewry-demise-small-carriers-cuts-competition_20130429.html (accessed 26 August 2013).
- 8. Lloyd's List Intelligence Containers (2013). See http://www.lloydslistintelligence.com/llint/containers/index.htm (accessed 27 August 2013).
- 9. Shipping Intelligence Weekly (2013). Single hull VLCCs The long goodbye. 14 June.
- 10. UNCTADStat-Statistical Database (2013). See http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx (accessed 27 August 2013).

Аннотация

Последние тенденции в развитии торгового судоходства непосредственно связаны с увеличением среднего тоннажа флота который эксплуатируется в мире и консолидацией судоходных операторов и компаний. В то же время доля флота во владении стран и компаний — экспортеров сырья также увеличивается, определенным образом изменился и средний возраст судов, что в конечном счете определенным образом повиляло и на цены фрахтового рынка.

В 2012 году мир увидел поворот крупнейшего судостроительного цикла, в истории человечества. Между 2001 и 2011 годами, из года в год, поставки нового строительства достигли новых исторических максимумов. Даже после экономического спада 2008 года, строящийся дедвейт ежегодно продолжал увеличиваться в течение еще трех лет за счет заказов, которые были в значительной степени размещенных до кризиса. Только в 2012 году, впервые с 2001 года, дедвейт флота, который вступил в эксплуатацию в течение года, был меньше, чем поставлялся в течение предыдущих 12 месяцев. Замедление новых поставок, мирового тоннажа продолжает расти и после 2012 года, хотя и более медленными темпами; год от года рост составил 6 процентов, по сравнению с 10 процентов увеличить в предыдущем году. С 2001 года мировой флот вырос более чем в два раза, достигнув 1630 млн. т дедвейта в январе 2013 года. Поворотный момент в цикле судостроения когда больше тоннажа было построено в 2011 году, чем тоннажа, построенного в 2012 году продолжается уже около 2-х лет. Такое большое снижение темпов поставок флота не наблюдалось с середины 1990-х годов. Еще одним подтверждением поворотного момента является также тот факт, что объем заявок на новострой уже начал

регрессировать в 2009. Цифры размеров заказов флота начали реагировать только спустя год что свидетельствует о медленно меняющейся экономической среде. В то время как о спаде спроса на тоннаж стало ясно еще в 2008 году, портфель заявок показал снижение лишь в 2009 году, а соответственно на новых поставках это сказалось только в 2012 году, и существующий флот попрежнему продолжает расти даже и в 2013 году, хотя портфель заказов, уже, стремительно уменьшается.

Мировой флот в январе 2013 года состоит по дедвейту из 42 процентов насыпного тоннажа, рекорд за всю историю этого вида судна. Тоннаж судов для генеральных грузов, с другой стороны, продолжил снижение; его доля от общего мирового объема составляет сейчас менее 5 процентов, по сравнению с 15 процентной долей 20 лет назад. Удельный вес нефтетанкеров, тоже снизился, с почти половины мирового тоннажа в 1980 году, до 30 процентов в январе 2013 года.

Одновременно во всех сегментах судоходства вырос средний дедвейт флота и произошла определенная консолидация судоходных и операторських компаний.

Таким образом, тенденции, сложившиеся в судоходстве на сегодняшний день которые свидетельствуют о росте среднего дедвейта флота и укрупнении операторских и судовладельческих компаний, обусловливают возростающие требования к дальнейшему развитию портов. Характер этого развития затрагивает такие аспекты: глубины и размеры причалов, а также соответствующее развитие инфраструктуры берега.

В результате может оказаться так, что положительный эффект увеличения масштаба в судоходстве будет поглощен увеличением единовременных и текущих затрат по портовой составляющей. Во всяком случае, точка равновесия между ними уже где то рядом.