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# **International Shipping Market Report**

(Review of 2019 and Outlook for 2020)

International Container Liner Shipping Market

**Shanghai International Shipping Institute**

**January 2020**

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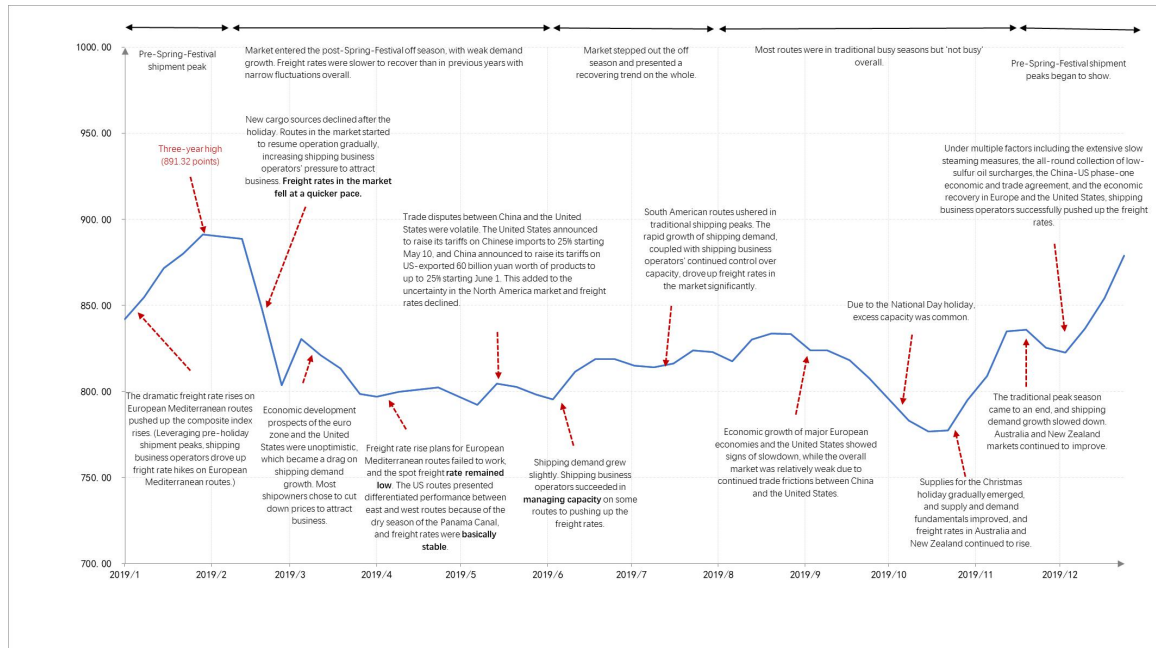
# **Review of 2019 and Outlook for 2020 of International Container Shipping Market**

## **I. Overview of International Container Shipping Market**

### **Developments in 2019**

#### **1. Container market in 2019 'not busy in busy season'; freight rates stay stable and relatively low**

Overall, the China Containerized Freight Index (CCFI) stayed relatively stable in 2019 and recorded between 800-900 points for most of the year, with the annual amplitude of variation at 13.6%. In the first quarter, before the Spring Festival holiday, cargo shipments recorded a small peak and lines took this opportunity to push freight rates to a high of 891.32 points since May 2015. After the festival, the freight rates fell. Brexit's uncertainty, Germany's economic slowdown and Italy's downturn undermined the demand growth, and freight rate recovery was slower than in previous years. Lines' plan to push up freight rates on Asia-Europe route failed to yield results. In the second quarter, the market entered the post-Spring-Festival low season featuring weak demand growth. Trade disputes between the United States and China have been volatile. The increased uncertainty of the North America market forced lines to temporarily suspend their services or take slow steaming measures. Due to the poor demand fundamentals, freight rate rises were limited. In the third quarter, a traditional peak season of shipping, lines enhanced their shipping capacity input. However, due to the economic slowdown in major European countries and the United States, and the continued trade disputes between the United States and China, the market demand overall was relatively weak, failing to hit the peak as expected. The market was "not busy in a busy season" on the whole. In the fourth quarter, the shipment peak before the Spring Festival started to show. Boosted by multiple factors, including the extensive slow steaming measures, the all-round collection of low-sulfur oil surcharges, the US-China phase-one economic and trade agreement, and the economic recovery in Europe and the United States, lines successfully pushed up the freight rates.

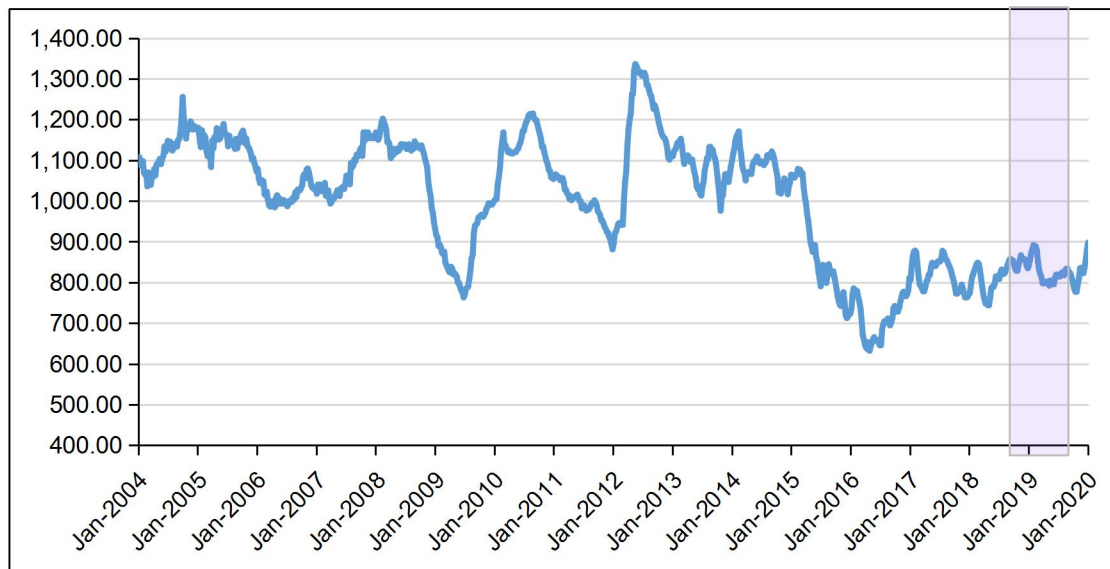


**Figure 1-1 Trends and Explanations of CCFI in 2019**

Source: Shanghai Shipping Exchange, prepared by Shanghai International Shipping Institute

## 2. Long-term-wise, international container freights remain in recovery and adjustment

Although the total shipping capacity growth of global container fleets was under control in 2019, the idled capacity of fleets reached a two-year high. Due to the continued growth slowdown in global container shipping volume, the overall shipping freights remained in recovery and adjustment since the historical low of 2016. The CCFI stayed relatively stable overall within the range of 700-900 points.

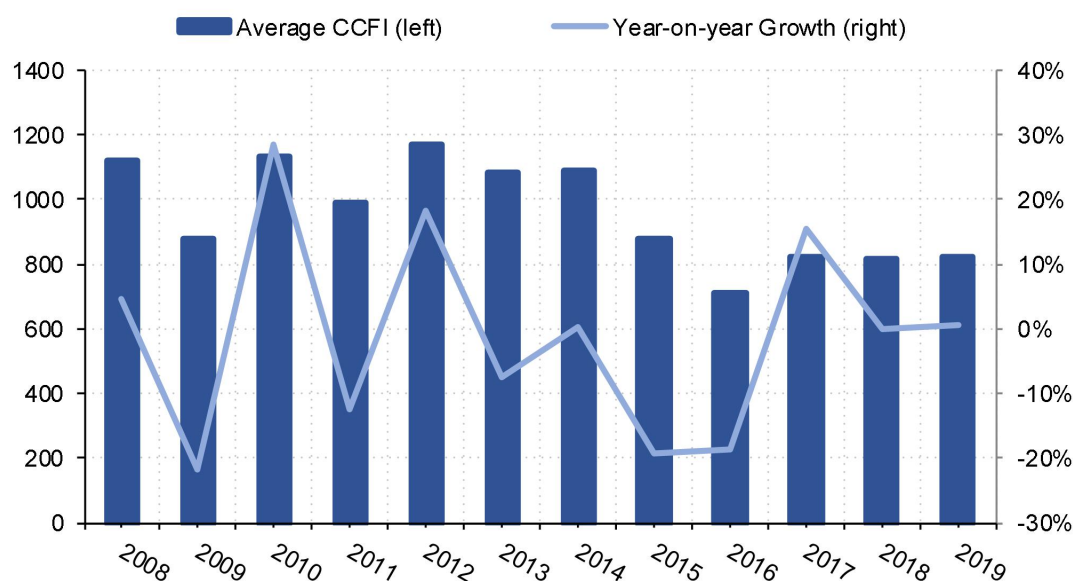


**Figure 1-2 Trends of CCFI in 2004-2019**

Source: Shanghai Shipping Exchange, prepared by Shanghai International Shipping Institute

In 2019, the average freight rates of the international container liner shipping market increased slightly year-on-year, with the average yearly CCFI standing at 823.98 points, a slight rise of 0.7% over the 2018 level. Both the average freight rate and

growth rate ran flat with those for 2018.

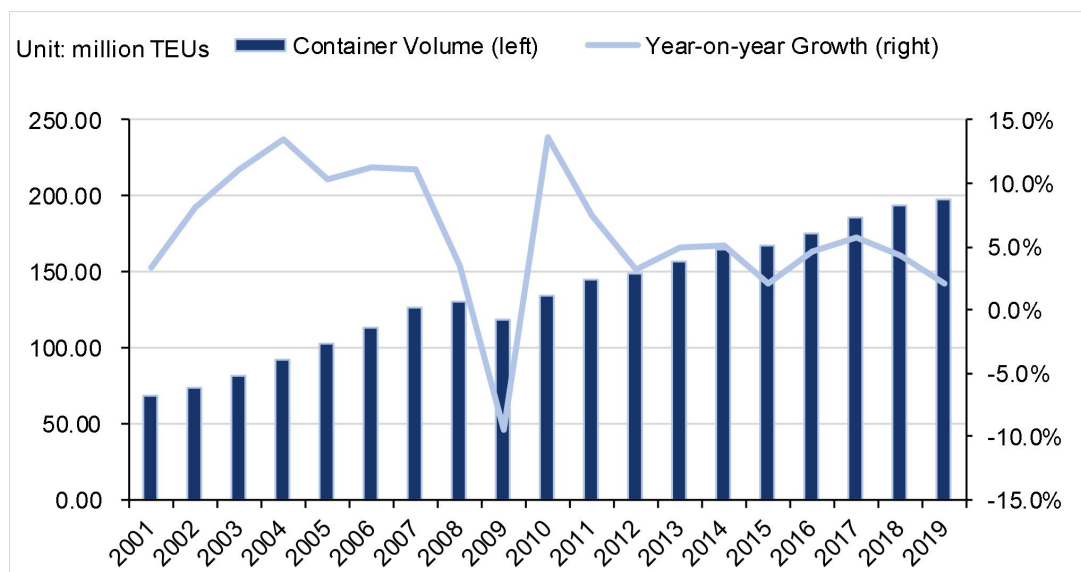


**Figure 1-3 Yearly Averages and Growth Rates of CCFI in 2008-2019**

Source: Shanghai Shipping Exchange, prepared by Shanghai International Shipping Institute

### 3. Global seaborne container trade slows down growth for the 2nd consecutive year; Transpacific volumes decline for the first time in 10 years

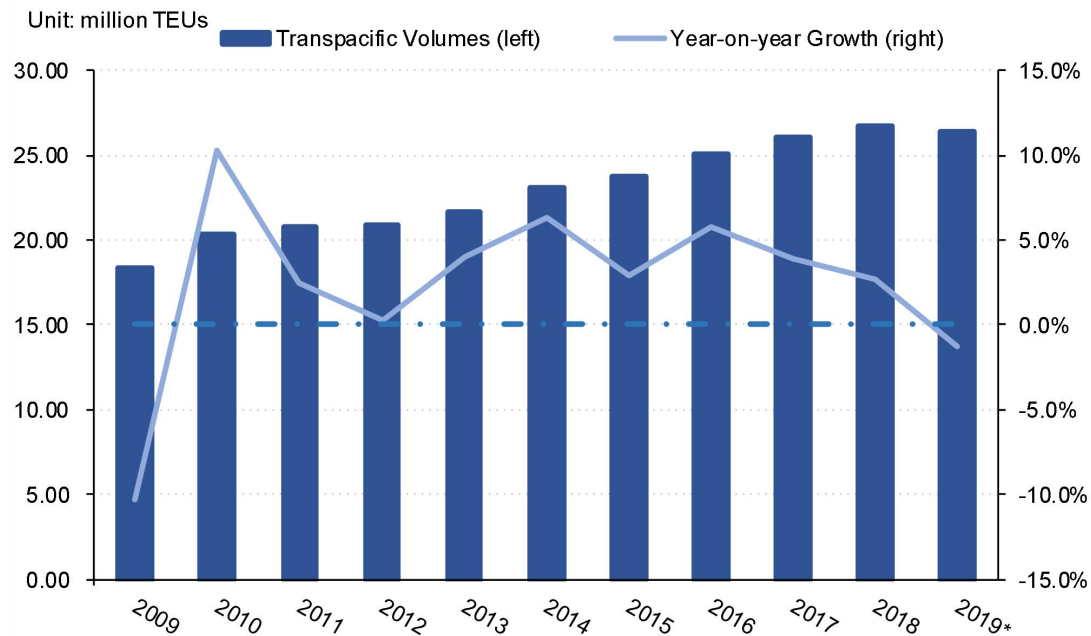
Due to continued global economic slowdown and other adverse factors, the growth rate of international commodity trade volume has kept declining in recent years. Container shipping is a major mode of international commodity trade, and the growth rate of container trade has also declined. According to Clarksons, the global seaborne container trade in 2019 was 198 million TEUs, an increase of 2.0% year-on-year, with the growth rate falling by 2.2 percentage points year-on-year. The growth rate of global seaborne container trade has slowed down for the second consecutive year since 2017.



**Figure 1-4 Global Seaborne Container Trade in 2001-2019**

Source: Clarksons, prepared by Shanghai International Shipping Institute

In 2019, the global seaborne container trade maintained slow growth overall and most mainlane routes recorded growth slowdown or even negative growth in container volumes. Due to the volatile US-China trade frictions, transpacific volumes dropped significantly. The global seaborne container trade declined for the first time in past 10 years, recording a year-on-year increase of -1.3%.

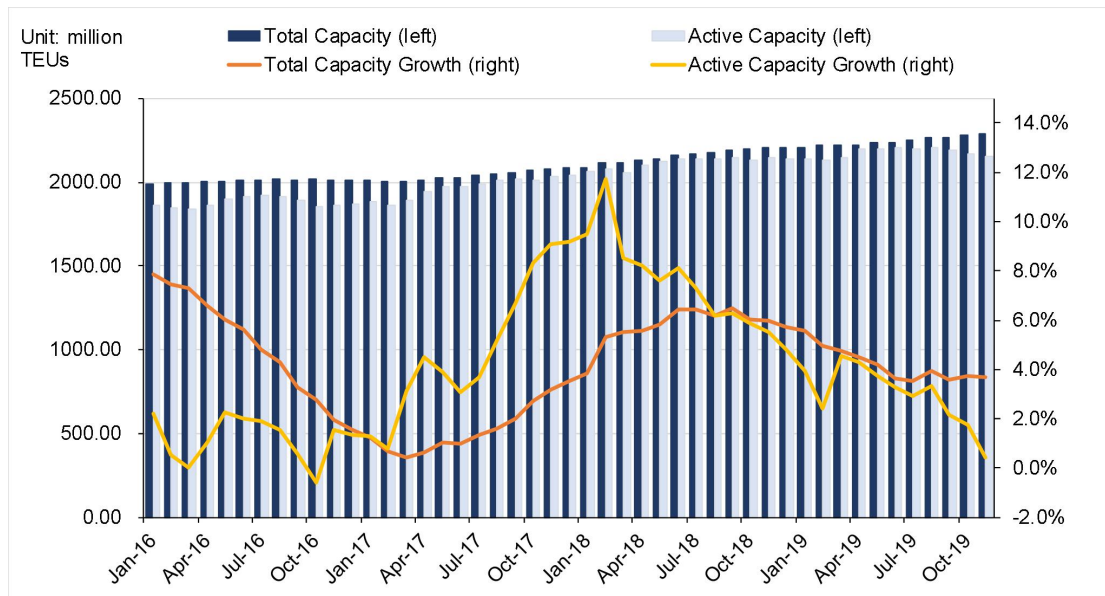


**Figure 1-5 Transpacific Volumes and Growth Rates in 2009-2019**

Source: Clarksons, prepared by Shanghai International Shipping Institute

#### **4. Total fleet capacity keeps slow increases; active capacity growth records three-year low**

In 2019, the growth rate of global container fleet capacity posted a slow decline, with the annual total capacity standing at 22.876 million TEUs (an increase of 4.0% year-on-year). The growth rate fell by 1.6 percentage points year-on-year, indicating an overall slow growth trend. Specifically, the growth rate of active capacity in November recorded a three-year low at 0.4%.



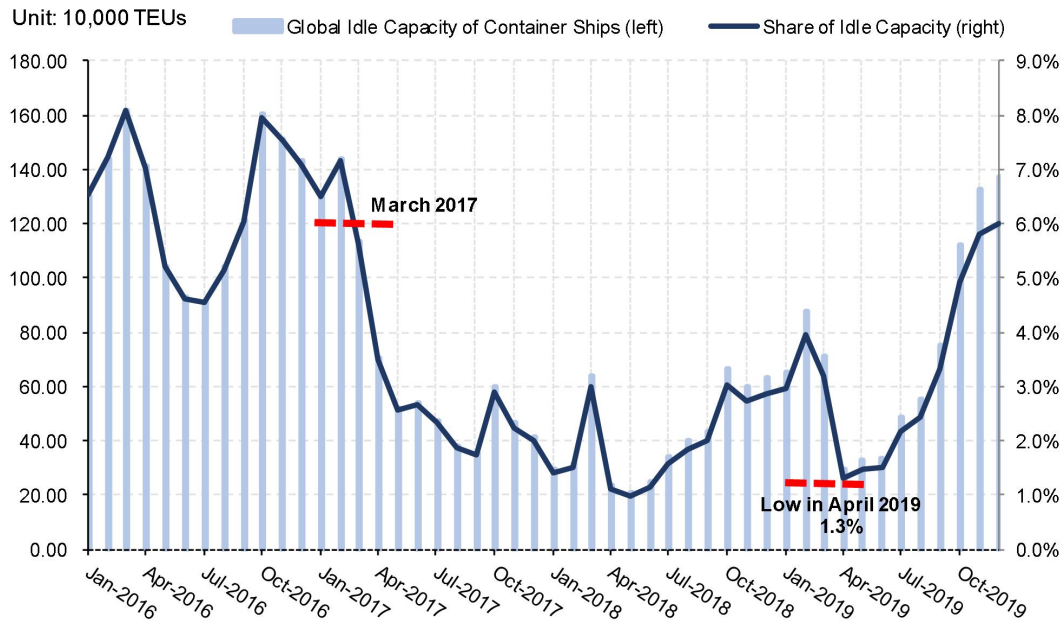
**Table 1-6 Total Capacities and Active Capacities of Global Container Fleets**

Source: Clarksons, prepared by Shanghai International Shipping Institute

Note: Active capacity = Total capacity - Idle capacity

### 5. Idle capacity of global fleets hits two-year high; fleet capacity on Far East-North America routes slumps

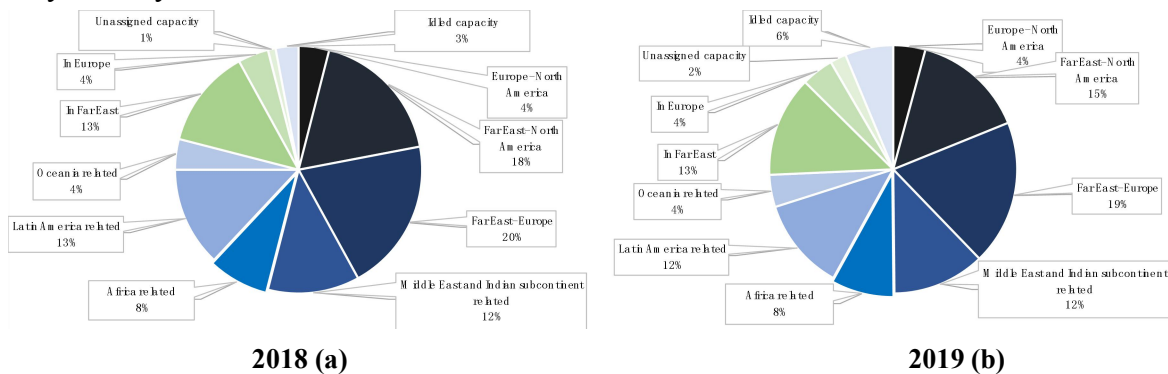
As of the end of 2019, the idle capacity of global container ships was 1.38 million TEUs, accounting for 6.0% of the global fleets' total, which was basically the same as in March 2017, with a year-on-year increase of 3.1 percentage points. In 2019, the proportion of container fleets' idle capacity of the year fell and then increased. Specifically, the proportion of idle capacity at the end of April reached the year's low of 1.3%. With the number of ships undergoing scrubber retrofit increasing and lines intensifying shipping suspension, the proportion of idle capacity increased significantly and reached a high of the past two-plus years in December.



**Figure 1-7 Idled Shipping Capacities and Proportions of Global Container Shipping Fleets in 2016-2019**

Source: Clarksons, prepared by Shanghai International Shipping Institute

Specifically, the shares of container fleet capacity on the Far East-North America and the Far East-Europe routes decreased by 3 and 1 percentage point, respectively, year-on-year.



**Figure 1-8 Container Fleet Capacity Deployment by Route in 2018-2019**

Source: Alphaliner, prepared by Shanghai International Shipping Institute

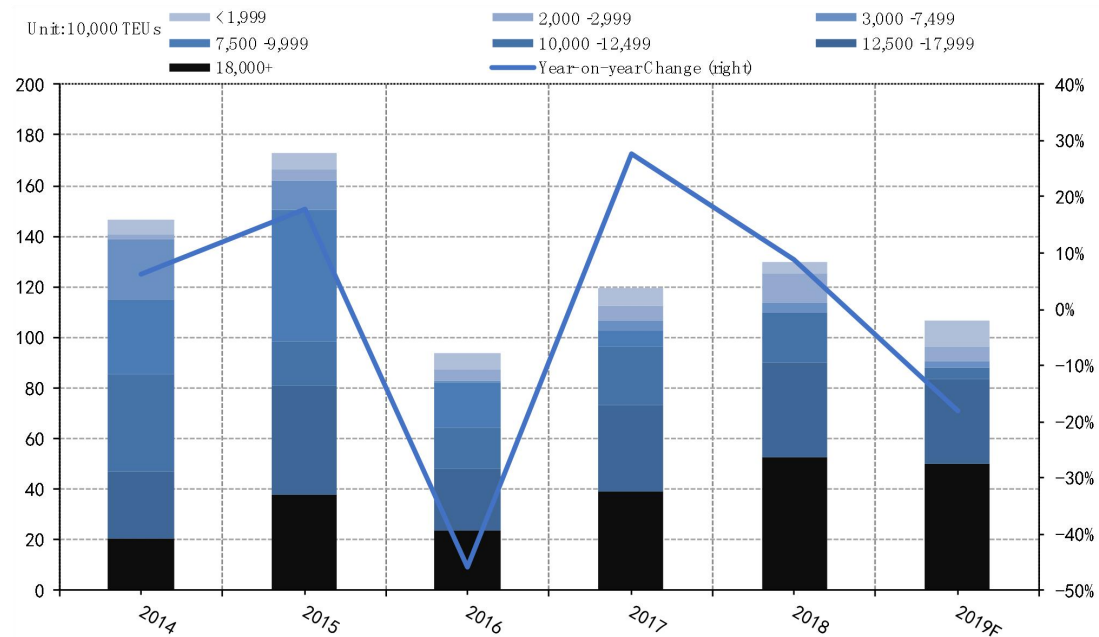
## II. Market Developments and Trends

### 1. Containership deliveries plummet by 18.0%; the orderbook reaches 10-year low

In 2019, the global containership deliveries are expected to total 1.07 million TEUs, down by 18.0% year-on-year. Specifically, the delivered capacity of ultra-large container ships of above 18,000 TEUs accounted for 47%, an increase of 6 percentage points year-on-year, and the delivered capacity of small container ships of below



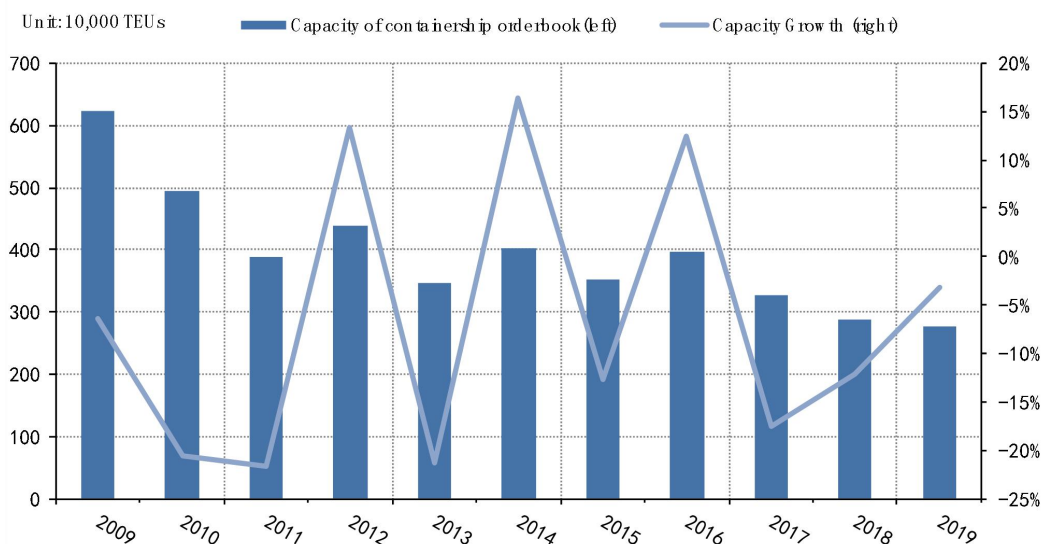
1,999 TEUs accounted for 10%, a rise of 7 percentage points year-on-year. The newly delivered ship sizes presented a clear "polarized" trend. In the second half of 2019, MSC received two 23,000-TEU container ships. The two vessels are currently the world's largest container ships in service.



**Figure 2- 1 Capacity Deployment of Newly Delivered Ship by size range in 2014-2019 (F)**

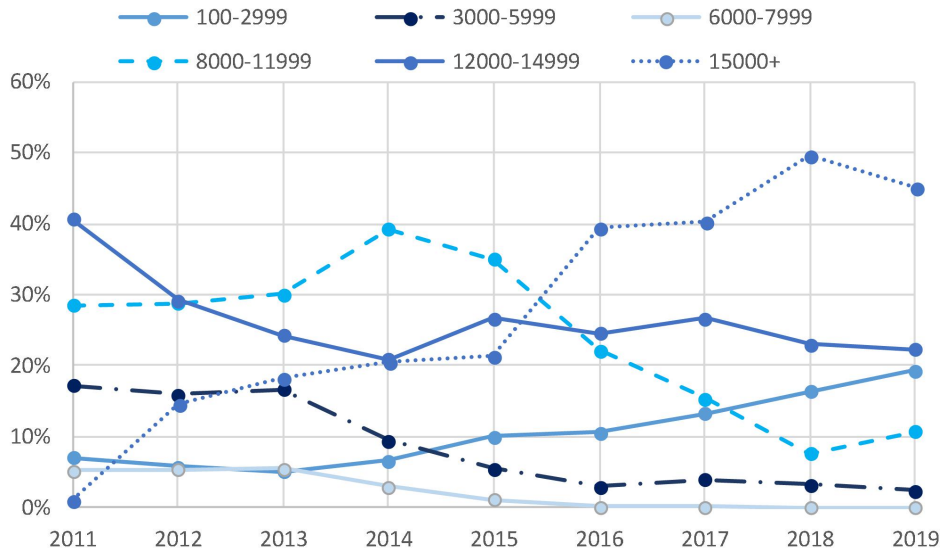
Source: Alphaliner, prepared by Shanghai International Shipping Institute

In 2019, the orderbook for container ships totalled 448 worldwide, or 2.78 million TEUs, the lowest in the past 10 years and a decrease of 3.2% year-on-year. Specifically, the capacity share of orders for ships of above 15,000 TEUs fell by 5 percentage points for the first time, after exceeding 50% for the first time in 2018.



**Figure 2-2 The Orderbook for Container Ships in 2009-2019**

Source: Clarksons, prepared by Shanghai International Shipping Institute

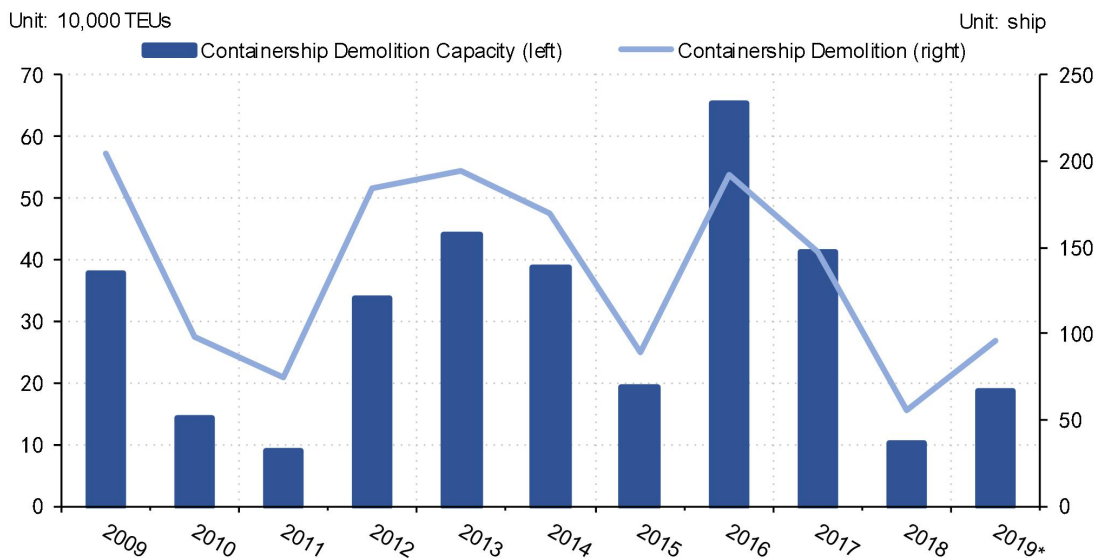


**Figure 2-3 Capacity Shares of Containership Order Book by Size Range in 2011-2019**

Source: Clarksons, prepared by Shanghai International Shipping Institute

**2. Containership demolition picks up greatly, with demolition prices on quick declines**

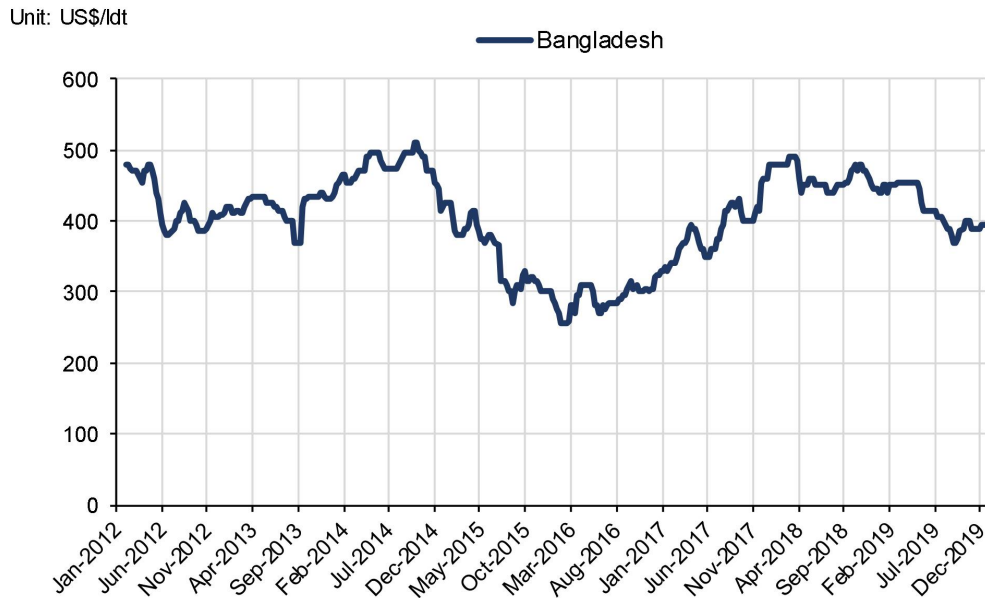
In 2019, 96 container ships, totalling up to 186,300 TEUs in capacity, were scrapped, marking a significant increase of 82.0% year-on-year.



**Figure 2-4 Containership Demolition in 2009-2019**

Source: Alphaliner, prepared by Shanghai International Shipping Institute

As of December 27, 2019, the annual average value of containership demolition prices was US\$418/ldt, a decrease of 9.6% year-on-year, within a range of US\$415/ldt and US\$370/ldt.



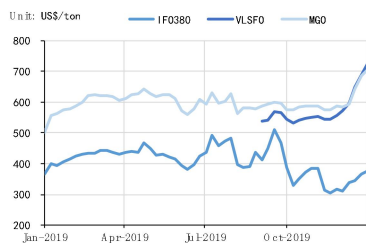
**Figure 2-5 Containership Demolition Prices in 2012-2019**

Source: Clarksons, prepared by Shanghai International Shipping Institute

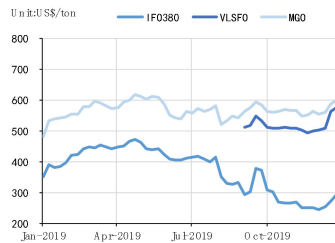
**3. Low-sulfur Fuel oil is in severe short supply in the short term, with high- and low-sulfur oil price gap as wide as more than US\$200**

It is predicted that the global ship-use fuel oil consumption will be nearly 200 million tons in 2020, of which the low-sulfur oil demand will be about 135 million tons, and the supply-demand gap for low-sulfur oil will be about 40%. The gap of low-sulfur heavy oil supply-demand in the market can be filled by the expensive MGO in the early stage.

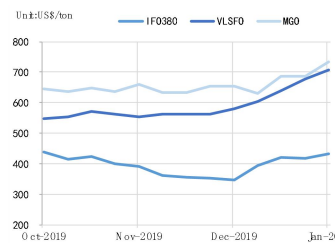
As of the end of 2019, the prices of low-sulfur heavy oil and MGO kept climbing. Specifically, the price gaps between low-sulfur oil and high-sulfur and MGO and high-sulfur oil have been rising all the way. The current price gaps are generally between US\$200 and US\$300 per ton. The price gap between MGO and high-sulfur oil IFO380 in Fujairah Port was once more than US\$400/ton. VLSFO at the Port of Singapore was once priced higher than MGO.



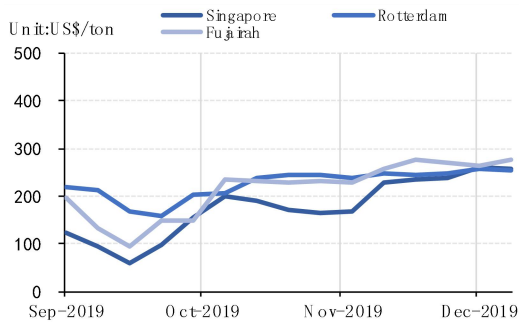
**(a) Singapore bunker price**



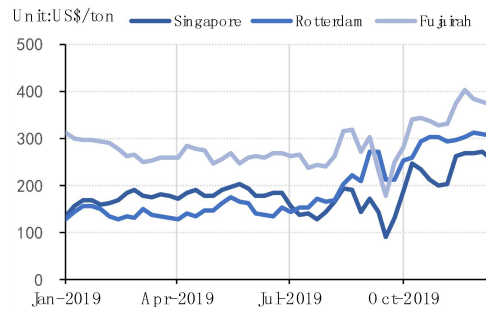
**(b) Rotterdam bunker price**



**(c) Zhoushan bunker price**



(d) VLSF0-IFO380 price gap



(e) MGO-IFO380 price gap

Figure 2-6 Bunker Prices at Major Bunker Ports in the World

Source: Clarksons, prepared by Shanghai International Shipping Institute

#### 4. Number of ships undergoing scrubber retrofit surges, with ultra-large ships taking a dominant share

In 2019, the scrubber installing cost dropped significantly by US\$2 to US\$3 million, and the unit price dropped to US\$3 to US\$5 million. Scrubber has become an attractive option for lines.

Since June 2019, the number of container ships installed scrubber worldwide has been on a rise, pushing up the idle capacity of global fleets to a two-year high. As of December 2019, 327 container ships opted for scrubbers. Specifically, the number of containerships with a scrubber fitted at delivery was 62, the number of containerships with a scrubber retrofit completed was 165, and containerships with a scrubber retrofit in progress were 100.

Unit: 10,000 TEUs

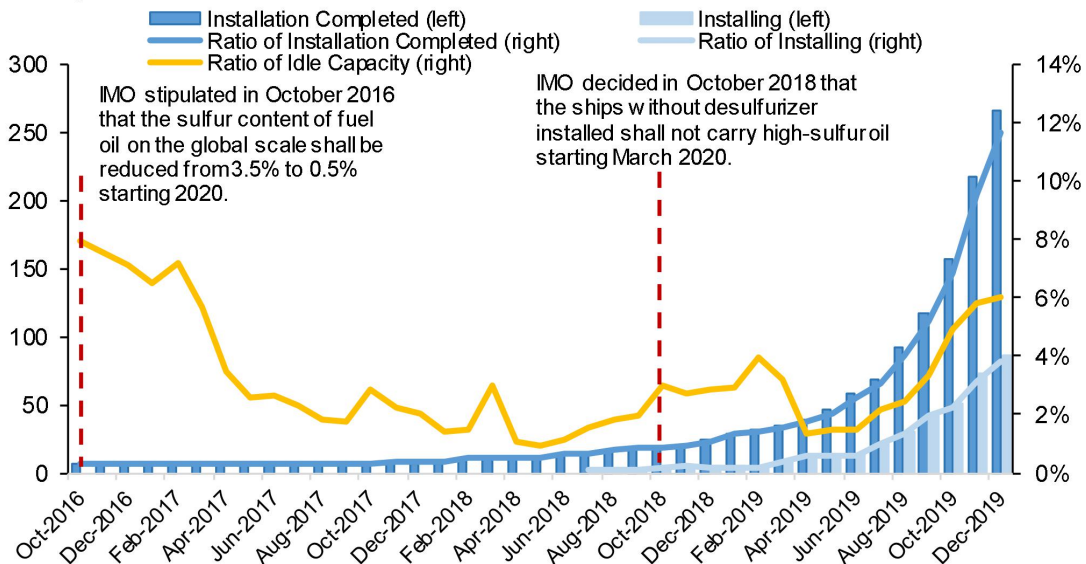


Figure 2-7 Container Ships That Opt for Scrubber in 2016-2019

Source: Clarksons, prepared by Shanghai International Shipping Institute

Table 2-1 Container Ships That Opt for Scrubber

--	Number of Ships	Capacity (10,000 TEUs)
<b>Container Ships That Opt for Scrubber</b>	327	287.66
--Fitted at delivery	62	53.58
--Retrofit completed	165	137.45
--Retrofit in progress	100	96.63

Source: Alphaliner, prepared by Shanghai International Shipping Institute

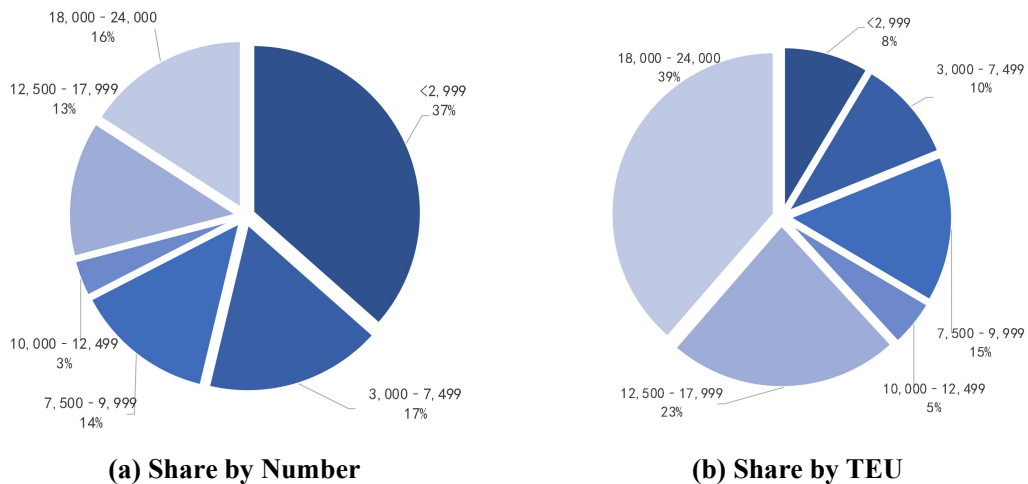
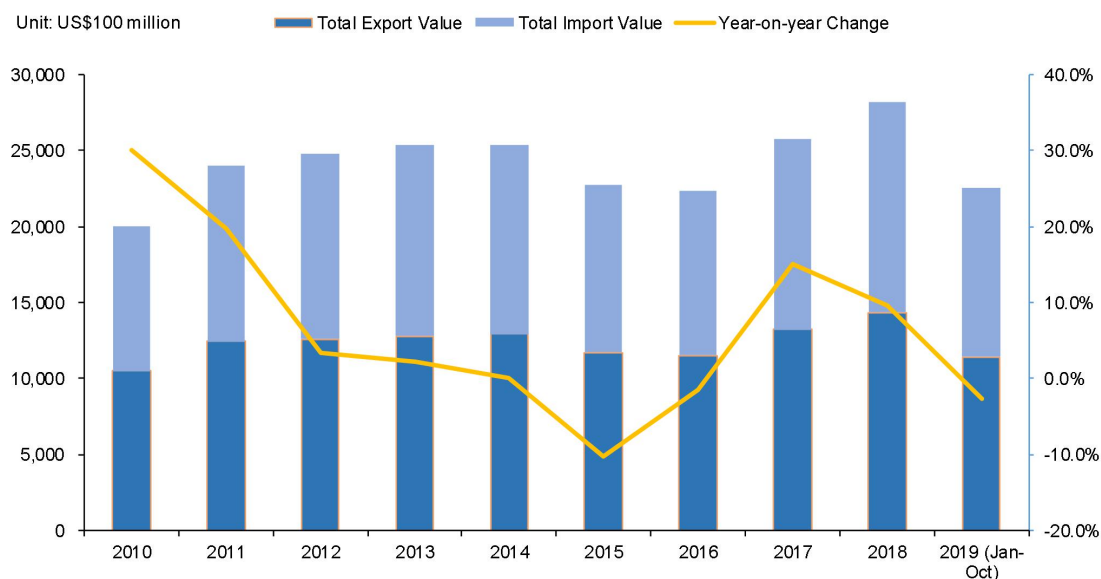


Figure 2-8 Shares of Containerships Scrubber Retrofit by Size Range

### 5. Import and export values of Southeast Asia decline for the first time in past 3 years; freight rates on routes volatile throughout the year

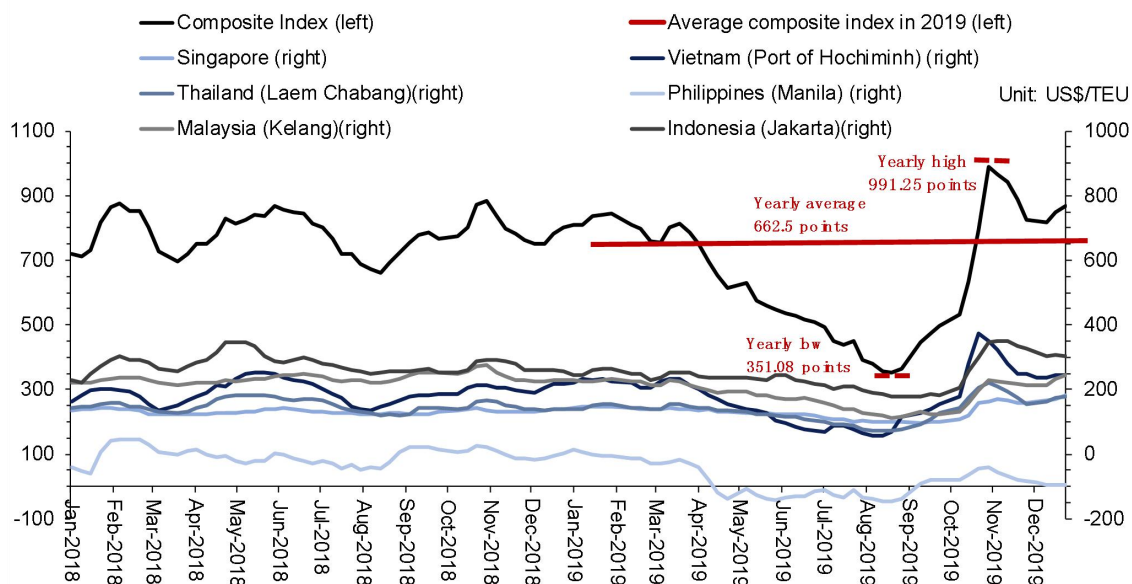
After the strong growth in 2017 and 2018, the import and export values of Southeast Asia's major trader nations from January to October 2019 decreased to US\$2.26 trillion, a drop of 2.6% year-on-year, or a fall of 16.1 percentage points from 2018. The growth rate was 6.6 percentage points lower than the growth rate of the commodity trade volume worldwide (4.0%) in 2019. A bright spot is that Vietnam's import and export trade volumes continued to boom. Its trade value for January to October 2019 reached US\$427.334 billion, an increase of 8.2% year-on-year, ahead of other Southeast Asian countries.



**Figure 2-9 Southeast Asian Import and Export Trade Values and Variations in 2010-2019**

Source: ASEAN database, WTO database and Vietnam customs, prepared by Shanghai International Shipping Institute

In 2019, the volatility of freight rates in Southeast Asian container liner shipping market increased significantly compared with 2018. In late August and early November, the Southeast Asia Freight Index (SEAFI) recorded its 2.5-year low (351.08 points) and high (991.25 points), with the annual swing as wide as 78.9%. The annual average of the composite index was 662.5 points, down by 15.4% (or 121.05 points) year-on-year.



**Figure 2-10 SEAFI in 2018-2019**

Source: Shanghai Shipping Exchange, prepared by Shanghai International Shipping Institute

## 6. Liner industry gets increasingly intensified, especially the Europe-North America routes

Compared with 2008, the total share of the top 10 lines in terms of capacity in 2019 increased by 22.5 percentage points to 83.0%, with APM-Maersk and MSC remaining at the top. Specifically, the share of MSC in terms of capacity rose by 5.5 percentage points. In the integration wave of the liner industry, CSCL and COSCO merged and acquired OOCL. NYK and APL also were acquired separately. The industry became increasingly concentrated, changing from the mid-to-low concentrated to the mid-to-high concentrated type.

**Table 2-2 Capacity Shares and Concentrations of Global Top 10 Lines in 2008 and 2019**

Ranking	Line	Capacity Share in 2008	Line	Capacity Share in 2018	Capacity Share in 2019
1	APM-Maersk	16.2%	APM-Maersk	17.9%	17.8%
2	MSC	10.4%	MSC	14.6%	15.9%
3	CMA-CGM	7.5%	COSCO	12.3%	12.4%
4	Evergreen	5.3%	CMA-CGM	11.9%	11.4%
5	Hapag-Lloyd	4.2%	Hapag-Lloyd	7.1%	7.3%
6	CSCL	3.7%	ONE	6.7%	6.7%
7	COSCO	3.6%	Evergreen	5.2%	5.4%
8	APL	3.4%	Yang Ming	2.8%	2.7%
9	NYK	3.2%	PIL	1.9%	1.7%
10	OOCL	3.0%	HMM	1.8%	1.7%
CR4	--	39.4%	--	56.7%	57.5%
CR10	--	60.5%	--	82.2%	83.0%
Concentration Level	--	Middle (lower) concentration oligopoly	--	Middle (upper) concentration oligopoly	Middle (upper) concentration oligopoly

Source: Alphaliner, prepared by Shanghai International Shipping Institute

Note: The data for 2008 is as of February 1 2008, and that for 2019 is as of January 6 2020.

Note: Market structure can be divided into six levels: oligopoly (CR4 >75%), high concentration oligopoly (65% < CR4 < 75%), middle (upper) concentration oligopoly (50% < CR4 < 65%), middle (lower) concentration oligopoly (35% < CR4 < 50%), low concentration oligopoly (30% < CR4 < 35%), complete competition (CR4<30%).

Europe-North America and the Far East-Europe routes belong to high concentration oligopoly. The top three lines, namely MSC, APM-Maersk and COSCO Shipping, demonstrated obvious scale advantages on mainlane east-west routes. North-south routes also belong to high concentration oligopoly. APM-Maersk has a strong advantage in North-south routes relying on Hamburg Süd. CMA-CGM was the leader of Australia and New Zealand/Oceanian routes. The regional market was differentiated. Regional routes in Europe belong to middle (upper) concentration oligopoly. MSC owned an obvious comparative advantage, while regional routes in Asia belong to middle (lower) concentration oligopoly with many market players.

**Table 2-3 Market Shares and Concentrations of Lines on Different Routes**

Ranking	Line	Eur-N.Am	FE-N.Am	FE-Eur	ME/ISC Related	Sub Saharan Africa Related	Lat Am Related	ANZ /Oceania Related	Intra FE	Intra-Europe
1	APM-Maersk	12.3%	15.5%	18.6%	14.9%	28.4%	25.0%	18.0%	6.7%	12.1%
2	MSC	27.9%	4.7%	19.5%	12.6%	20.4%	15.3%	15.3%	2.3%	30.9%
3	COSCO	6.0%	16.1%	15.4%	15.1%	6.4%	7.1%	16.4%	18.6%	5.9%
4	CMA-CGM	5.3%	14.3%	11.4%	8.6%	15.5%	14.3%	23.3%	5.2%	10.4%
5	Hapag-Lloyd	23.7%	5.0%	9.1%	8.0%	1.8%	12.0%	5.6%	1.1%	5.0%
6	ONE	9.7%	14.8%	9.4%	2.9%	3.4%	5.5%	3.5%	3.7%	1.6%
7	Evergreen	1.2%	9.4%	8.0%	3.6%	1.3%	3.4%	1.4%	5.3%	1.2%
8	Yang Ming	1.9%	6.0%	4.3%	2.6%	0.0%	0.4%	1.4%	2.1%	1.3%
9	PIL	0.0%	1.5%	0.0%	2.0%	6.6%	1.5%	3.7%	1.0%	0.0%
10	HMM	0.0%	2.7%	0.0%	4.1%	0.0%	0.4%	0.8%	1.5%	0.0%
<b>CR4</b>		<b>73.6%</b>	60.5%	65.0%	51.2%	<b>71.1%</b>	66.7%	<b>73.0%</b>	35.9%	59.3%
<b>CR10</b>		88.0%	<b>89.9%</b>	<b>95.8%</b>	74.4%	84.0%	84.9%	<b>89.4%</b>	47.6%	68.4%
<b>Concentration Level</b>		<b>High concentration on oligopoly</b>	Middle (upper) concentration on oligopoly	<b>High concentration on oligopoly</b>	Middle (upper) concentration on oligopoly	<b>High concentration on oligopoly</b>	<b>High concentration on oligopoly</b>	<b>High concentration on oligopoly</b>	Middle (lower) concentration on oligopoly	Middle (upper) concentration on oligopoly

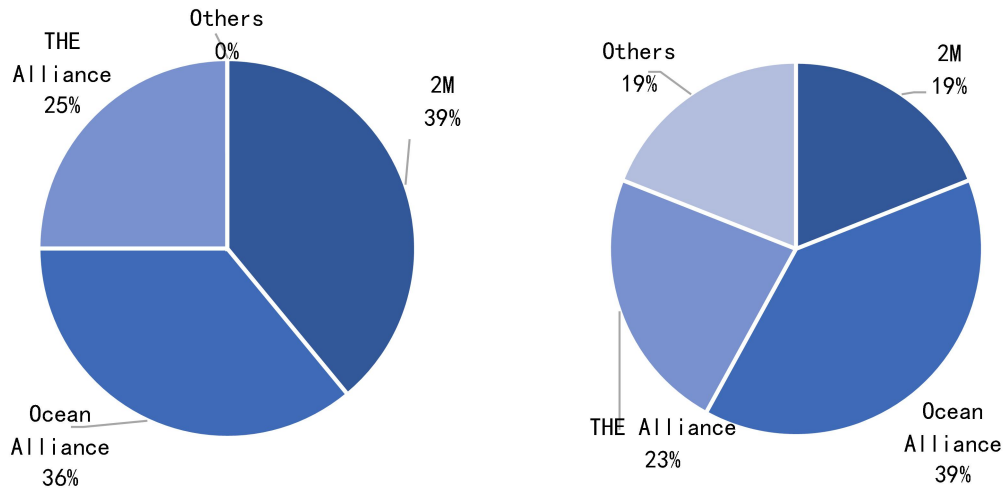
Source: Alphaliner (December 2019), prepared by Shanghai International Shipping Institute

Note: Market structure can be divided into six levels: oligopoly (CR4 >75%), high concentration oligopoly (65% < CR4 < 75%), middle (upper) concentration oligopoly (50% < CR4 < 65%), middle (lower) concentration oligopoly (35% < CR4 < 50%), low concentration oligopoly (30% < CR4 < 35%), complete competition (CR4<30%).

### **7. Non-alliance lines find little foothold on Far East-Europe routes; large lines pursue ultra-large container ships**

On the Far East-Europe routes, the capacity of three alliances accounted for 100%, with 2M alliance taking 39%, Ocean Alliance 36%, and THE Alliance 25%. Other non-alliance lines had no market share. On the Far East-North America routes, the capacity of the three alliances accounted for 81%, with Ocean Alliance taking 39%, and THE Alliance 23%.





Far East-Europe routes

Far East-North America routes

Figure 2-11 Capacity Shares of Three Alliances on Mainlane East-West Routes in 2019

Source: Alphaliner (December 2019), prepared by Shanghai International Shipping Institute

Large lines presented an increasingly prominent trend of large scale containership. The competition of capacity among container ships of above 18,000 TEUs was largely among the top seven lines. Compared with 2018, Evergreen, MSC, and COSCO Shipping recorded a rise of 11 percentage points, 4 percentage points and 3 percentage points, respectively, in terms of capacity share of container ships of above 18,000 TEUs. Wan Hai and ZIM's capacity shares of container ships of 10,000-15,100 TEUs rose by 8 percentage points and 11 percentage points, respectively. However, small lines such as PIL, X-Press and TS Lines have increased their numbers of ships of 3,000-5,100 TEUs to upgrade their capacities on intra-regional routes.

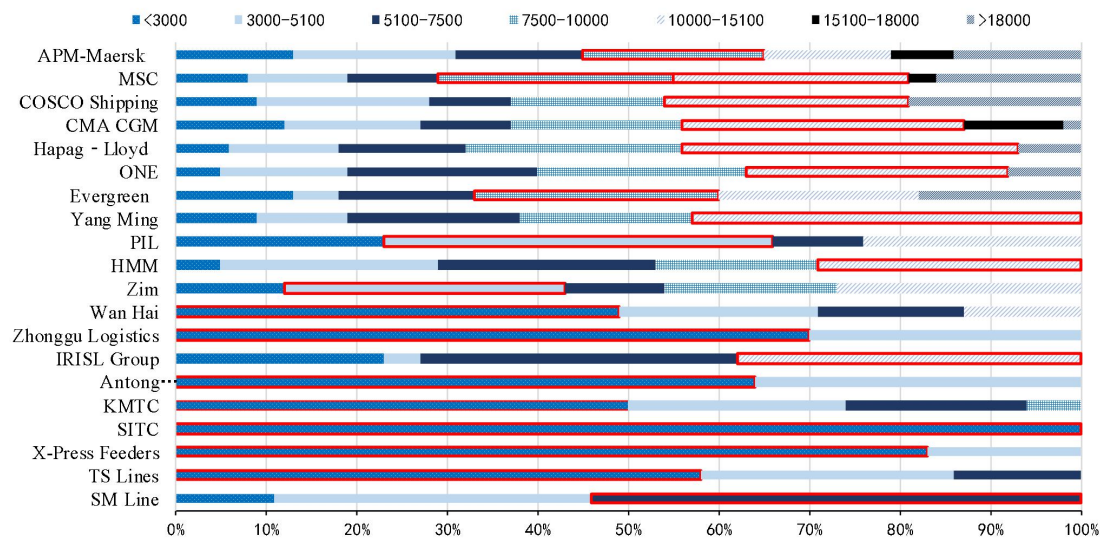


Table 2-12 Ship Type Structures of Global Top 20 Lines in 2019

Source: Alphaliner (December 2019), prepared by Shanghai International Shipping Institute

**8. Major lines welcome improving profitability; COSCO Shipping records significant net profit rises in Q1-Q3**

The liner industry in the first three quarters of 2019 outperformed 2018 in terms of

profitability on the whole. Hapag-Lloyd, Wan Hai, and COSCO Shipping posted significant rises in profits. Maersk, ONE, and Evergreen got out of the red. Yang Ming, HMM, and ZIM recorded significant reduction of loss. CMA-CGM fell to short-term loss because of its purchase of CEVA Logistics. Matson suffered falling profits due to continued low cargo volumes on the Hawaii routes and rising operating costs.

**Table 2-4 Financial Performance of Major Carriers in the First Three Quarters in 2019**  
(Unit: million US dollars)

Line	Revenue			Net Profit		
	Jan - Sept 2018	Jan - Sept 2019	Year-on-year Growth	Jan - Sept 2018	Jan - Sept 2019	Year-on-year Growth
APM-Maersk	29022	29222	0.7%	-126	517	Out of the red
COSCO shipping	12097.7	16441.2	35.9%	127.1	311.7	<b>145.2%</b>
CMA-CGM	17,176.1	22,732.4	32.3%	76.5	-101.0	Fall to loss
Hapag-Lloyd	10141	10654	5.1%	15	333	<b>2120.0%</b>
ONE <sup>2</sup>	5030	5984	19.0%	-311	126	Out of the red
Evergreen	3949	4693	18.8%	-13.1	11.2	Out of the red
Yang Ming	3450	3710	7.5%	-220	-108	Significant loss reduction
HMM <sup>1</sup>	2870.3	3144.6	9.6%	-378.5	-231	Significant loss reduction
ZIM	2395	2473	3.2%	-74	-14.2	Significant loss reduction
Wan Hai	1560	1774	13.7%	27	78.44	<b>190.5%</b>
SITC	1041.7	1108.4	6.4%	--	--	--
Matson	1657.9	1662.4	0.3%	88.4	67.1	-24.1%

Note: 1. Only container shipping and related businesses are included; 2. For the period from April to September;

Source: Financial statements of companies, prepared by Shanghai International Shipping Institute

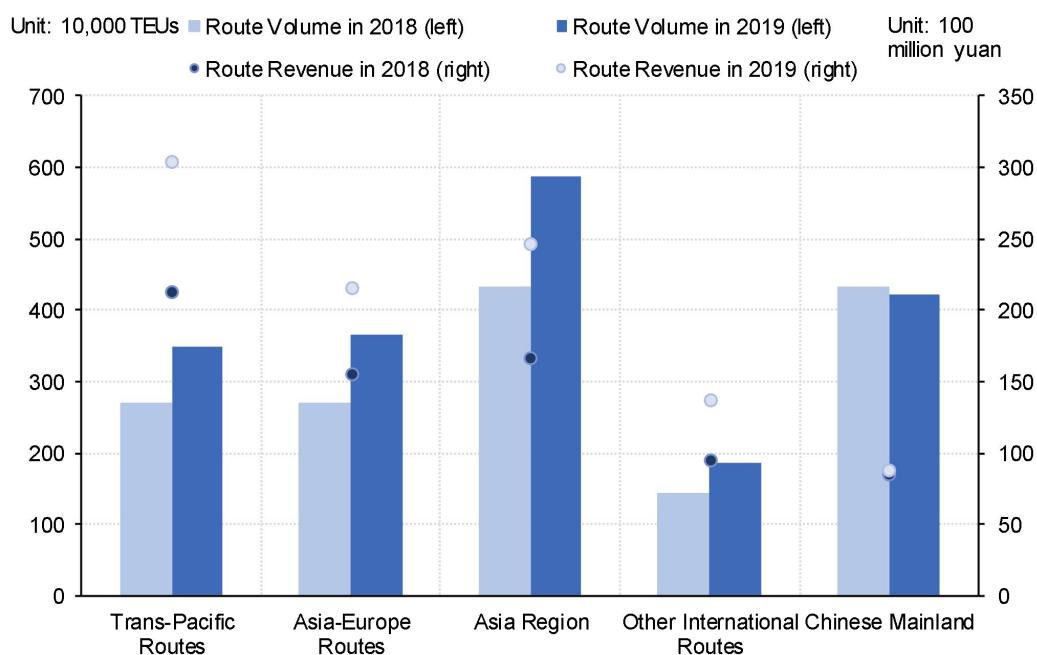
In the first three quarters of 2019, COSCO Shipping' revenue recorded 111.62 billion yuan, an increase of 36% year-on-year, with its net profit climbing to 3.52 billion yuan (a rise of 66% year-on-year). Specifically, its freight revenue was 106.86 billion yuan, an increase of 37% year-on-year. The company augmented its efforts to develop the Belt and Road emerging markets and regional markets, and to expand third-country shipping. Under the dual brands of COSCO Container Lines and OOCL, the cargo volumes reached 19.1 million TEUs, and its freight revenue increased as well.

**Table 2-5 Revenue and Cost of COSCO Shipping Holdings in First 9 Months of 2018-2019**

(Unit: 100 million)	Revenue	Operating Cost
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yuan)	2018	2019	Growth %	2018	2019	Growth %
<b>Total</b>	821.3	1116.17	36%	761.22	994.21	31%
<b>-Freight business</b>	777.75	1068.60	37%	732.94	969.16	32%
<b>-Terminal business</b>	52.23	67.74	30%	36.94	45.17	22%

Source: Quarterly reports of COSCO Shipping Holdings, prepared by Shanghai International Shipping Institute



**Figure 2-13 Volumes and Freight Revenue of COSCO Shipping Holdings in First 9 Months of 2018-2019**

Source: Quarterly reports of COSCO Shipping Holdings, prepared by Shanghai International Shipping Institute

### III. Outlook of International Container Shipping Market in 2020

#### 1. Factors and trends

##### ◆ Shipping capacity input becomes more rational, mindset of competition changes industrywide

In 2019, with the overall market demand slowing down, the several waves of large-scale suspension measures taken by lines, the sharp decline in new ship deliveries, and the 15-year low of orderbook jointly contributed to rational input of shipping capacity in the industry overall. The freight rates in the market remained stable, and even rose slightly. Most lines recorded significant increases in profits or reduced losses. As lines were paying more and more attention to non-ocean businesses, they tapped into the synergy of port and shipping sectors, stressed on comprehensive logistics to improve control and efficiency of logistics chains on the whole, and enhanced R&D and investment of new technologies such as blockchain. This introduced a shift of the industry's overall mindset and pattern of competition,

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gradually moving the focus of competition from "capacity war" and "price war" to "technology war" and "service war".

◆ **US-China phase-one economic and trade agreement about to be signed, global economic and trade environment to improve**

According to IMF and WTO forecasts, the global economic growth and trade growth in 2020 will reach 3.4% and 2.7%, respectively, an increase of 0.4 and 1.5 percentage points from 2019, manifesting an improvement in the overall economic and trade environment. Specifically, China and the United States will sign the phase-one economic and trade agreement in Washington. It is expected that the two sides will reach consensus on multiple aspects including intellectual property rights, technology transfers, food and agricultural products, financial services, exchange rates and transparency, trade expansion, bilateral assessment and dispute settlement. This will further boost the recovery of global container shipping demand, and will be especially important for the recovery of shipping volumes on the Far East-North America routes.

◆ **China's shipping industry continues to improve despite greater downward pressure in Q1 2020**

In the fourth quarter of 2019, China's shipping enterprises maintained steady performance overall, with China Shipping Prosperity Index standing at 107.55 point, posting a modest decline but remaining in the slightly prosperous interval. China Shipping Confidence Index recorded 107.58 points in the prosperous interval, manifesting that Chinese shipping entrepreneurs were still confident in their business prospects. It is expected that China's shipping industry will become slightly stagnant in the first quarter of 2020. China Shipping Prosperity Index for the quarter is projected to touch 96.53 points, a drop of 11.02 points quarter-on-quarter and falling to the slightly stagnant interval. China Shipping Confidence Index is projected to touch 94.99 points, a drop of 12.59 points quarter-on-quarter and falling to the slightly stagnant interval.

◆ **IMO sulfur restrictions to take effect in 2020, industry capacity supply to decrease slightly**

With the IMO sulfur restrictions to take effect in 2020, the current idle capacity of global container fleets has reached a new high in more than two years, accounting for 6% of the global total. Currently about two-thirds of the world's idle capacity is a result of ships being docked for installing scrubbers. It is expected that as a result of this, the shipping capacity temporarily unavailable in 2020 will account for about 1.2% of the global total. Meanwhile, the slow steaming measures taken for the purpose of fuel cost reduction will also consume part of the excess capacity. The increasingly stricter environmental protection requirements and the industry's endeavors to achieve decarbonization goals have pushed lines to further accelerate technological iterations and ship optimization, increase the application and R&D of new energy powered ships such as LNG-powered ships, and accelerate the dismantling of old ships. This has intensified the scarcity of container ships on non-mainlane routes a certain extent.

◆ **Overall impact of the US-Iran conflict relatively small, lines exposed to operational risks from conflict escalation**

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The sudden escalation of the US and Iran tensions drove international crude oil prices to rise rapidly, and then the oil prices fell sharply as the hot spots cooled down. The biggest risk that lies in the US-Iran conflict is that Iran may lock the Strait of Hormuz. If the escalation of the US-Iran conflict leads to hindered navigation through the Strait of Hormuz, the supply interruption will force many countries to reduce crude oil imports from Iraq, Kuwait and the United Arab Emirates (UAE). Supply risks will cause international oil prices to soar, which will undoubtedly increase the fuel cost burden on lines.

◆ **Price difference between high- and low-sulfur oil may remain high in the year, companies with a low scrubber installation rate may face profit risks**

According to Shanghai International Shipping Institute estimates, even if most of the current lines impose the LSS (Low Sulfur Surcharge), it remains hard for them to fully offset the increased cost from price differences between high- and low-sulfur oil (which is as high as US\$306/ton in Singapore). Based on a supposed price gap of US\$202/ton between high- and low-sulfur oil, ships installed with scrubbers can usually recover the installation cost in one to two years. Based on the current low-sulfur oil gap, the difference between high- and low-sulfur oil prices in 2020 and 2021 are expected to be around US\$235/ton and US\$185/ton, respectively. For a line with a relatively low scrubber installation rate, if the extra cost for fuel oil in 2020 is not offset well, the company's overall profitability may be impacted to a large extent. Meanwhile, the wide gap between high- and low-sulfur oil prices may lead to small peaks in installation of scrubber, which can push up the average duration of ship undergoing scrubber retrofit.

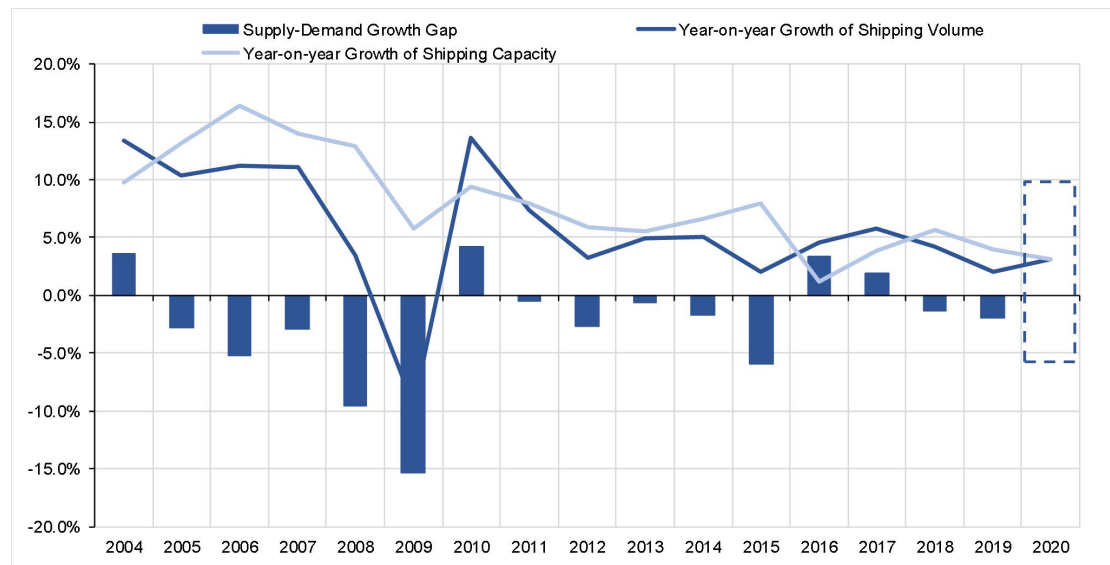
◆ **Alliance competition pattern increasingly obvious, non-alliance lines can nurture intra-regional markets in response**

The container shipping industry is currently in high concentration oligopoly competition, and the competitive advantages of alliances on mainlane routes are becoming more obvious. For example, the capacity share of the three major alliances on the Far East-Europe routes has reached 100%. Meanwhile, as intra-alliance cooperation continues to deepen and alliance structures become more stable, the overall synergistic effect of alliances is also unleashed. The vivosphere of non-alliance companies is being squeezed, and it has become difficult for them to compete effectively with alliances simply through building larger ships. The focus of competition among non-alliance lines can be moderately shifted to intra-regional markets that feature relatively low concentration. Non-alliance carriers are recommended to focus on improving service quality and nurturing key market segments.

## **2. Market prospects**

In view of the current market status, forecasting the overall market trend not only requires attention to the fundamentals of supply and demand, but also integrated analysis with periodic factors and changes in industry competition mindset combined. Looking into 2020, the growth rates of supply and demand are expected to be balanced, and the supply-demand fundamentals will significantly improve compared

with 2019. It is expected that the global container liner shipping market will outperform 2019 on the whole, and 2020 may become an important turning point from which the market will embrace a new round of rises.

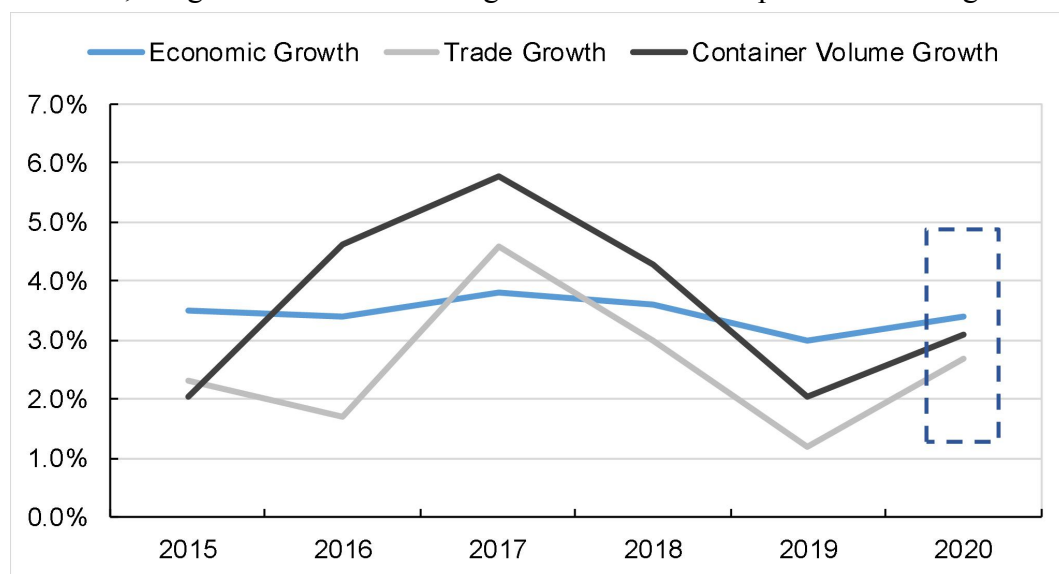


**Figure 3-1 Growth Rates of Container Volumes and Capacities, and Supply-Demand Growth Rate Gaps in 2004-2020**

Source: Clarksons, prepared by Shanghai International Shipping Institute

◆ **Prospect of seaborne container trades**

It is expected that the global seaborne container trade demand will pick up in 2020, with volumes hitting 204 million TEUs, a rise of 3.1% year-on-year, or 1.1 percentage points over the level in 2019. Specifically, the growth rates of seaborne container trade volumes on non-mainlane east-west routes and north-south routes are expected to pick up significantly; the shipping volume demands on mainlane east-west routes will recover to some extent because of favorable factors such as the eased US-China trade frictions and the recovery of the economic and trade environment in developed economies; the growth rates of intra-regional routes will drop to a certain degree.



**Figure 3-2 Trends of Global Economy, Trade and Container Volume Growth Rates in**

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## 2015-2020

Source: IMF, WTO, and Clarksons, prepared by Shanghai International Shipping Institute

### ◆ Prospect of fleet capacity

It is expected that the growth of global boxship fleet capacities will slow down for the third consecutive year, with the capacity totalling 22.95 million TEUs, a year-on-year rise of 3.1%, the rate being 0.9 percentage points lower year-on-year. Specifically, the capacity of ships of 15,000 TEUs or above continues to increase at high speed, but the growth rate falls compared with 2019. The capacity on the orderbook is expected to decline for the fourth consecutive year to hit a 16-year low; the newly delivered capacity may hit 1.12 million TEUs, a slight rise compared with 2019, but the delivered capacity of ultra-large container ships will continue to decline.

### ◆ Prospect of freight rates

As stated above, it is expected that the freight rate index for 2020 will outperform 2019 on the whole, and the CCFI for the year will be higher than 900 points on average. Route specific, the Transpacific routes, boosted by favorable factors such as alleviated trade frictions between the United States and China, will embrace widespread recovery in shipping demand, and the overall freight rates may perform well. Asia-Europe routes are affected by factors such as increased shipping demand and reduced delivery of ultra-large ships, and its overall freight rate performance is expected to be better than 2019.