

China's Shipping Industry Continues to Improve Despite Greater Downside Pressure in Q1

(CSPI Research Office, Shanghai International Shipping Institute)

- China Shipping Prosperity Report Series

Summary:

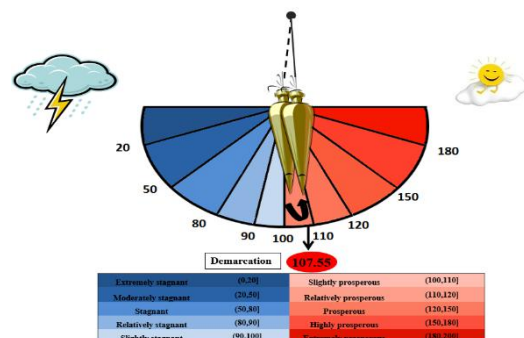
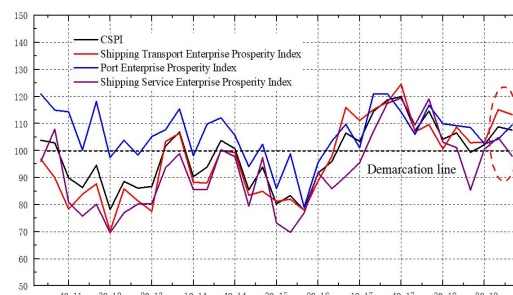
- **China's shipping industry stabilizes.** China Shipping Prosperity Index for the fourth quarter of 2019 stood at 107.55 point, recording a modest decline but remaining in the slightly prosperous interval, indicating the stabilization of China's shipping industry. China Shipping Confidence Index for the same quarter edged down to 107.58 points, remaining in the slightly prosperous interval, manifesting the sufficient confidence among Chinese shipping entrepreneurs in their business prospects.
- **Profitability of port and shipping enterprises improves.** Shipping enterprises enjoyed substantial growth quarter-on-quarter in terms of profitability in the fourth quarter of 2019. Meanwhile, the prosperity indexes of shipping transport enterprises, port enterprises and shipping service enterprises were all above the prosperity demarcation. Specifically, the prosperity index of container shipping enterprises reported an increase of 33.81 points quarter-on-quarter and port enterprises recorded a rise by 35.89 points quarter-on-quarter, enabling the enterprises in the two areas to march into the highly prosperous and the prosperous intervals, respectively.
- **Confidence of container shipping enterprises bounces back.** In the fourth quarter of 2019, the prosperity index of container shipping enterprises stood at 129 points in the prosperous interval. The confidence index of container shipping enterprises reached 111.14 points, surging by 35.14 points quarter-on-quarter and back to the relatively prosperous interval.
- **Business outlook for the next quarter looks worrying.** According to the China shipping prosperity survey, China Shipping Prosperity Index for the first quarter of 2020 is projected to drop by 11.02 points to 96.53 points, falling to the slightly stagnant interval. China Shipping Confidence Index is expected to reach 94.99 points, a drop of 12.59 points to below the prosperity demarcation. Overall, China's shipping enterprises may see worrying business performance in the first quarter of 2020.

Highlights:

1. China's shipping market has been volatile in 2019 and remains low overall. More than 40% of shipping transport enterprises believed the shipping sector in the next year may continue the trend from this year; but only a few large ship enterprises said the shipping market in 2020 will be sluggish;
2. Since November 2019, the freight rates of all routes starting from Asia have seen significant rises, with the ones for containers on the Asia-Europe routes surging by 30%. Nearly 40% of container shipping enterprises believed vessels docked in a centralized manner to install desulfurizers was the cause of the rising container freight rates in Asia;
3. Port and shipping enterprises transiting to comprehensive logistic service providers has become a global shipping trend. More than 40% of port and shipping enterprises said they would sign strategic cooperation agreements with upstream and downstream players to gain control over comprehensive logistic resources through cooperation or alliance;
4. On November 29, 2019, Maersk, the world's largest container liner company, announced a new round of layoff, but other enterprises in the industry were not impacted yet. **The layoff won't spread in 2020.**

Risks: Although China Shipping Prosperity Index is rallying overall, there is a severe lack of incentive for sustained growth of prosperity and a relative lack of incentive in terms of rally strength and sustainability. China's shipping industry still faces high uncertainties for future development.

➤ Prosperity



➤ Related Reports

- **Analysis Report on Major Coastal Dry Bulks Shipping Markets in China (Review of 2019 and Outlook for 2020)**
- **Analysis Report on Domestic Container Shipping Markets in China (Review of 2019 and Outlook for 2020)**
- **Analysis Report on International Container Shipping Market in 2020 (Review of 2019 and Outlook for 2020)**
- **Analysis Report on International Dry Bulks Market (Review of 2019 and Outlook for 2020)**

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1. Overview of China's Shipping Prosperity in Q4 2019

China's shipping industry continues to improve.

China Shipping Prosperity Alertness Index for November 2019 stood at 67.25 points, rising marginally quarter-on-quarter and remaining in the extremely gloomy interval. China Shipping Prosperity Composite Index for the same month stood at 96.07 points, slipping slightly quarter-on-quarter and fluctuating at low levels on the whole. At the micro level, China Shipping Prosperity

Index for the fourth quarter of 2019 fell by 1.19 points quarter-on-quarter to 107.55 points, staying in the slightly prosperous interval. China Shipping Confidence Index reached 107.58 points, falling by 0.76 points quarter-on-quarter yet remaining above the demarcation. China's shipping entrepreneurs were confident in the market prospect and believed that the shipping sector would pick up (see Table 1-1, Figure 1-1).

Time		China Shipping Prosperity Alertness Index	China Shipping Prosperity Composite Index	China Shipping Prosperity Index	China Shipping Confidence Index
1Q-19	January	56.42	96.17	99.33	108.52
	February	42.82	94.97		
2Q-19	March	49.4	96.27	102.15	91.06
	April	48.4	95.86		
	May	57.73	95.9		
3Q-19	June	54.17	96.1	108.74	108.34
	July	55.95	96		
	August	55.95	96.25		
4Q-19	September	58.17	96.35	107.55	107.58
	October	64.50	96.22		
	November	67.25	96.07		

Table 1-1 China Shipping Prosperity

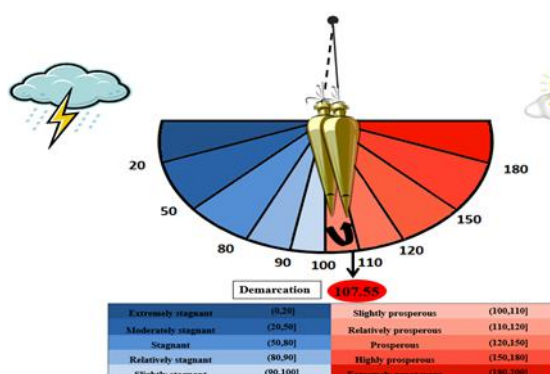


Figure 1-1 China Shipping Prosperity Index in Q4 2019

Source: Shanghai International Shipping Institute

2. Macro Analysis on China's Shipping Prosperity

Economic and shipping indicators continue to run low. China Shipping Prosperity Alertness Index for November 2019 was 67.25 points, remaining in the extremely gloomy interval (see Figure 2-1). Among the alertness indicators, all the indicators for the shipping market, except the BDI, BDTI and power generation, were in the gloomy or extremely gloomy intervals, yet the general freight rates in the market went up a little. The sector was still sluggish on the whole, and the growth of

Part of shipping indicators comparatively stable. In the fourth quarter of 2019, the dry bulks shipping market dipped and BDI among the four major shipping indicators plunged, yet remaining in the normal interval. BDTI started to enter the normal interval from October. CCFI followed a stable trend in this quarter, fluctuating around 800 points in the extremely gloomy interval. CCBFI fell again in November after a rally and fluctuated at low levels in the gloomy interval (see Figure 2-2).

Economic indicators fall across the board. In the fourth quarter of 2019, all economic indicators dropped to varied degrees. Specifically, the growth of fixed-asset investments kept falling and plunged in November in particular, remaining in the extremely gloomy interval. Consumer goods retail sales growth and port throughput continued to rise. Import and export values growth fluctuated in a narrow range in this quarter and ended up rising, yet remaining in the gloomy interval. Power generation growth enjoyed a sharp rise in this quarter,

total social demand headed downward (see Figure 2-4).

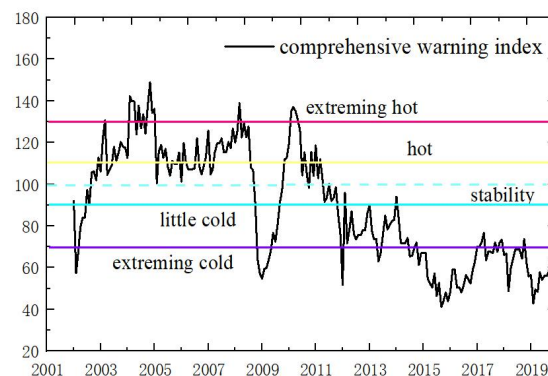


Figure 2-1 China Shipping Prosperity Alertness Index

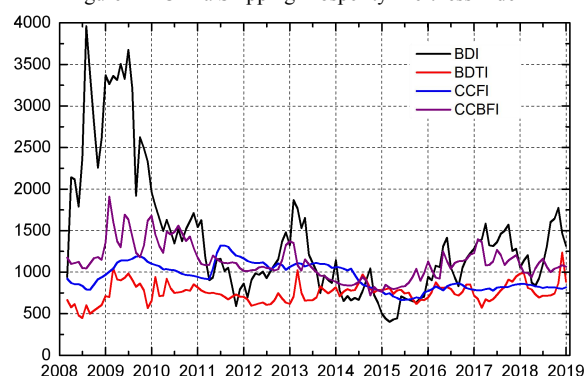


Figure 2-2 Variations of Shipping Indicators

returning to the normal interval from the gloomy interval in last quarter (see Figure 2-3).

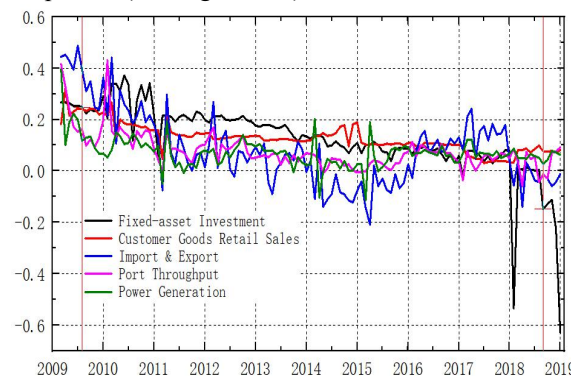


Figure 2-3 Variations of Economic Indicators

T M E	BD I	BD TI	CCFI	CCBFI	FIXED-ASSET INVESTMENT	CUSTOMER GOODS RETAIL SALES	IMPORT EXPORT	PORT THROUGHPUT	POWER GENERATION	CASI
2019-11	●	●	●	●	●	●	●	●	●	●
2019-10	●	●	●	●	●	●	●	●	●	●
2019-09	●	●	●	●	●	●	●	●	●	●
2019-08	●	●	●	●	●	●	●	●	●	●
2019-07	●	●	●	●	●	●	●	●	●	●
2019-06	●	●	●	●	●	●	●	●	●	●

(Legend: ● Extremely heated; ● Heated; ● Normal; ● Gloomy; ● Extremely gloomy)

Figure 2-4 Composite Alertness Index Signals

3. Analysis on Prosperity of China's Shipping Enterprises

Some shipping enterprises maintained stable business performance in the fourth quarter of 2019. China Shipping Prosperity Index stood at 107.55 points, a moderate fall of 1.19 points quarter-on-quarter. Specifically, container shipping enterprises welcomed a significant improvement

in prosperity and entered the prosperous interval, while dry bulks shipping enterprises and shipping service enterprises suffered drops to the slightly stagnant interval (see Figure 3-1).

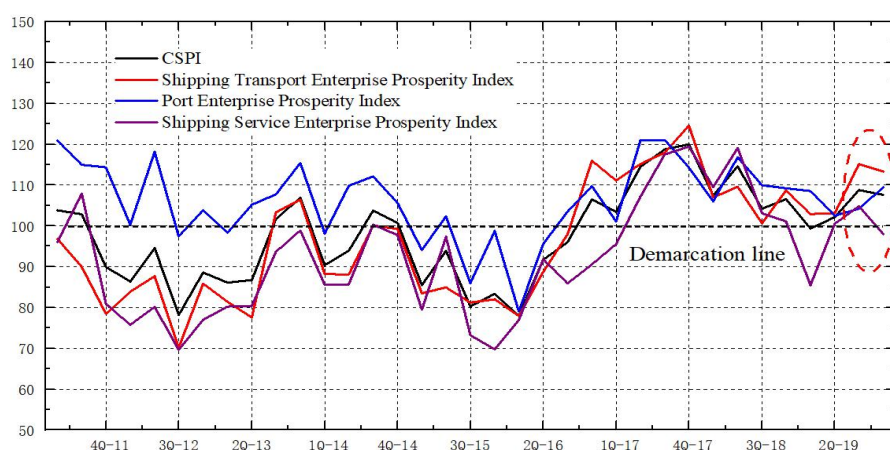


Figure 3-1 China Shipping Prosperity Index

In the fourth quarter of 2019, China Shipping Confidence Index was 107.58 points, edging down by 0.76 points quarter-on-quarter to the slightly prosperous interval. Specifically, the confidence index of dry bulks shipping enterprises tumbled to the relatively stagnant interval, while those of other enterprises all remained above the demarcation. Shipping enterprises that were

optimistic about the general situation accounted for 19.83%, a drop of 0.68% from that in the previous quarter. 59.48% of surveyed shipping enterprises believed the general situation was just all right whereas 19.83% were not optimistic about the general situation, the proportion dropping by 1.53% from that in the previous quarter. China's shipping industry remained stable (see Figure 3-2).

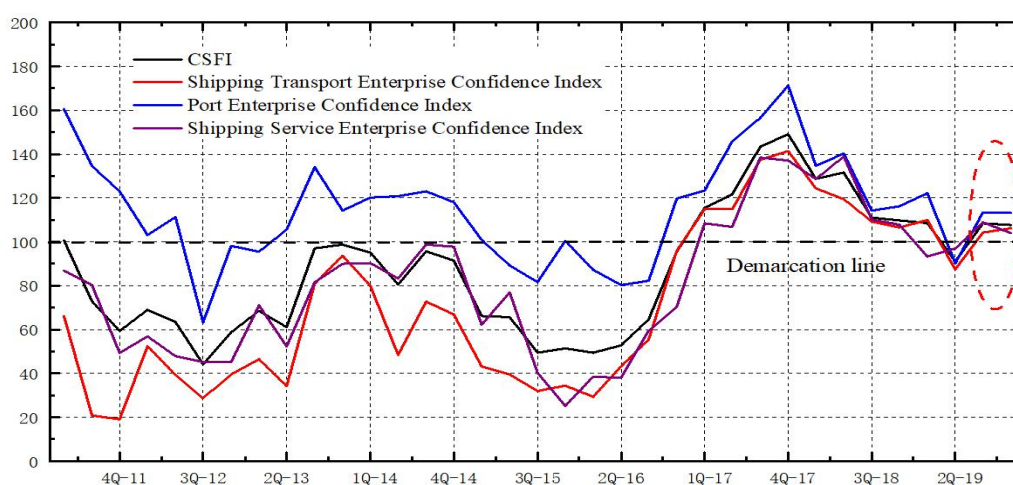


Figure 3-2 China Shipping Confidence Index

3.1 Analysis on Prosperity of China's Shipping Transport Enterprises

Shipping transport enterprises continue favorable development. In the fourth quarter of 2019, the prosperity index of shipping transport enterprises reached 113.3 points, running flat with that in the previous quarter. The confidence index of shipping transport enterprises stood at 106.09 points in the slightly prosperous interval, up by 1.89 points from that of the previous quarter. Specifically, the prosperity indexes of dry bulks shipping enterprises

and container shipping enterprises were 95.64 points and 129 points, respectively, and their confidence indexes were 85.18 points and 111.14 points, respectively, indicating improving business performance overall for shipping transport enterprises and recovering confidence among entrepreneurs who were optimistic about further recovery of the market (see Figure 3-3).



Figure 3-3 Prosperity and Confidence Indexes of Shipping Transport Enterprises

Large shipping transport enterprises post the highest prosperity index. In the fourth quarter of 2019, the prosperity indexes of large, medium-sized and small shipping transport enterprises stood at 115.16 points, 109.43 points and 112.27 points, respectively. Specifically, the prosperity index of large shipping transport enterprises fell from the prosperous interval to the relatively prosperous interval, and the prosperity index of medium-sized shipping transport enterprises ran flat with that in the previous quarter. The prosperity index of small shipping transport enterprises, however, soared quarter-on-quarter, rising from below the demarcation line

to the relatively prosperous interval. In general, large, medium-sized and small shipping transport enterprises recorded sound business performance (see Figure 3-4).

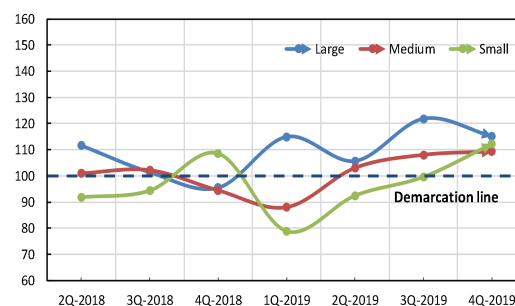


Figure 3-4 Prosperity Indexes of Large, Medium-sized and Small Shipping Transport Enterprises

Business indicators of shipping transport enterprises improve on the whole. In the fourth quarter of 2019, shipping transport enterprises continued to see stable capacity input, improved space utilization and

rising freight income. Despite the surge in operating costs, enterprises managed to stay profitable with more abundant current funds and easier access to financing. Besides, loan liability further fell and labor demand was relatively stable.

Meanwhile, shipowners started to show improving willingness in investing in shipping capacity (see Figure 3-5).

Monitoring Indicators of Shipping Transport Enterprises	4Q Prosperity Indices		Compare with 3Q	Prosperity
Shipping Capacity	100.41	↓	-7.80	Slightly prosperous
Space Utilization	113.50	↓	-2.49	Relatively prosperous
Freight	121.13	↓	-14.93	Prosperous
Operating Cost	73.46	↓	-19.70	Stagnant
Profitability	128.69	↓	-0.99	Prosperous
Current Fund	137.73	↓	-2.77	Prosperous
Enterprise Financing	117.80	↑	4.78	Relatively prosperous
Loan Liability	117.88	↑	7.85	Relatively prosperous
Labor Demand	110.09	↑	5.12	Relatively prosperous
Shipping Capacity Investment	112.26	↑	12.57	Relatively prosperous

Figure 3-5 Business Indicator Prosperity Indexes of Shipping Transport Enterprises

Source: Shanghai International Shipping Institute

Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression. The higher the value is, the more promising the industrial outlook is.

3.2 Analysis on Prosperity of China's Dry Bulks Shipping Enterprises

Dry bulks shipping enterprises suffer declined prosperity. In the fourth quarter of 2019, the prosperity index of dry bulks shipping enterprises reached 95.64 points, down by 29.19 points quarter-on-quarter from prosperous interval to the slightly stagnant interval. The confidence index of dry bulks shipping enterprises stood

at 85.18 points, a sharp decline of 77.20 points quarter-on-quarter to the relatively stagnant interval. Dry bulks shipping enterprises posted worrying business performance overall, and entrepreneurs were less confident in market performance (see Figure 3-6).

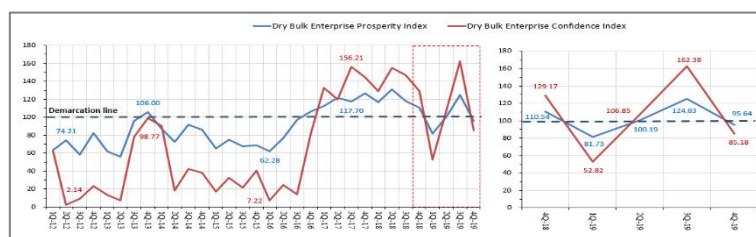


Figure 3-6 Prosperity and Confidence Indexes of Dry Bulks Shipping Enterprises

Small dry bulks shipping enterprises post the highest prosperity. In the fourth quarter of 2019, the prosperity indexes of large, medium-sized and small dry bulks shipping enterprises stood at 85.71 points, 97.50 points and 132.22 points, respectively. Compared with the previous quarter, the prosperity indexes of large and medium-sized dry bulks shipping enterprises in this quarter fell quarter-on-quarter, dropping to the relatively stagnant and slightly stagnant intervals, respectively. The prosperity index of small dry bulks shipping enterprises,

however, rose by 23.76 points quarter-on-quarter, rising to the prosperous interval, demonstrating the highest prosperity performance (see Figure 3-7).

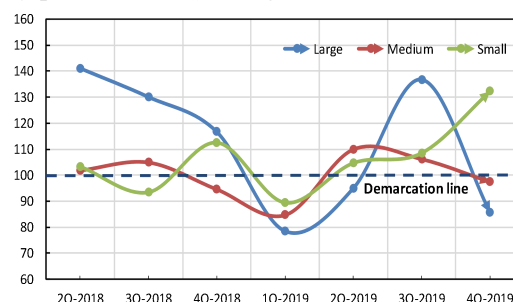


Figure 3-7 Prosperity Indexes of Large, Medium-sized and Small Dry Bulks Shipping Enterprises

Most business indicators of dry bulks shipping enterprises decline. In the fourth quarter of 2019, despite the reduced shipping capacity offered by enterprises, ship turnover went down and the unit freight rates slipped, along with surging operating costs. However, enterprises

managed to remain profitable with their loan liability falling and the willingness to invest in shipping capacity staying stable. Yet enterprises began to see current funds strains with relatively difficult financing and declining labor demand (see Figure 3-8).

Monitoring Indicators of Dry Bulk Shipping Enterprises	4Q Prosperity Indices	Compare with 3Q	Prosperity
Shipping Capacity	84.76	↓ -33.68	Relatively stagnant
Vessel Turnover	96.01	↓ -25.89	Slightly stagnant
Freight	89.52	↓ -67.93	Relatively stagnant
Operating Cost	58.21	↓ -10.52	Stagnant
Profitability	114.58	↓ -44.84	Relatively prosperous
Current Fund	92.86	↓ -58.82	Slightly stagnant
Enterprise Financing	84.52	↓ -50.05	Relatively stagnant
Loan Liability	136.13	↑ 7.57	Prosperous
Labor Demand	95.18	↓ -4.82	Slightly stagnant
Shipping Capacity Investment	104.58	↓ -2.99	Slightly prosperous

Figure 3-8 Business Indicator Prosperity Indexes of Dry Bulks Shipping Enterprises

Source: Shanghai International Shipping Institute

Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression. The higher the value is, the more promising the industrial outlook is.

3.3 Analysis on Prosperity of China's Container Shipping Enterprises

Container shipping enterprises embrace rally of confidence. In the fourth quarter of 2019, the prosperity index of container shipping enterprises stood at 129 points, rising by 17.19 points quarter-on-quarter into the prosperous interval. The confidence index of container shipping enterprises stood at 111.14 points, surging by

35.14 points quarter-on-quarter and back to the relatively prosperous interval. Container shipping enterprises embraced improved business performance overall and entrepreneurs were generally confident in the industry prospect (see Figure 3-9).



Figure 3-9 Prosperity and Confidence Indexes of Container Shipping Enterprises

Large container shipping enterprises post best business performance. In the fourth quarter of 2019, the prosperity indexes of large, medium-sized and small container shipping enterprises were 135.71 points, 129.09 points and 102 points, respectively. Compared with the previous quarter, the prosperity indexes of large and small container shipping enterprises improved substantially in this quarter, with that of small container shipping enterprises, in particular, rising from the relatively stagnant interval to the slightly prosperous interval. The prosperity index of medium-sized container shipping enterprises rose marginally quarter-on-quarter and

continued to stay in the prosperous interval. Large enterprises posted the best prosperity (see Figure 3-10).

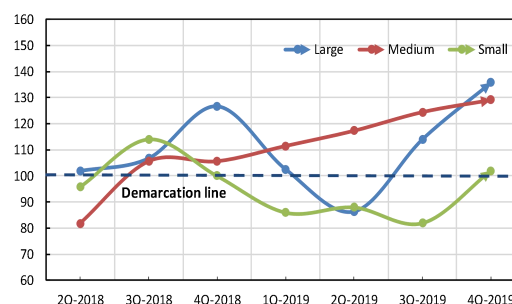


Figure 3-10 Prosperity Indexes of Large, Medium-sized and Small Container Shipping Enterprises

Most business indicators of container shipping enterprises rally. In the fourth quarter of 2019, the capacity launched by enterprises recovered, and enterprises' space utilization rallied, driving up freight rates. Meanwhile, despite the rising operating costs, enterprises' profitability turned for the better. Enterprises

still enjoyed relatively sufficient current funds and easier access to capital. Loan liability also reduced significantly and labor demand increased. Enterprises' willingness to invest in shipping capacity also recovered (see Figure 3-11).

Monitoring Indicators of Container Shipping Enterprises	4Q Prosperity Indexes	Compare with 3Q	Prosperity
Shipping Capacity	100.00	21.44	Demarcation point
Space Utilization	143.38	38.27	Prosperous
Freight	151.22	16.11	Highly prosperous
Operating Cost	94.00	-33.22	Slightly stagnant
Profitability	150.92	33.81	Highly prosperous
Current Fund	171.06	15.17	Highly prosperous
Enterprise Financing	133.78	7.67	Prosperous
Loan Liability	123.96	17.96	Prosperous
Labor Demand	115.39	24.83	Relatively prosperous
Shipping Capacity Investment	106.3	29.86	Slightly prosperous

Figure 3-11 Business Indicator Prosperity Indexes of Container Shipping Enterprises

Source: Shanghai International Shipping Institute

Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression. The higher the value is, the more promising the industrial outlook is.

3.4 Analysis on Prosperity of China's Port Enterprises

China's port enterprises remain fully confident. In the fourth quarter of 2019, the prosperity index of port enterprises stood at 109.46 points, rising slightly quarter-on-quarter and remaining in the slightly prosperous interval. Business performance of port

of port enterprises touched 113.21 points, running flat quarter-on-quarter and staying in the relatively prosperous interval. Port entrepreneurs generally held a bullish view toward the overall performance of the industry (see Figure 3-12).



enterprises remained stable overall. The confidence index

Figure 3-12 Prosperity and Confidence Indexes of Port Enterprises

Small port enterprises enjoy sound business performance. In the fourth quarter of 2019, the prosperity indexes of large, medium-sized and small port enterprises stood at 107.86 points, 107 points and 120 points, respectively. Compared with the previous quarter, small port enterprises maintained a favorable business performance momentum in this quarter and their prosperity index stayed in the prosperous interval. The prosperity index of large port enterprises continued to stay in the prosperous interval, manifesting relatively stable business performance overall. On the other hand, the

medium-sized port enterprises, though witnessing slight improvements in prosperity index over the previous quarter, remained in the slightly stagnant interval (see

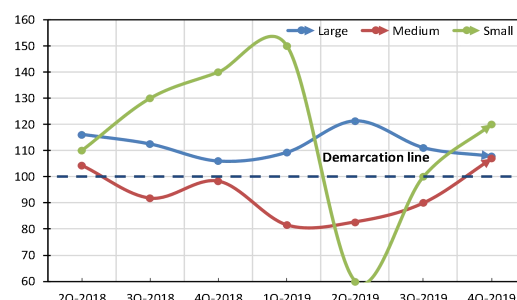


Figure 3-13).

Figure 3-13 Prosperity Indexes of Large, Medium-sized and Small Port Enterprises

Multiple indicators of port enterprises improve. In the fourth quarter of 2019, port throughput kept growing and berth utilization rose, with port charging rates on a decline. Although the operating costs rose to some extent, enterprises' profitability improved against the trend.

Enterprises' asset liabilities increased. Yet port enterprises still enjoyed sufficient current funds and easier access to capital. Port enterprises' labor demand and newly added berth and machinery investment ran flat quarter-on-quarter (see Figure 3-14).

Monitoring Indicators of Port Enterprises	4Q Prosperity Indices	Compare with 3Q	Prosperity
Throughput	135.36	↑ 17.44	Prosperous
Berth Utilization	113.21	↑ 10.71	Relatively prosperous
Charge	97.5	↓ -0.42	Slightly stagnant
Operating Cost	57.86	↓ -18.39	Stagnant
Profitability	147.14	↑ 35.89	Prosperous
Current Fund	122.14	↑ 8.81	Prosperous
Enterprise Financing	110.36	↓ -7.14	Relatively prosperous
Loan Liability	95.36	↑ 14.94	Slightly stagnant
Labor Demand	115.71	↑ 17.79	Relatively prosperous
Newly Built Berths and Machinery Investment	100.00	↓ -26.67	Demarcation point

Figure 3-14 Business Indicator Prosperity Indexes of Port Enterprises

Source: Shanghai International Shipping Institute

Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression. The higher the value is, the more promising the industrial outlook is.

3.5 Analysis on Prosperity of China's Shipping Service Enterprises

Shipping service enterprises fall stagnant again. In the fourth quarter of 2019, the prosperity index of shipping service enterprises was 97.99 points, down by 6.81 points from that in the previous quarter to the slightly stagnant interval from the slightly prosperous interval. The confidence index of shipping service enterprises was 103.93 points, declining by 4.95 points quarter-on-quarter

to remain in the slightly prosperous interval. The prosperity index of shipping service enterprises fell to below the prosperity demarcation, indicating worrisome business performance of shipping service enterprises overall, and entrepreneurs were cautious about the prospect (see Figure 3-15).

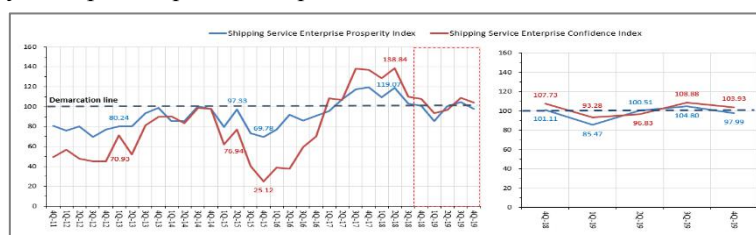


Figure 3-15 Prosperity and Confidence Indexes of Shipping Service Enterprises

Medium-sized shipping service enterprises post the highest prosperity. In the fourth quarter of 2019, the prosperity indexes of large, medium-sized and small shipping service enterprises were 96.43 points, 104.29 points and 93.75 points, respectively. Compared with the previous quarter, medium-sized shipping service enterprises posted the highest prosperity with a rise of 6.78 points into the slightly prosperous interval. Large and small shipping service enterprises continued to suffer declining business performance with their prosperity

indexes both below the demarcation, indicating their sluggish business performance overall (see Figure 3-16).

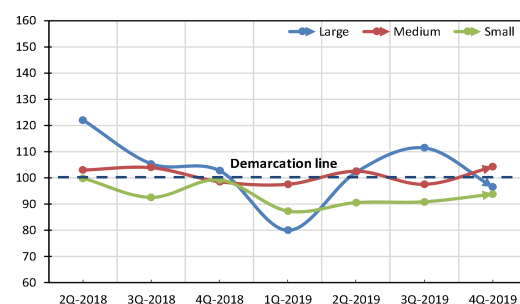


Figure 3-16 Prosperity Indexes of Large, Medium-sized and Small Shipping Service Enterprises

Shipping service enterprises see increased loan delinquency. In the fourth quarter of 2019, despite the high-rising operating costs of shipping service enterprises, their profitability improved, benefiting from the rising business volume and charging rates. Enterprises enjoyed

more sufficient current funds but with more difficult access to capital, along with increasing loan delinquency, leading to plunging labor demand and undermining enterprises' willingness to invest in fixed assets (see Figure 3-17).

Monitoring Indicators of shipping service Enterprises	4Q Prosperity Indices	Compare with 3Q	Prosperity
Business Reservation	102.05	↓ -7.36	Slightly prosperous
Trade Volume	121.61	↓ -4.58	Prosperous
Trade Price	100.36	↓ -6.55	Slightly prosperous
Business Cost	71.61	↓ -2.95	Stagnant
Profit-loss Variation	107.32	↓ -20.12	Slightly prosperous
Current Fund	108.21	↓ -8.26	Slightly prosperous
Enterprise Financing	92.5	↓ -2.50	Slightly stagnant
Payment Default	89.64	↑ 7.73	Relatively stagnant
Labor Demand	87.68	↓ -23.29	Relatively stagnant
Fixed-asset Investment	98.93	↓ -0.23	Slightly stagnant

Figure 3-17 Business Indicator Prosperity Indexes of Shipping Service Enterprises

Source: Shanghai International Shipping Institute

Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression. The higher the value is, the more promising the industrial outlook is.

4. Projection of China's Shipping Industry Trend

Prospect of shipping market may improve. In November 2019, the leading index of China's shipping industry closed at 98.02 points, presenting a slight decline starting from September. The coincidence index stood at 95.07 points, lower than last year's average of 95.42 points, rising by 0.21 points over the average of 94.86 points for last quarter. The lagging index stood at 98.18 points, lower

than last year's average of 98.35 points, edging down by 0.56 points from the average of 97.62 points for last quarter. In terms of the index trend, the leading index followed a slightly fluctuating and downward trend, and it is expected that the shipping market may enter a period of decline in the future (see Figure 4-1).

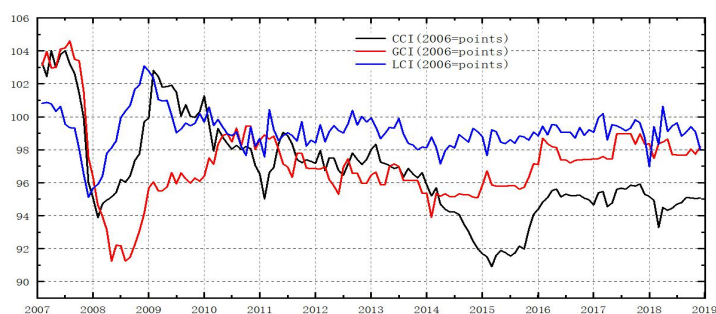


Figure 4-1 Trend of Indexes under the Umbrella of CSCI

In the fourth quarter of 2019, among the leading index indicators, vessel arrivals rose by a narrow margin since October. Power generation declined to some extent in this quarter. Money supply continued the stable rise in this quarter. Fixed-asset investments had been dropping since September. Consumer goods retail sales also rose to some extent in this quarter (see Figure 4-2).

In November 2019, among the coincidence index indicators, port throughput growth in November rose and import and export values kept slipping in this quarter. Among the four major shipping indicators, BDTI declined after a rally, CCFI basically leveled off, BDI surged to this

year's high in September at 1,774 points and then dropped, and CCBFI also fell after a rise in this quarter (see Figure 4-3).

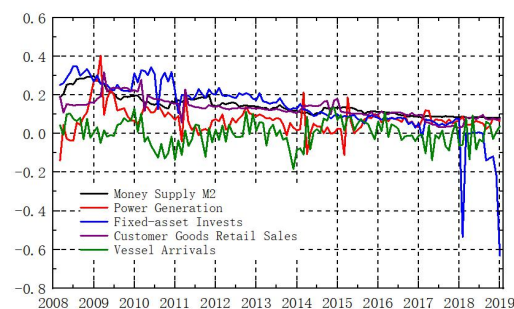


Figure 4-2 Trend of LCI

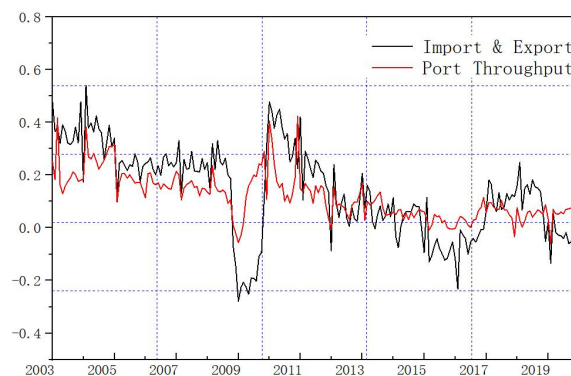
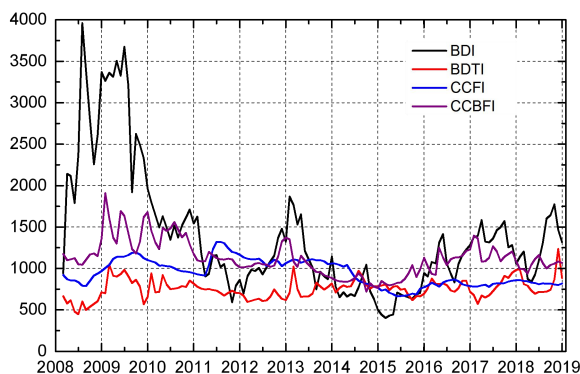


Figure 4-3 Trend of CEI

5. Forecast of Chinese Shipping Prosperity in Q1 2020

According to the China shipping prosperity survey, China Shipping Prosperity Index for the first quarter of 2020 is expected to reach 96.53 points, down by 11.02 points quarter-on-quarter to the slightly stagnant interval. The prosperity indexes of all types of enterprises may decline to some extent. Specifically, the prosperity indexes of container shipping enterprises and port enterprises will remain above the demarcation line, while those of dry bulks shipping enterprises and shipping service enterprises may fall to the relatively stagnant interval. China Shipping Confidence Index for the first quarter of 2020 is projected to touch 94.99 points, a drop of 12.59 points quarter-on-quarter and falling to the slightly stagnant interval. All types of enterprises lack confidence in the future, with their confidence indexes all

below the demarcation line. The confidence index of dry bulks shipping enterprises, in particular, may fall to the stagnant interval (see Figure 5-1, Figure 5-2 and Figure 5-3).

As per the China shipping prosperity survey, 17.67% of surveyed shipping enterprises are optimistic about the overall performance of the shipping industry in the first quarter of 2020, the proportion declining by 8.47 percentage points quarter-on-quarter; 47.84% are neutral, the proportion rising by 5.79 percentage points quarter-on-quarter, and the rest 33.62% are pessimistic, the proportion increasing by 1.8 percentage points quarter-on-quarter. Overall, China's shipping enterprises' confidence has fallen by a narrow margin.

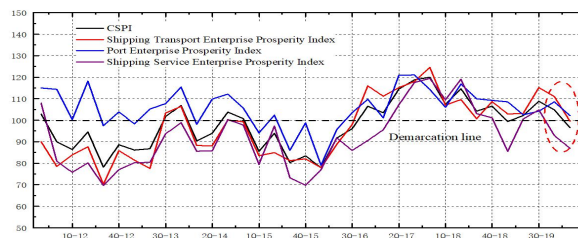


Figure 5-1 Projected China Shipping Prosperity Index

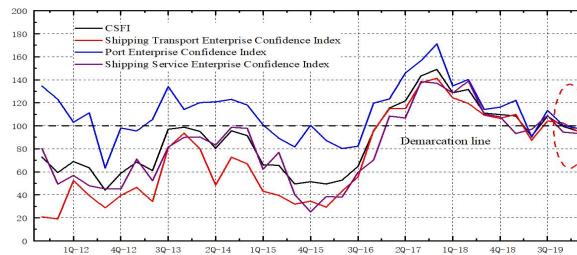


Figure 5-2 Projected China Shipping Confidence Index

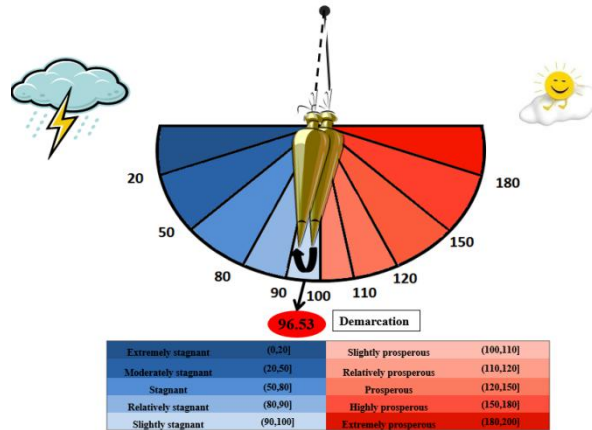


Figure 5-3 Forecast of China Shipping Prosperity Index in Q1 2020

5.1 Projection of Prosperity of China's Shipping Transport Enterprises

Shipping transport enterprises expected to face a grim situation for operation. According to the China shipping prosperity survey, in the first quarter of 2020, the prosperity index of shipping transport enterprises is forecast to drop by 13.75 points quarter-on-quarter to 99.54 points. The confidence index of shipping transport

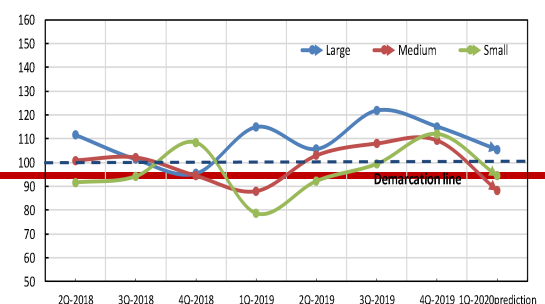
enterprises is projected at 94.43 points, down by 11.66 points quarter-on-quarter. Both indexes may fall to below the demarcation line. In general, shipping transport enterprises may face a grim situation for operation and entrepreneurs are less confident and hold a wait-and-watch attitude toward the future (see Figure 5-4).



Figure 5-4 Projected Prosperity and Confidence Indexes of Shipping Transport Enterprises

Business performance of medium-sized and small shipping transport enterprises lackluster. In the first quarter of 2020, the prosperity indexes of large, medium-sized and small shipping transport enterprises are expected to hit 105.48 points, 88.29 points and 94.55

points, respectively. Compared with this quarter, large shipping transport enterprises will see a slight drop in prosperity index in the next quarter, but their business



performance will maintain a favorable momentum. Medium-sized and small shipping transport enterprises are expected to suffer a significant decline in prosperity index from this quarter to the stagnant interval, manifesting their

Profitability of shipping transport enterprises deteriorates substantially. In the first quarter of 2020, enterprises are expected to continue to augment shipping capacity input, but space utilization may fall and freight income may plummet. Meanwhile, operating costs will continue to go high, leading to drop in profitability. However, enterprises will continue to enjoy relatively

Monitoring Indicators of Shipping Transport Enterprises	Predicted 1Q Prosperity Indexes	Compare with 4Q	Prosperity
Shipping Capacity	101.52	1.11	Slightly prosperous
Space Utilization	94.03	-19.47	Slightly stagnant
Freight	83.50	-37.63	Relatively stagnant
Operating Cost	52.32	-21.14	Stagnant
Profitability	83.26	-45.43	Relatively stagnant
Current Fund	140.20	2.47	Prosperous
Enterprise Financing	115.66	-2.14	Relatively prosperous
Loan Liability	109.28	-8.60	Slightly prosperous
Labor Demand	106.05	-4.04	Slightly prosperous
Shipping Capacity Investment	109.61	-2.65	Slightly prosperous

Figure 5-6 Projected Business Indicator Prosperity Indexes of Shipping Transport Enterprises

Source: Shanghai International Shipping Institute

Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression. The higher the value is, the more promising the industrial outlook is.

5.2 Projection of Prosperity of China's Dry Bulks Shipping Enterprises

China's dry bulks shipping enterprises have quite low confidence. In the first quarter of 2020, the prosperity index of dry bulks shipping enterprises is expected to reach 85.88 points, down by 9.76 points from that of this quarter to the relatively stagnant interval. The confidence index of dry bulks shipping enterprises is projected to

relative depression in business performance overall (see Figure 5-5).

Figure 5-5 Projected Prosperity Indexes of Large, Medium-sized and Small Shipping Transport Enterprises

sufficient current funds and sound financing capabilities. Their loan liability may further contract and labor demand will keep rising. Meanwhile, the willingness to invest in shipping capacity may edge up and shipowners will be optimistic about investing in shipping capacity (see Figure 5-6).

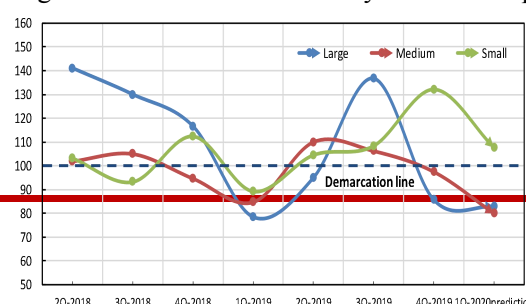


Figure 5-7 Projected Prosperity and Confidence Indexes of Dry Bulks Shipping Enterprises

Large and medium-sized dry bulks shipping enterprises to face worrisome business performance. In the first quarter of 2020, the prosperity indexes of large, medium-sized and small dry bulks shipping enterprises are projected to reach 82.86 points, 80.00 points and 107.78 points, respectively. Compared with this quarter, only the

reach 54.05 points, a sharp decline quarter-on-quarter to the stagnant interval. In general, it is expected that the business performance of dry bulks shipping enterprises may be poor in the first quarter of 2020 and entrepreneurs have very low confidence in the future market (see Figure 5-7).

small dry bulks shipping enterprises will maintain the favorable business performance momentum in the next quarter with their prosperity index above the demarcation line. Large and medium-sized dry bulks shipping



enterprises, however, may continue the decline in prosperity index quarter-on-quarter to the relatively stagnant interval and stagnant interval, respectively, indicating worrisome business performance (see Figure

Dry bulks shipping profitability to plunge. In the first quarter of 2020, it is expected that dry bulks shipping enterprises will reduce their input in shipping capacity and the ship turnover may rise. It is expected that dry bulks shipping freights will drop and the operating costs will

5-8).

Figure 5-8 Projected Prosperity Indexes of Large, Medium-sized and Small Dry Bunks Shipping Enterprises

rise, leading to falling profitability of enterprises. In addition, enterprises' current funds will drop, with higher financing difficulty and reduced labor demand. But their loan liability may go down, driving up enterprises' willingness to invest in shipping capacity (see Figure 5-9).

Monitoring Indicators of Dry Bulk Shipping Enterprises	Predicted 1Q Prosperity Indexes	Compare with 4Q	Prosperity
Shipping Capacity	80.77	-3.99	Relatively stagnant
Vessel Turnover	109.23	13.22	Slightly prosperous
Freight	57.02	-32.50	Stagnant
Operating Cost	51.96	-6.25	Stagnant
Profitability	45.71	-68.87	Moderately stagnant
Current Fund	94.94	2.08	Slightly stagnant
Enterprise Financing	82.44	-2.08	Relatively stagnant
Loan Liability	124.23	-11.90	Prosperous
Labor Demand	99.35	4.17	Slightly stagnant
Shipping Capacity Investment	113.15	8.57	Relatively prosperous

Figure 5-9 Projected Business Indicator Prosperity Indexes of Dry Bunks Shipping Enterprises

Source: Shanghai International Shipping Institute

Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression. The higher the value is, the more promising the industrial outlook is.

5.3 Projection of Prosperity of China's Container Shipping Enterprises

Container shipping enterprises may see stressful business performance overall. According to the China shipping prosperity survey, in the first quarter of 2020, the prosperity index of container shipping enterprises is expected to stand at 103.98 points, down by 25.02 points quarter-on-quarter. The confidence index of container

shipping enterprises is projected to hit 91.21 points, a drop of 19.93 points quarter-on-quarter and fall to the stagnant interval. Container shipping entrepreneurs are comparatively pessimistic about the general market performance in the first quarter of 2020 and are relatively short of confidence (see Figure 5-10).

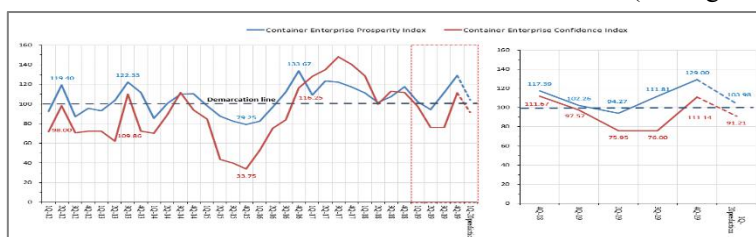
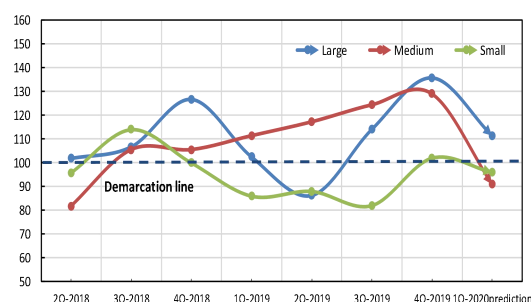


Figure 5-10 Projected Prosperity and Confidence Indexes of Container Shipping Enterprises

Medium-sized container enterprises post the lowest prosperity index. In the fourth quarter of 2020, the prosperity indexes of large, medium-sized and small container shipping enterprises may reach 111.43 points, 90.91 points and 96 points, respectively. Compared with this quarter, large and medium-sized and small container shipping enterprises will suffer declines to varied degrees in business performance in the next quarter, while

medium-sized container shipping enterprises may see their prosperity index plummet compared with this quarter to



the slightly stagnant interval (see Figure 5-11).

Figure 5-11 Projected Prosperity Indexes of Large, Medium-sized

A majority of business indicators of container shipping enterprises decline. In the first quarter of 2020, it is expected that the container shipping enterprises will significantly increase their shipping capacity input but space utilization and container shipping freights will fall. Meanwhile, enterprises' operating costs may continue to

and Small Container Shipping Enterprises

go high, compromising their profitability. Benefiting from the more sufficient current funds, container shipping enterprises will find it easier to gain access to capital, with the loan liability on a decline. The labor demand will remain strong, and the willingness to invest in shipping capacity will grow (see Figure 5-12).

Monitoring Indicators of Container Shipping Enterprises	Predicted 1Q Prosperity Indexes	Compare with 4Q	Prosperity
Shipping Capacity	129.74	↑ 29.74	Prosperous
Space Utilization	77.06	↓ -66.32	Stagnant
Freight	83.88	↓ -67.34	Relatively stagnant
Operating Cost	48.35	↓ -45.65	Moderately stagnant
Profitability	85.64	↓ -65.28	Relatively stagnant
Current Fund	168.79	↓ -2.27	Highly prosperous
Enterprise Financing	129.23	↓ -4.55	Prosperous
Loan Liability	102.27	↓ -21.69	Slightly prosperous
Labor Demand	108.57	↓ -6.82	Slightly prosperous
Shipping Capacity Investment	106.3	→ 0.00	Slightly prosperous

Figure 5-12 Projected Business Prosperity Index of Container Shipping Enterprises

Source: Shanghai International Shipping Institute

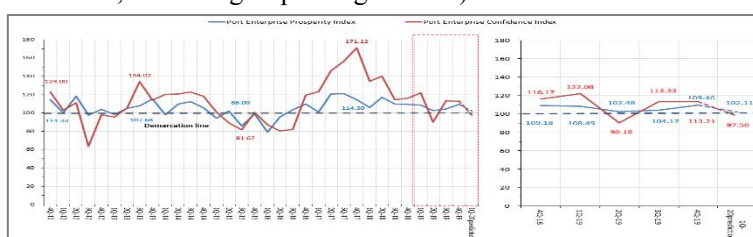
Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression.

The higher the value is, the more promising the industrial outlook is.

5.4 Projection of Prosperity of China's Port Enterprises

Port enterprises' confidence in business performance to edge down. According to the China shipping prosperity survey, in the first quarter of 2020, the prosperity index of port enterprises is forecast at 102.11 points, falling by 8.35 points quarter-on-quarter and remaining in the prosperous interval, indicating improving

enterprises is expected to decline by 15.71 points to 97.50 points into the slightly stagnant interval. In general, China's port enterprises will present relatively stable business performance, but port entrepreneurs are concerned about the prospect of the industry (see Figure 5-13).

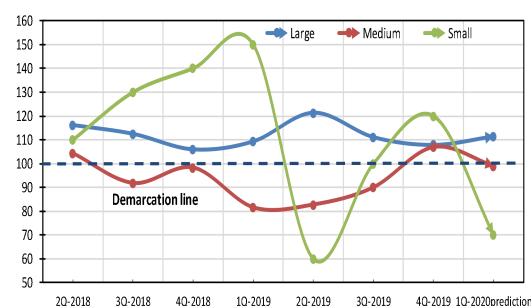


business performance. The confidence index of port

Figure 5-13 Projected Prosperity and Confidence Indexes of Port Transport Enterprises

Medium-sized and small port enterprises face relatively grim business situations. In the first quarter of 2020, the prosperity indexes of large, medium-sized and small port enterprises are forecast at 111.43 points, 99 points and 70 points, respectively. Compared with this quarter, large port enterprises will maintain a favorable business performance momentum in the next quarter with their prosperity index staying above the demarcation line.

The prosperity indexes of medium-sized and small port enterprises will both stay below the demarcation line, that



is, in the stagnant interval, implying relatively grim business situations overall (see Figure 5-14).

Port enterprises to continue enjoying profitability. In the first quarter of 2020, despite the falling berth utilization and charging rates at ports which increased operating costs, the growing throughput will drive up the profitability of enterprises. Port enterprises will continue

Monitoring Indicators of Port Enterprises	Predicted 1Q Prosperity Indexes	Compare with 4Q	Prosperity
Throughput	115.71	↓ -19.65	Relatively prosperous
Berth Utilization	97.86	↓ -15.35	Slightly stagnant
Charge	82.14	↓ -15.36	Relatively stagnant
Operating Cost	83.93	↑ 26.07	Relatively stagnant
Profitability	110.36	↓ -36.78	Relatively prosperous
Current Fund	122.14	→ 0.00	Prosperous
Enterprise Financing	110.36	→ 0.00	Relatively prosperous
Loan Liability	113.57	↑ 18.21	Relatively prosperous
Labor Demand	78.93	↓ -36.78	Stagnant
Newly Built Berths and Machinery Investment	106.07	↑ 6.07	Slightly prosperous

Figure 5-15 Projected Business Indicator Prosperity Indexes of Port Enterprises

Source: Shanghai International Shipping Institute

Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression. The higher the value is, the more promising the industrial outlook is.

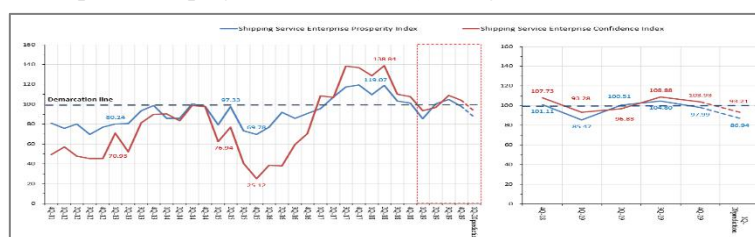
5.5 Projection of Prosperity of China's Shipping Service Enterprises

Prosperity of shipping service enterprises to keep falling. In the first quarter of 2020, the prosperity index of shipping service enterprises is expected to reach 86.94 points, down by 11.05 points quarter-on-quarter and falling to the relatively stagnant interval. The confidence index of shipping service enterprises is projected to hit

Figure 5-14 Projected Prosperity Indexes of Large, Medium-sized and Small Port Transport Enterprises

to enjoy sufficient current funds and easy access to capital, with the loan liability on a decline. Although the labor demand will drop, the willingness of newly added berth and machinery investment will grow (see Figure 5-15).

to the slightly stagnant interval. In general, both the prosperity index and confidence index of shipping service enterprises are expected to fall to below the prosperity demarcation and shipping service entrepreneurs are pessimistic and less confident about the future in general (see Figure 5-16).

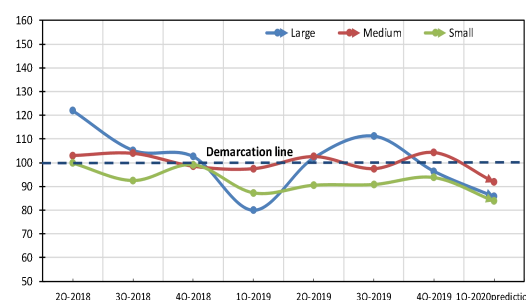


93.21 points, dropping by 10.72 points quarter-on-quarter

Figure 5-16 Projected Prosperity and Confidence Indexes of Shipping Service Enterprises

Large shipping service enterprises post the lowest prosperity. In the first quarter of 2020, the prosperity indexes of large, medium-sized and small shipping service enterprises are forecast at 85.71 points, 91.79 points and 83.75 points, respectively. Compared with this quarter, the prosperity indexes of large and small shipping service enterprises may be low in the next quarter, both declining

by 10.00 points to the relatively stagnant interval. Medium-sized shipping service enterprises will continue



to suffer declining business performance with their prosperity index below the demarcation, indicating unfavorable business performance overall (see Figure

Business indicators of shipping service enterprises worsen across the board. In the first quarter of 2020, the business orders of shipping service enterprises and charging rates will continue to decline and business volume and operating costs will remain high. This will further hurt profitability, which may fall to the relatively

Monitoring Indicators of shipping service Enterprises	Predicted 1Q Prosperity Indices	Compare with 4Q	Prosperity
Business Reservation	72.77	↓ -29.28	Stagnant
Trade Volume	74.29	↓ -47.32	Stagnant
Trade Price	81.7	↓ -18.66	Relatively stagnant
Business Cost	75.71	↓ 4.10	Stagnant
Profit-loss Variation	84.73	↓ -22.59	Relatively stagnant
Current Fund	103.04	↓ -5.17	Slightly prosperous
Enterprise Financing	91.07	↓ -1.43	Slightly stagnant
Payment Default	100.36	↑ 10.72	Slightly prosperous
Labor Demand	87.95	↑ 0.27	Relatively stagnant
Fixed-asset Investment	97.77	↓ -1.16	Slightly stagnant

Figure 5-18 Projected Business Indicator Prosperity Indexes of Shipping Service Enterprises

Source: Shanghai International Shipping Institute

Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression. The higher the value is, the more promising the industrial outlook is.

6. Analysis and Suggestions on Hot Issues

With regard to recent hot issues in the shipping industry, this report obtains first-hand data from a considerable number of shipping enterprises, summarizes and analysis and proposes several suggestions for development, in an effort to provide some reference to various shipping enterprises in their decision making.

5-17).

Figure 5-17 Projected Prosperity Indexes of Large, Medium-sized and Small Shipping Service Enterprises

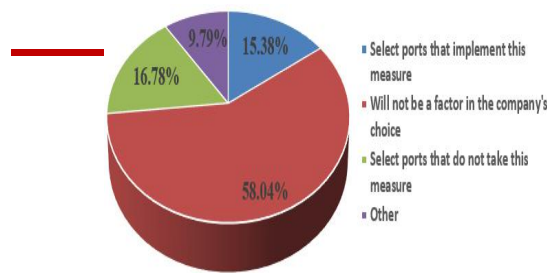
stagnant interval. Enterprises will enjoy reduced loan delinquency and relatively sufficient current funds. Enterprises may find it harder to attract capital and the labor demand will keep falling. Enterprises' willingness to invest in fixed assets will go down (see Figure 5-18).

6.1 Limited effectiveness of granting entry priority for boosting use of ultra-low sulfur fuel oil

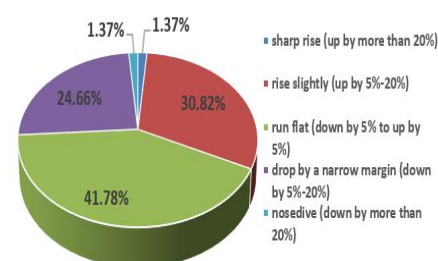
The 48th executive meeting of the government of Qinhuangdao city passed the *Interim Measures for Ship-caused Air Pollution Prevention and Control of Qinhuangdao City* on October 23. The measures stipulated that vessels entering the coastal areas of Qinhuangdao city shall use fuel oil of less than 0.5%_{m/m} sulfur content; for the vessels using fuel oil of 0.1%_{m/m} or lower sulfur content, preferential measures, including priority for entry, cargo handling as well as berthing and departing, will be provided. Against this backdrop, the CSPI Research Office of Shanghai International Shipping Institute conducted a nationwide survey on shipping transport enterprises.

Figure 6-1 Impacts of Port Measures on Ship Enterprises' Choices of Ports of Call

Among the surveyed shipping transport enterprises,



17



15.38% would prioritize the port implementing this measure as the port of call, 58.04% of enterprises believed the measure won't be one of the considerations for choosing ports of call, 16.78% would prefer the port not implementing such a measure as the port of call, and 9.79% said this measure impacts their decision on choosing the port of call. Therefore, entry priority and other preferential steps of ports may not be enough to boost the use of fuel oil of 0.1%_{m/m} or lower sulfur content.

The above survey shows that among the respondent shipping transport enterprises, more than half of them believed this measure won't be one of the considerations for choosing ports of call. Compared with medium-sized and small enterprises, large shipping transport enterprises have a higher share of the enterprises that would choose the port implementing such a measure as the port of call. This is probably because large ship enterprises, benefiting from their scale economy and leading technologies, can cover the additional costs from using the fuel oil of 0.1%_{m/m} or lower sulfur content through the entry priority and other measures. It is worth noting that if this measure is implemented, 16.78% of shipping transport enterprises would transfer to the ports that have not implemented such a measure and the share of such enterprises is even greater than that of the enterprises that would choose the ports implementing the measure (15.38%). This indicates that the step is not conducive to most medium-sized and small ship enterprises and may force them to call the ports that have not implemented such a measure.

6.2 Shipping transport enterprises look to a stable and improving shipping market in 2020

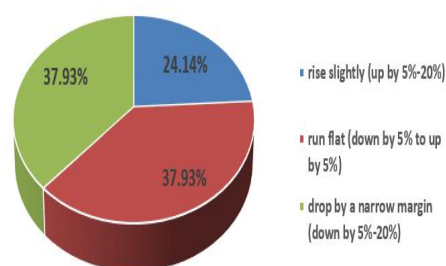
The shipping market has been volatile in 2019 and remains depressed relatively. Into the 2020, the CSPI Research Office of Shanghai International Shipping Institute surveyed shipping transport enterprises nationwide to learn their viewpoints about the trends of the shipping market in 2020, and the results are shown in

Figure 6-2.

Figure 6-2 Viewpoints of Ship Enterprises about Shipping Market Developments in 2020

Among the surveyed shipping transport enterprises, 41.78% believed the market may run flat (down by 5% to up by 5%); 30.82% said the market may rise slightly (up by 5%-20%); 24.66% held that it may drop by a narrow margin (down by 5%-20%); 1.37% of them looked to a sharp rise (up by more than 20%); and 1.37% expected a nosedive (down by more than 20%).

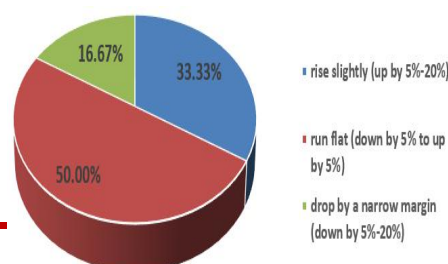
The above survey shows that among the respondent shipping transport enterprises, more than 40% of large shipping transport enterprises believed the shipping market in 2020 will rise slightly, and more than 40% of medium-sized and small shipping transport enterprises said the shipping sector in 2020 will run flat with this year. Only a small number of ship enterprises said the shipping



market in 2020 will plunge.

Figure 6-3 2020 Market Prospect in the Eyes of Dry Bulks Shipping Enterprises

Among the surveyed dry bulks shipping enterprises, 37.93% believed the shipping market in 2020 will go down compared with 2019, 37.93% believed the shipping market in 2020 will run flat with this year and 24.14% expected that the market in 2020 will modestly improve. But none of them expect a dramatic rise or fall in the dry



bulks shipping market in 2020.

Figure 6-4 2020 Market Prospect in the Eyes of Container Shipping Enterprises

Among the surveyed container shipping enterprises, 50% believed the container shipping market will stay unchanged compared with 2019, 33.33% said the market will edge up slightly, and 16.67% believed the opposite. But none of them expect a dramatic rise or fall in the container shipping market in 2020.

6.3 Most enterprises look to rise of container shipping in Asia because of vessels docked in a centralized manner to install desulfurizers

According to Drewry's World Container Index, all routes starting from Asia have seen freight rate rises since November 2019, with the container freight rates on Asia-Europe routes, in particular, surging by 30%. The CSPI Research Office of Shanghai International Shipping Institute conducted a survey on domestic container shipping enterprises to study the causes of the rising container shipping fees in Asia.

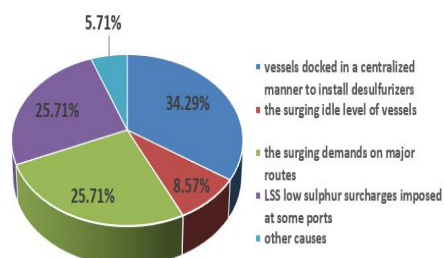


Figure 6-5 Causes Behind Container Shipping Rates Rise in Asia In Eyes of Container Shipping Enterprises

Among the surveyed container shipping enterprises, 34.29% believed vessels docked in a centralized manner to install desulfurizers is the cause; 8.57% said it is because the surging idle level of vessels; 25.71% attributed it to the surging demands on major routes and some ports' LSS; the rest 5.71% believed other causes were to blame.

The above survey shows that most of the surveyed container shipping enterprises believed vessels docked in a centralized manner to install desulfurizers is the main

cause. According to Alphaliner data, as of November 2019, a total of 100-plus container ships were suspended for shipping because of docking for installing desulfurizers, and it is expected that more similar types of vessels will undergo the same renovation and decommissioning.

6.4 Promoting digitalized port production to build world-class ports

The Ministry of Transport of China and the National Development and Reform Commission of China, along with six other ministries, printed and issued the *Guiding Opinions on Building World-class Ports*, planning to build world-class ports in an all-round manner by 2050. In view of the key development tasks under the guidance of the Ministry of Transport of China for building world-class ports, the CSPI Research Office of Shanghai International Shipping Institute conducted a survey on port enterprises nationwide.

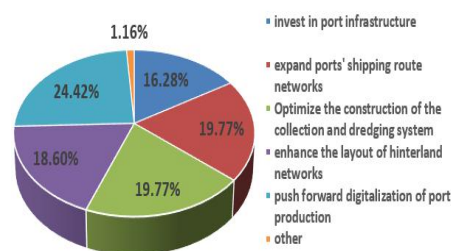
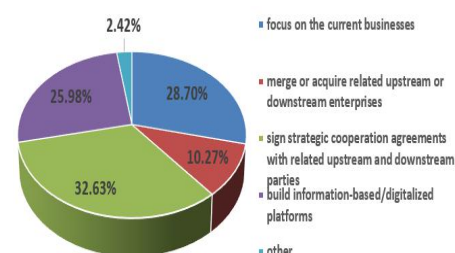


Figure 6-6 Key Development Tasks of Port Enterprises for Building



World-class Ports

Among the surveyed port enterprises, 16.28% would focus on investing in port infrastructure to enhance ports' throughput capacity, 19.77% would focus on expanding ports' shipping route networks to improve ports' interconnectivity; 19.77% would focus on optimizing the cargo collection, distribution and transportation systems to vigorously develop sea-railway intermodal transport; 18.60% would focus on enhancing the layout of hinterland

networks to enhance control over cargo sources; and 24.42% would focus on pushing forward digitalization of port production to improve ports' intelligent level.

As the above survey shows, promoting digitalization of port production and improving ports' intelligence levels are the focuses of most enterprises in the next step. Therefore, to build world-class ports, port enterprises can consider intelligentization of gates and handling facilities at terminals to improve the intelligent levels of port facilities; enhancement of collaboration mechanisms of production businesses and development of container management systems to achieve efficient development of industries; improvement of the construction and management of information-based logistic equipment for cargo collection, distribution and transportation depots at ports to achieve intelligent cargo collection, distribution and transportation systems built up by intelligent ports.

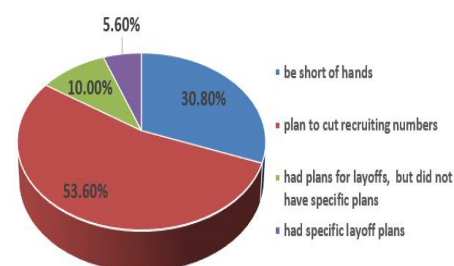
6.5 Extension to industrial chains a development trend of shipping industry

As the globalization process gains speed, the manufacturing industry has gradually extended to the upstream and downstream sections of the industrial chain. To enable value creation of logistic services, it has become a global shipping trend for port and shipping enterprises to transform to comprehensive logistic service providers. Therefore, Shanghai International Shipping Institute conducted a survey on nearly 300 port and shipping enterprises nationwide on "How can port and shipping enterprises transform to comprehensive logistic service providers?"

Figure 6-7 Measures Taken by Port and Shipping Enterprises to Transform to Comprehensive Logistic Service Providers

The survey results show that among the respondent port and shipping enterprises, 32.63% said they would sign strategic cooperation agreements with related upstream and downstream parties to gain control over comprehensive logistic resources through partnerships or alliances; 25.98% said they would build information-based/digitalized platforms (asset-light

operations) to integrate related resources of logistic chains through technical means; 10.27% said they would merge



or acquire related upstream or downstream enterprises to extend their logistic chains through capital means, that is, nearly 70% of shipping enterprises would transform to comprehensive logistic service providers through capital, technical and alliance. However, 28.70% of surveyed enterprises said they would only focus on the current businesses and provide professional logistic services at a certain node to improve their competitiveness in the market.

As the above survey shows, extension to the upstream and downstream of the industrial chain has become a development trend of the shipping industry, and most enterprises are more inclined to establishment of platforms or direct partnerships to gain control over upstream and downstream resources of the industrial chain. This approach avoids operational risks caused by heavy assets and helps maintain customer relations to a greater extent, being an important direction of industrial chain extension in the globalization backdrop.

6.6 Shipping enterprise layoff wave won't spread in 2020

Maersk, the world's largest container liner company, announced a new round of layoff on November 29 after two layoffs in 2015 and 2017, respectively, to reduce costs and enhance efficiency. It was learned that this move would start from the Maersk headquarters in Copenhagen and the German headquarters of Hamburg Süd, with around 200 layoffs planned. Does this signal a new round of layoffs in the shipping industry? In view of the above question, Shanghai International Shipping Institute carried out a survey among nearly 300 port and shipping

enterprises nationwide.

Figure 6-8 Planned Layoffs of Port and Shipping Enterprises

As the survey result shows, among the respondent port and shipping enterprises, only 15.60% had plans for layoffs, and only 5.60% of them already had specific layoff plans ready for implementation and the rest either did not have specific plans in place yet or might change the current plans as the business performance improved; 53.60% had no plans for layoffs but they planned to cut

recruiting numbers to keep the human resources stable; however, 30.80% of the enterprises, especially shipping service and shipping transport enterprises, said they were short of hands currently and might further expand their staff size.

The above survey result shows that the shipping industry has not followed suit after Maersk's layoff, and some enterprises are still planning for expansion, with shipping talent still in shortage.

7. Briefing on CSPI System

The China Shipping Prosperity Index (CSPI) is an umbrella term for a group of quantized data indicating the prosperity of China's shipping industry. It includes China Shipping Prosperity Index (CSPI), China Shipping Confidence Index (CSFI), China Shipping Prosperity Alertness Index (CSAI) and China Shipping Prosperity Composite Index (CSCI).

CSPI is compiled based on China marine executives' judgment of the current business performance of their enterprises and their prediction of the forthcoming development. It comprehensively reflects the business performance of China's shipping enterprises. CSFI is compiled based on China marine executives' judgment of the current development of the China shipping industry on the whole and their prediction of its future trend. It reflects their confidence and outlook toward China's shipping industry from the macro perspective.

CSPI takes 100 points as its demarcation (or critical point) and fluctuates between 0 and 200 points. When the CSPI value is greater than 100, which means the upward indicators prevail over the downward ones, the China shipping industry may present positive growth and is in a boom period. The higher the CSPI value, the more optimal the industrial outlook. When the CSPI value is less than 100, which means the downward indicators prevail over the upward ones, the China shipping industry development may slow down or even fall into recession. The lower the CSPI value, the more depressed the industrial outlook.

The CSPI was first issued in the fourth season of 2009. It is formed based on survey feedbacks from companies in the field of shipping transport, port and shipping services. The results are presented in these three categories as well. The CSPI is issued on a seasonal basis.

The CSAI is intended to envisage the future development trend of the China shipping industry through a comprehensive judgment of the change of several

sensitive indicators and their composite indexes. A group of sensitive indicators are selected to mirror the development of the China shipping industry. With specific data processing methods, these indicators are combined into a composite index. After the critical value of each indicator and the composite index are defined, a five-colored signal system resembling traffic lights (red stands for overheated, green for stable, royal blue for too cold, etc.) are employed to directly reflect the China shipping trend. The CSCI consists of the leading index, the coincidence index and the lagging index. The leading index aims to unveil the future trend of China's shipping industry based on the current performance of the industry. The coincidence index is compiled based on indicators that share the temporal fluctuations with China's shipping industry to describe the prosperity of China's shipping industry in the very period. Analysis of the time lag between the coincidence index and the leading index may shed light on prediction of critical industrial turning points based on the turning points of leading indicators. The lagging index is compiled based on indicators the turning points which lag behind those of the overall market, and the fluctuations which also lag behind those of the overall shipping variations. The lagging index primarily serves to identify alerts and confirm whether a shipping cycle process has surpassed a turning point to enter the next prosperity interval.

CSPI and CSFI aim to assess and forecast the current status and development trend of China's shipping industry from the micro level, or the enterprise level, based on shipping executives' business experience and grassroots enterprise performance. CSAI and CSCI, on the other hand, try to assess and forecast the current status and development trend of China's shipping industry from the macro level based on objective data.

Table 0-1 CSPI Intervals and Their Indication

Indication	CSPI Interval
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Extremely prosperous	(180, 200]
Highly prosperous	(150, 180]
Prosperous	(120, 150]
Relatively prosperous	(110, 120]
Slightly prosperous	(100, 110]

Demarcation	100
Slightly stagnant	(90, 100]
Relatively stagnant	(80, 90]
Stagnant	(50, 80]
Moderately stagnant	(20, 50]
Extremely stagnant	[0, 20]

8. CSPI Commission

Zhen Hong (secretary-general of SISI and professor at Shanghai Maritime University)

Members:

Yin Ming (secretary and deputy secretary-general of Shanghai International Shipping Institute and professor at Shanghai Maritime University)

Li Gang (deputy secretary-general of Shanghai International Shipping Institute and associate professor at Shanghai Maritime University)

Zhang Jieshu (deputy secretary-general of Shanghai International Shipping Institute and professor at Shanghai Maritime University)

Zhou Dequan (director of SISI CSPI Research Office and director of SISI Domestic Shipping Research Office)

CSPI Working Committee

Lead: Zhou Dequan

Members: Chen Youchao, Liao Qingmei, Wu Jun, Chen Yu, Ren Siying, Wang Minjie, Sun Jilei