

China's Shipping Industry Improves Steadily as Confidence Rebounds

(CSPI Research Office, Shanghai International Shipping Institute)

- China Shipping Prosperity Report Series

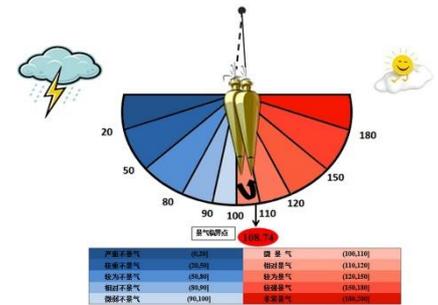
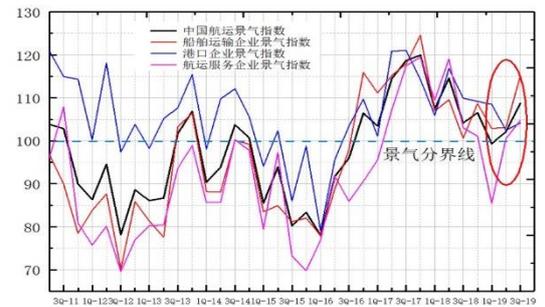
Summary:

- **China's shipping enterprises to welcome prosperity again.** China Shipping Prosperity Index for the third quarter of 2019 stood at 108.74 point, recording a modest rise and remaining in the slightly prosperous interval, indicating the stabilization of China's shipping industry. China Shipping Confidence Index for the same quarter **surged to 108.34 points into the slightly prosperous interval**, manifesting the sufficient confidence among Chinese shipping entrepreneurs in their business prospects.
- **Profitability of port and shipping enterprises improves substantially.** Shipping enterprises enjoyed substantial growth quarter-on-quarter in terms of profitability in the third quarter of 2019. Specifically, the prosperity index of container shipping enterprises reported an increase of 42.52 points quarter-on-quarter and that for port enterprises a rise by 17.07 points quarter-on-quarter, enabling the two types of enterprises to march into the relatively prosperous interval. Meanwhile, the prosperity indexes of shipping transport enterprises, dry bulks shipping enterprises and shipping service enterprises were in the prosperous or above intervals.
- **China's port enterprises restore confidence.** In the third quarter of 2019, the prosperity index of China's port enterprises stood at 104.17 points, edging up by 1.69 points quarter-on-quarter into the slightly prosperous interval. The confidence index of China's port enterprises stood at 113.33 points, **soaring by 23.15 points quarter-on-quarter** to return to the relatively prosperous interval.
- **Business performance for the next quarter expected to stay relatively stable.** According to the China shipping prosperity survey, China Shipping Prosperity Index for the fourth quarter of 2019 is projected to drop by 3.95 points to 104.80 points, remaining in the prosperous interval. The China Shipping Confidence Index is expected to reach 99.41 points, a drop of 8.94 points quarter-on-quarter to below the prosperity demarcation. Overall, China's shipping enterprises will maintain relatively stable business performance.
- **Highlights:**

1. The Ballast Water Management (BWM) Convention entered Phase II implementation on Sept 8, 2019, yet more than half of shipping transport enterprises failed to achieve compliance for their vessels and technical and management challenges remain for installing ballast water processing systems compliant with the D-2 standard;
2. The IMO sulfur restrictions are about to take effect soon and nearly 80% of enterprises choose to levy surcharges on low sulfur fuel oil or improve freights to balance the cost;
3. BDI closed at 2,267 points on August 29, hitting a high since December 2013. More than half of enterprises believed that the run was likely to continue until the end of the year;
4. Shanghai Port tops 2019 ranking of world's best-connected ports, with digitalization and cargo collection, distribution and transportation system construction being a major means for ports to enhance interconnectivity.

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 Trend



Related Reports

- **Analysis Report on Major Coastal Dry Bulks Shipping Markets in China (Review of 2018 and Outlook for 2019)**
- **Semiannual Report on China's Container Shipping Market in 2019**
- **Semiannual Report on International Container Shipping Market in 2019**
- **Analysis Report on International Dry Bulks Market (Review of 2018 and Outlook for 2019)**

CSPI Research Office:

Zhou Dequan, Liao Qingmei, Wu Jun,
Chen Yu, Ren Siying, Wang Minjie,
Sun Jilei

Tel: 021-65853850 ext 8039

E-mail: dqzhou@sisi-smu.org

1. Overview of China's Shipping Prosperity in

China's shipping industry continues the improvement. China Shipping Prosperity Alertness Index for August 2019 stood at 55.95 points, falling marginally quarter-on-quarter and remaining in the extremely gloomy interval. China Shipping Prosperity Composite Index for the same month stood at 96.25 points, rallying slightly quarter-on-quarter and fluctuating at low levels on the whole. At the micro level, China Shipping Prosperity

Q3 2019

Index for the third quarter of 2019 rose by 6.59 points quarter-on-quarter to 108.74 points, remaining in the slightly prosperous interval. China Shipping Confidence Index reached 108.34 points, rising by 17.28 points quarter-on-quarter to above the demarcation. China's shipping entrepreneurs were confident in the market prospect and believed that the shipping sector will 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
4Q-18	October	73.67	97.11	106.54	109.76
	November	62.57	96.44		
1Q-19	December	55.86	95.95	99.33	108.52
	January	56.42	96.17		
	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		

Table 1-1 China Shipping Prosperity

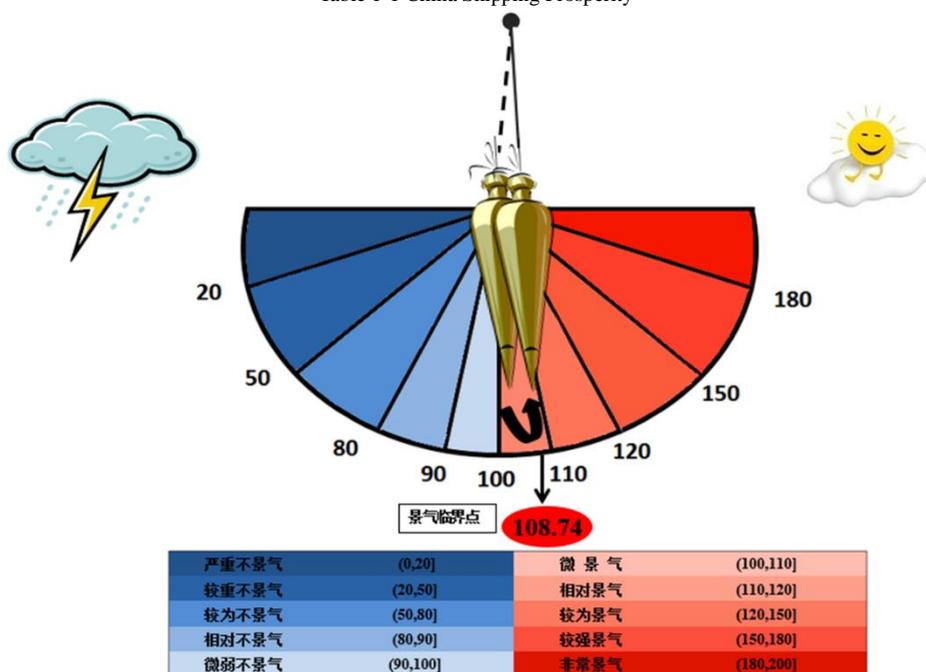


Figure 1-1 China Shipping Prosperity Index for Q3 2019

Source:

Shanghai

International

Shipping

Institute

2. Macro Analysis on China's Shipping

Economic and shipping indicators continue to run low. China Shipping Prosperity Alertness Index for August 2019 was 55.95 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, were in the gloomy or extremely gloomy intervals, yet the general freight rates in the market went up a little. The market was still sluggish on the whole, and the growth of total social demand headed downward (see Figure 2-4).

Part of shipping indicators comparatively stable. In the third quarter of 2019, the dry bulks shipping market continued the recovery and BDI among the four major shipping indicators soared all the way, rising from the extremely gloomy interval last quarter to the normal interval. BDTI and CCFI followed a stable trend in this quarter, fluctuating around 650 points and 800 points, respectively, remaining in the extremely gloomy interval. CCBFI picked up to some extent in August after it bottomed out in July and fluctuated at low levels in the extremely gloomy interval (see Figure 2-2).

Economic indicators fall across the board. In the third quarter of 2019, all economic indicators dropped to varied extents. Specifically, the growth of fixed-asset investments kept falling and picked up in August after bottoming out in July, remaining in the extremely gloomy interval. Consumer goods retail sales growth and port throughput continued the downward trend, import and export values growth fluctuated in a narrow range in this quarter and ended up rising, but remaining in the gloomy interval. Power generation growth tumbled in this quarter, dropping from the normal interval in last quarter to the gloomy interval (see Figure 2-3).

Prosperity

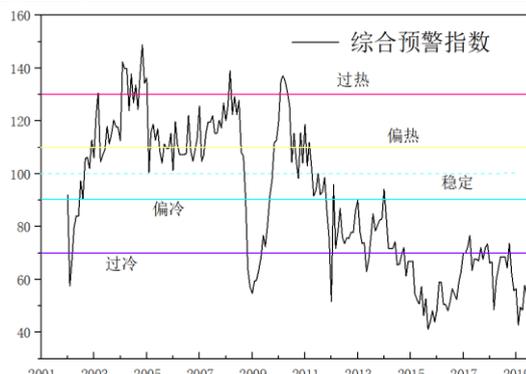


Figure 2-1 China Shipping Prosperity Alertness Index

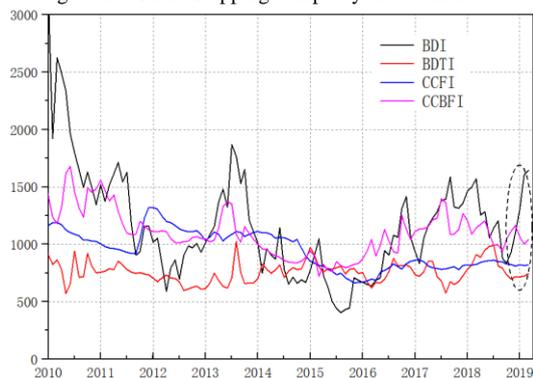


Figure 2-2 Variations of Shipping Indicators

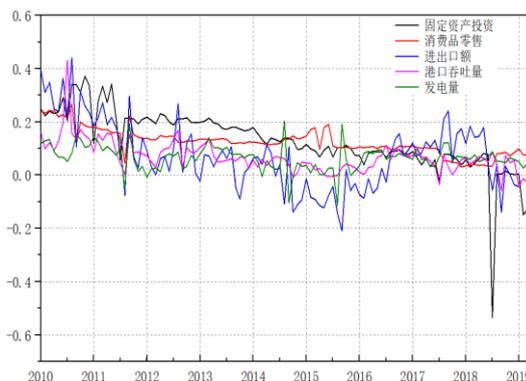


Figure 2-3 Variations of Economic Indicators

时间	BDI	BDTI	CCFI	CCBFI	固定资产投资	消费品零售	进出口额	港口吞吐量	发电量	综合指数
2019-08	●	●	●	●	●	●	●	●	●	●
2019-07	●	●	●	●	●	●	●	●	●	●
2019-06	●	●	●	●	●	●	●	●	●	●
2019-05	●	●	●	●	●	●	●	●	●	●
2019-04	●	●	●	●	●	●	●	●	●	●
2019-03	●	●	●	●	●	●	●	●	●	●

(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 third quarter of 2019. China Shipping Prosperity Index stood at 108.74 points, a moderate rise of 6.59 points quarter-on-quarter. The prosperity index value

Enterprises

of shipping transport enterprises rallied to the relatively prosperous interval, while that of other types of enterprises all remained above the prosperity demarcation (see Figure 3-1).

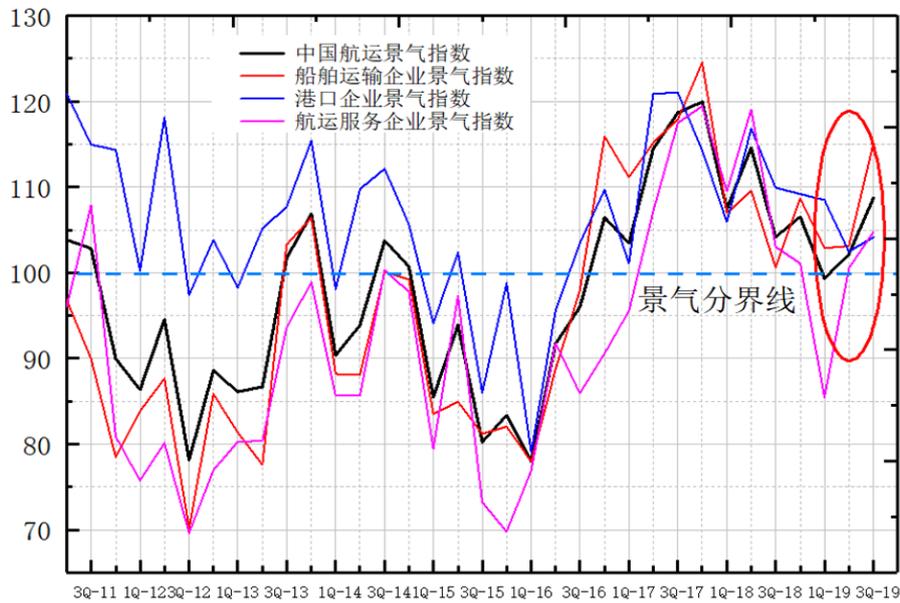


Figure 3-1 China Shipping Prosperity Index

In the third quarter of 2019, China Shipping Confidence Index was 108.34 points, surging by 17.28 points quarter-on-quarter to the slightly prosperous interval. Specifically, the confidence index values of shipping transport enterprises and shipping service enterprises rose to the slightly prosperous interval, while that of port enterprises increased to the relatively prosperous interval. Shipping enterprises that were optimistic about the general situation accounted for

20.51%, a rise of 7.04% over that in the previous quarter. 57.26% of surveyed shipping enterprises believed that the general situation was just all right whereas 21.36% were not optimistic about the general situation of the industry, the proportion dropping by 8.03% from that in the previous quarter. China's shipping entrepreneurs enjoyed a moderate boost in confidence in the market (see Figure 3-2).

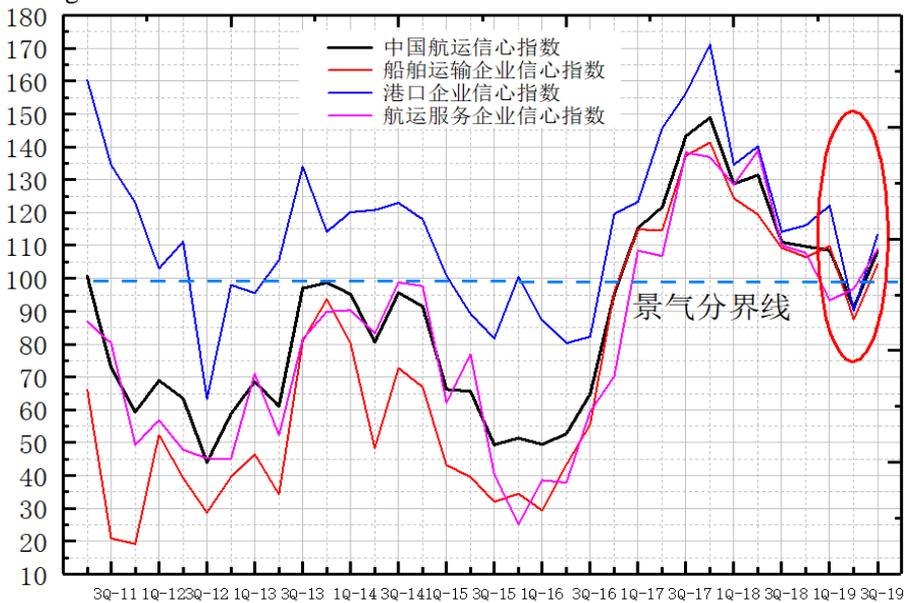
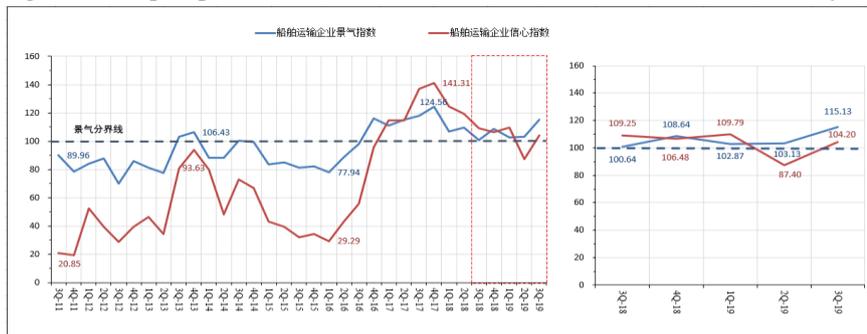


Figure 3-2 China Shipping Confidence Index

3.1 Analysis on Prosperity of China's Shipping Transport Enterprises

Confidence of shipping transport enterprises picks up. In the third quarter of 2019, shipping transport enterprises reported a prosperity index of 115.13 points, a rise of 12 points quarter-on-quarter; the confidence index of shipping transport enterprises was 104.20, a sharp rise of 16.8 points quarter-on-quarter from the relatively stagnant interval to the slightly prosperous interval. Specifically, the prosperity index of dry bulks shipping enterprises was 124.83 points, rising to the prosperous interval. The

162.38 points in the highly prosperous interval. The prosperity index of container shipping enterprises was 111.81 points, returning to the relatively prosperous interval. The confidence index of container shipping enterprises was 76.00 points, remaining in the stagnant interval. Shipping transport enterprises enjoyed stable business performance overall but entrepreneurs' confidence in the market prospect picked up and stayed cautious about market recovery (see Figure 3-3).



prosperity index of dry bulks shipping enterprises was

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

Large, medium-sized shipping transport enterprises continue favorable business performance momentums. In the third quarter of 2019, the prosperity indexes of large, medium-sized and small shipping transport enterprises stood at 121.91 points, 108.16 points and 99.66 points, respectively. Compared with the previous quarter, large, medium-sized shipping transport enterprises maintained favorable business performance momentums in this quarter and their prosperity indexes were all above the demarcation line. On the other hand, small shipping transport enterprises, though enjoying slight improvements in prosperity index over the previous quarter, remained in the slightly stagnant interval and the

overall performance remained depressed (see Figure 3-4).



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

Profitability of shipping transport enterprises rises substantially. In the third quarter of 2019, shipping transport enterprises continued to see increasing capacity, improved space utilization and rising freight income. Despite the increase in operating costs, enterprises enjoyed significant improvements in profitability with

more abundant current funds. Besides, enterprise financing became easier, loan liability dropped and labor demand started to improve. Meanwhile, the willingness to invest in shipping capacity was less than sufficient, and shipowners were cautious about investing in shipping capacity (see Figure 3-5).

船舶运输企业经营指标	本季度景气指数值	较上季度情况	景气状况
企业运力	108.21	↓ -1.48	微景气区间
舱位利用率	115.99	↑ 26.29	相对景气区间
运费	136.06	↑ 34.20	较为景气区间
营运成本	93.16	↑ 24.12	微弱不景气区间
盈利情况	129.68	↑ 30.22	较为景气区间
流动资金	140.5	↑ 8.66	较为景气区间
企业融资	113.02	↓ -6.20	相对景气区间
贷款负债	110.03	↑ 6.00	相对景气区间
劳动力需求	104.97	↓ -6.05	微景气区间
船舶运力投资意愿	99.69	↑ 4.26	微弱不景气区间

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

Source: Shanghai International Shipping Institute

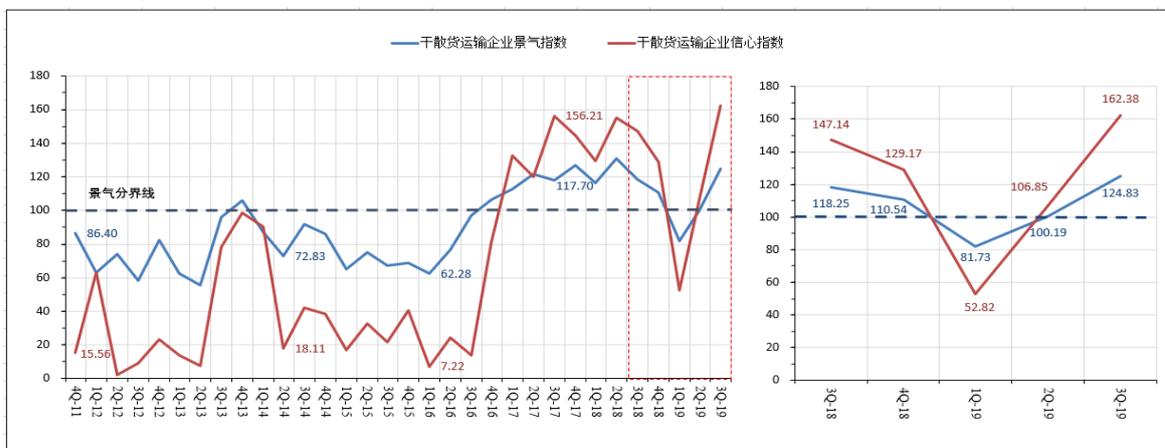
Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression. The higher the value is, the more promising the industrial outlook is.

3.2 Analysis on Prosperity of China's Dry

Dry bulks shipping enterprises enjoy encouraging prosperity. In the third quarter of 2019, the prosperity index of dry bulks shipping enterprises was 124.83 points, up by 24.64 points quarter-on-quarter from the slightly prosperous interval to the prosperous interval. The confidence index of dry bulks shipping enterprises stood

Bulks Shipping Enterprises

quarter-on-quarter to enter the highly prosperous interval. Dry bulks shipping enterprises enjoyed improving business performance overall, and entrepreneurs were fully confident in the business performance of the market (see Figure 3-6).



at 162.38 points, a surge of 55.53 points

Figure 3-6 Prosperity and

Confidence Indexes of Dry Bulks Shipping Enterprises

Large dry bulks shipping enterprises demonstrate the highest prosperity. In the third quarter of 2019, the prosperity indexes of large, medium-sized and small dry bulks shipping enterprises stood at 136.67 points, 106.25 points and 108.46 points, respectively. Compared with the previous quarter, the prosperity indexes of medium-sized and small dry bulks shipping enterprises in this quarter ran flat with this quarter, both remaining in the slightly prosperous interval. The prosperity index of large dry bulks shipping enterprises, however, soared by 41.67 points quarter-on-quarter, rising from below the demarcation line to the prosperous interval, demonstrating the highest prosperity performance (see Figure 3-7).

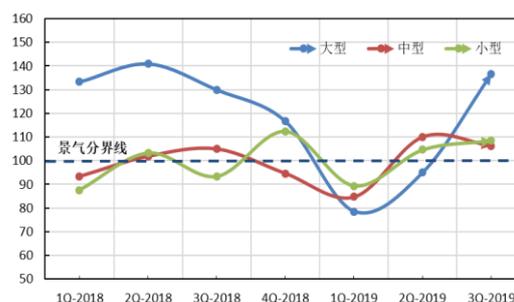


Figure 3-7 Prosperity Indexes of Large, Medium-sized and Small Dry Bulks Shipping Enterprises

Business indicators of enterprises improve almost across the board. In the third quarter of 2019, the capacity launched by enterprises continued to grow, ship turnover rate surged, and ocean freight income also went up, resulting in a significant increase in enterprises' profitability against the rising operating costs. Enterprises

enjoyed more sufficient current funds and relatively easy financing, with the loan liability on a decline and the labor demand relatively robust. The willingness to invest in shipping capacity picked up and stayed in the slightly prosperous interval (see Figure 3-8).

干散货运输企业经营指标	本季度景气指数值	较上季度情况	景气状况
企业运力	118.44	↑ 16.13	相对景气区间
船舶周转率	121.90	↑ 27.19	较为景气区间
运费	157.45	↑ 54.32	较强景气区间
营运成本	68.73	↓ -0.52	较为不景气区间
盈利情况	159.42	↑ 70.89	较强景气区间
流动资金	151.68	↑ 43.19	较强景气区间
企业融资	134.57	↑ 49.16	较为景气区间
贷款负债	128.56	↑ 21.56	较为景气区间
劳动力需求	100.00	↓ -13.85	景气分界点
船舶运力投资意愿	107.57	↓ -21.68	微景气区间

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

Container shipping enterprises return to prosperous interval. In the third quarter of 2019, the prosperity index of container shipping enterprises stood at 111.81 points, up by 17.54 points quarter-on-quarter and into the relatively prosperous interval. The confidence index of container shipping enterprises was 76.00 points, edging up

Shipping Enterprises

by 0.05 points quarter-on-quarter and remaining in the stagnant interval. Container shipping enterprises embraced improved business performance overall and entrepreneurs were generally less confident in the industry prospect (see Figure 3-9).



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

Small container shipping enterprises face worrisome business performance. In the third quarter of 2019, the prosperity indexes of large, medium-sized and small container shipping enterprises were 114.00 points, 124.44 points and 82.00 points, respectively. Compared with the previous quarter, the prosperity indexes of large and medium-sized container shipping enterprises improved substantially in this quarter, with that of large container shipping enterprises, in particular, jumping from the relatively stagnant interval to the relatively prosperous interval. Medium-sized container shipping enterprises posted 124.44 points in prosperity index in the prosperous interval, becoming the most prosperous enterprise type

(see Figure 3-10).

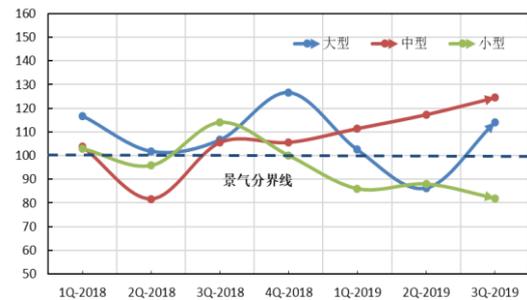


Figure 3-10 Prosperity Indexes of Large, Medium-sized and Small Container Shipping Enterprises

Control over container shipping capacity yields significant results. In the third quarter of 2019, the slashing of capacity carried out by enterprises resulted in a slight rise in space utilization and an increase in freight rates. Meanwhile, the dramatic decline of operating costs facilitated the constant rise in enterprise profitability.

Enterprises still enjoyed relatively sufficient current funds and easier access to capital. Loan liability also reduced significantly. However, the declining labor demand caused reduction in enterprises' willingness to invest in shipping capacity (see Figure 3-11).

集装箱运输企业经营指标	本季度景气指数值	较上季度情况	景气状况
企业运力	78.56	↓ -36.49	较为不景气区间
舱位利用率	105.11	↑ 29.11	微景气区间
运费	135.11	↑ 49.34	较为景气区间
营运成本	127.22	↑ 60.22	较为景气区间
盈利情况	117.11	↑ 42.52	相对景气区间
流动资金	155.89	↑ 8.48	较强景气区间
企业融资	126.11	↓ -3.98	较为景气区间
贷款负债	106.00	↑ 19.41	微景气区间
劳动力需求	90.56	↓ -7.17	微弱不景气区间
船舶运力投资意愿	76.44	↑ 13.99	较为不景气区间

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

Source: Shanghai International Shipping Institute

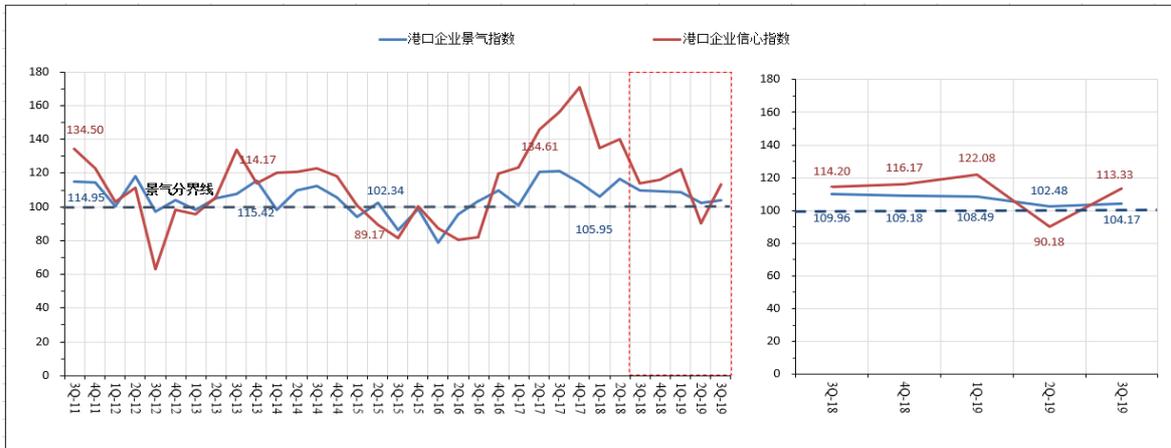
Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression. The higher the value is, the more promising the industrial outlook is.

3.4 Analysis on Prosperity of China's Port Enterprises

China's port enterprises comparatively confident. In the third quarter of 2019, the prosperity index of port enterprises stood at 104.17 points, running flat quarter-on-quarter and remaining in the slightly prosperous interval. Business performance of port

Enterprises

of port enterprises touched 113.33 points, a sharp rise of 23.15 points quarter-on-quarter and entered the relatively prosperous interval again. 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

Large port enterprises enjoy relatively stable business performance. In the third quarter of 2019, the prosperity indexes of large, medium-sized and small port enterprises stood at 111.11 points, 90.01 points and 100 points, respectively. Compared with the previous quarter, large port enterprises continued a favorable business performance momentum in this quarter and their prosperity index stayed above the demarcation line. On the other hand, the medium-sized port enterprises, though enjoying slight improvements in the prosperity index over the previous quarter, remained in the slightly stagnant interval. Small port enterprises embraced a bigger improvement and stepped on the prosperity demarcation, demonstrating relatively stable business performance

Port enterprises start to enjoy rising profitability. In the third quarter of 2019, port throughput kept growing and berth utilization reversed the decline to record a rise, with port charging rates on a decline. Although the operating costs rose to some extent, enterprises' profitability improved against the trend. Enterprises still

overall (see Figure 3-13).

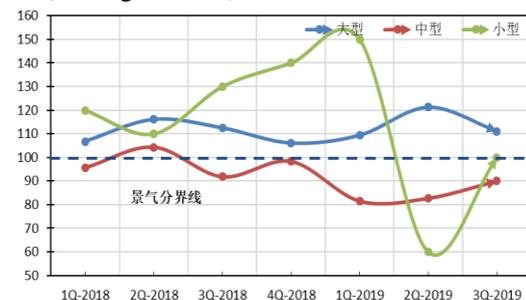


Figure 3-13 Prosperity Indexes of Large, Medium-sized and Small Port Enterprises

enjoyed sufficient current funds and easier access to capital. Asset liabilities increased and the labor demand continued to go down. Meanwhile, the willingness to invest in newly-added berths and machinery went upward (see Figure 3-14).

港口企业经营指标	本季度景气指数值	较上季度情况	景气状况
吞吐量	117.92	↑ 8.28	相对景气区间
泊位利用率	102.50	↑ 16.86	微景气区间
收费价格	97.92	↑ 4.19	微弱不景气区间
营运成本	76.25	↑ 2.43	较为不景气区间
企业盈利	111.25	↑ 17.07	相对景气区间
流动资金	113.33	↓ -20.94	相对景气区间
企业融资	117.50	↓ -0.77	相对景气区间
资产负债	80.42	↓ -35.03	相对不景气区间
劳动力需求	97.92	↑ 6.65	微弱不景气区间
新增泊位与机械投资	126.67	↑ 18.12	较为景气区间

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 present stable business performance on the whole. In the third quarter of 2019, the prosperity index of shipping service enterprises stood at 104.80 points, a rise of 4.29 points quarter-on-quarter and continuing to stay in the slightly prosperous interval. The confidence index of shipping service enterprises was 108.88 points, a rise of 12.05

points quarter-on-quarter and picking up from the slightly stagnant interval to the slightly prosperous interval. Both the prosperity index and confidence index of shipping service enterprises were above the demarcation, manifesting the stable business performance overall (see Figure 3-15).



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

Large shipping service enterprises post the highest prosperity. In the third quarter of 2019, the prosperity indexes of large, medium-sized and small shipping service enterprises were 111.33 points, 97.50 points and 90.83 points, respectively. Compared with the previous quarter, large shipping service enterprises posted the highest prosperity with a rise of 9.19 points into the relatively prosperous interval. Medium-sized 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

Profitability of shipping service enterprises starts to improve. In the third quarter of 2019, both business volumes and business orders of shipping service enterprises kept rising and the business charging rates went up. Although the business costs stayed high, enterprises enjoyed significant growth in profitability,

resulting in more sufficient current funds and a sound momentum of labor demand. However, enterprises began to face different financing challenges and loan delinquency also started to rise. Enterprises showed lower willingness in fixed-asset investments (see Figure 3-17).

航运服务企业经营指标	本季度景气指数值	较上季度情况	景气状况
业务预订	109.41	→ 0.00	微景气区间
业务量	126.19	↑ 4.73	较为景气区间
业务收费价格	106.91	↑ 12.81	微景气区间
业务成本	74.56	↓ -18.22	较为不景气区间
盈利状况	127.44	↑ 37.88	较为景气区间
流动资金	116.47	↑ 11.61	相对景气区间
企业融资	95.00	↓ -6.95	微弱不景气区间
贷款拖欠	81.91	↓ -8.98	相对不景气区间
劳动力需求	110.97	↑ 4.23	相对景气区间
固定资产投资	99.16	↑ 5.81	微弱不景气区间

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 August 2019, the leading index of China's shipping industry closed at 99.08 points, presenting a "V" curve starting from July. The coincidence index stood at 95.10 points, lower than last year's average of 95.42 points, rising by 0.61 points over the average of 94.49 points for last quarter. The lagging index stood at 97.67 points, lower

than last year's average of 98.35 points, edging down by 0.34 points from the average of 98.01 points for last quarter. In terms of the index trend, the leading index followed a fluctuating and upward trend, and it is expected that the shipping market may improve in the future (see Figure 4-1).



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

Among the leading index indicators for the third quarter of 2019, vessel arrivals continued to rise by narrow margins starting from July. Power generation kept rising in this quarter. Money supply increased in this quarter. Fixed-asset investments dropped moderately starting from July. Consumer goods retail sales maintained a stable rise in this quarter (see Figure 4-2).

In August 2019, among the coincidence index indicators, port throughput growth in August rose and import and export values kept slipping in this quarter. Among the four major shipping indicators, BDTI kept rising steadily, CCFI basically leveled off, BDI surged and reached this year's high in August at 1,643 points, and

CCBFI fell and then rose in this quarter (see Figure 4-3).

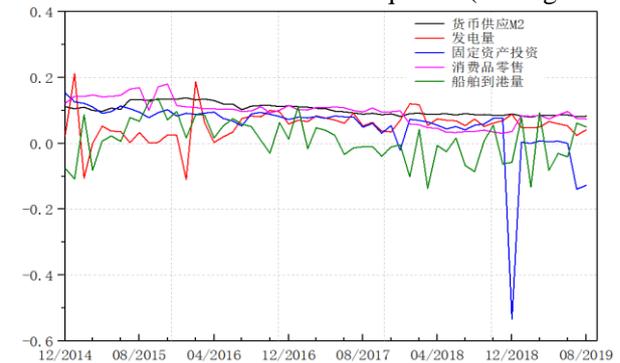


Figure 4-2 Trend of LCI

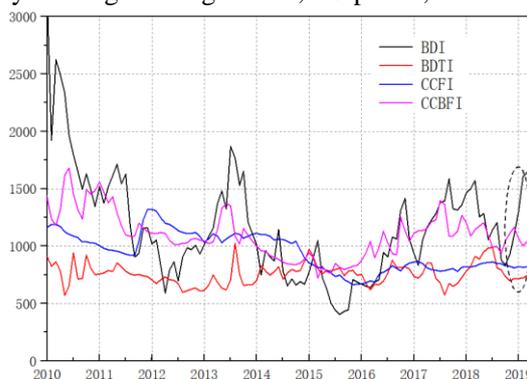


Figure 4-3 Trend of CEI



5. Projection of China's Shipping Prosperity in

According to the China shipping prosperity survey, China Shipping Prosperity Index for the fourth quarter of 2019 is expected to reach 104.80 points, down by 3.95 points quarter-on-quarter and remaining in the slightly prosperous interval. China's port enterprises may continue to see rising prosperity, shipping service enterprises will head for stagnant waters again, and ship enterprises may suffer a fall in prosperity index. China Shipping Confidence Index for the fourth quarter of 2019 is projected to touch 99.41 points, a drop of 8.94 points quarter-on-quarter and falling to the slightly stagnant interval. China's shipping service enterprises are less confident in the prospect, while the confidence indexes of China's port enterprises and ship enterprises may step on

Q4 2019

the demarcation line (see Figure 5-1, Figure 5-2 and Figure 5-3).

According to the China shipping prosperity survey, it is expected that 26.14% of surveyed shipping enterprises are optimistic about the overall performance of the shipping industry in the fourth quarter of 2019, the proportion rising by 13.51 percentage points quarter-on-quarter; 42.05% are neutral, the proportion dropping by 5.32 percentage points quarter-on-quarter, and the rest 31.82% are pessimistic, the proportion dropping by 8.18 percentage points quarter-on-quarter. Overall, China's shipping industry will continue to maintain stable.

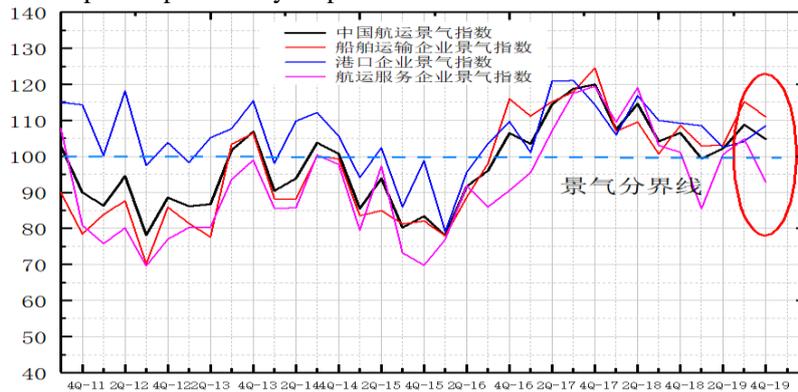


Figure 5-1 Projected China Shipping Prosperity Index

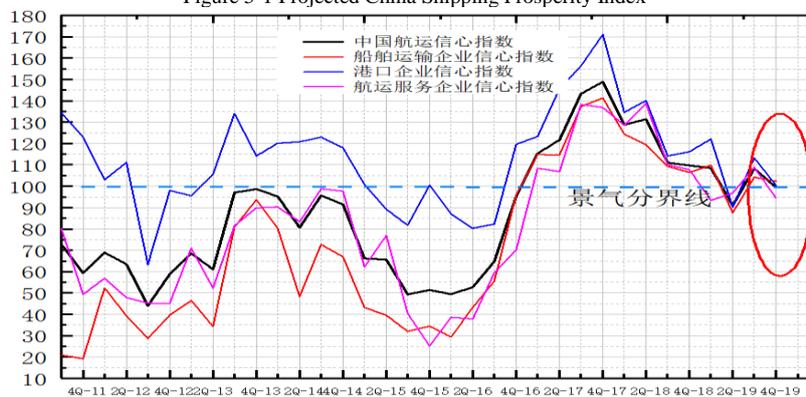


Figure 5-2 Projected China Shipping Confidence Index

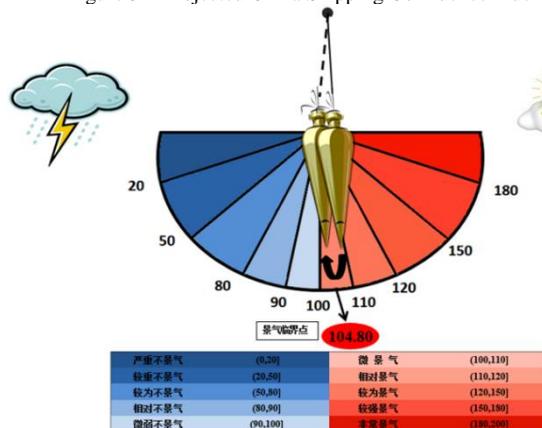


Figure -3 Projection of China Shipping Prosperity Index for Q4 2019

5.1 Projection of Prosperity of China's Shipping

Shipping transport enterprises to maintain favorable momentums. In the fourth quarter of 2019, the prosperity index of shipping transport enterprises is expected to reach 110.99 points, down by 4.14 points quarter-on-quarter and remaining in the relatively prosperous interval, and the confidence index of shipping

Transport Enterprises

transport enterprises is forecast at 102.37 points, running flat with that for this quarter and remaining in the slightly prosperous interval, as per the China shipping prosperity survey. In general, shipping transport enterprises may witness stable business performance and entrepreneurs are cautious about the future (see Figure 5-4).



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

Business performance of small shipping transport enterprises to continue the downturn. In the fourth quarter of 2019, the prosperity indexes of large, medium-sized and small shipping transport enterprises are expected to hit 117.62 points, 105.00 points and 94.48 points, respectively. Compared with this quarter, large, medium-sized shipping transport enterprises will continue favorable business performance momentums in the next quarter and their prosperity indexes will all stay above the demarcation line. On the other hand, small shipping transport enterprises are expected to witness a slight decline in prosperity index from this quarter and remain in the slightly stagnant interval, manifesting their continued

Profitability of shipping transport enterprises to continue improve. In the fourth quarter of 2019, shipping transport enterprises will continue to augment capacity launch, but the space utilization is expected to stay steady and freight income will go up. Despite the projected sharp increase in operating costs, enterprises may continue to

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

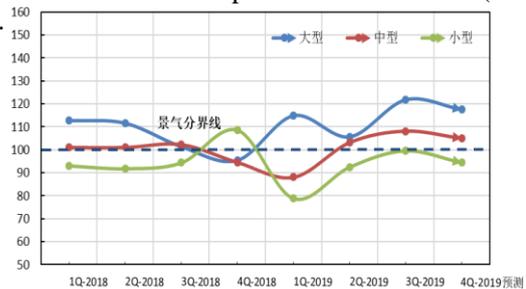


Figure 5-5 Projected Prosperity Indexes of Large, Medium-sized and Small Shipping Transport Enterprises

enjoy improvement in profitability with more abundant current funds. Besides, enterprise financing will become easier, loan liability will increase and labor demand will improve. Meanwhile, the willingness to invest in shipping capacity will keep falling and shipowners are cautious about investing in shipping capacity (see Figure 5-6).

船舶运输企业经营指标	下季度景气指数预测值	较本季度情况	景气状况
企业运力	114.53	↑ 6.32	相对景气区间
舱位利用率	104.17	↓ -11.82	微景气区间
运费	117.58	↓ -18.48	相对景气区间
营运成本	83.57	↓ -9.59	相对不景气区间
盈利情况	135.81	↑ 6.13	较为景气区间
流动资金	141.16	↑ 0.66	较为景气区间
企业融资	118.21	↑ 5.19	相对景气区间
贷款负债	97.28	↓ -12.75	微弱不景气区间
劳动力需求	102.11	↓ -2.86	微景气区间
船舶运力投资意愿	95.51	↓ -4.18	微弱不景气区间

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

Source: Shanghai International Shipping Institute

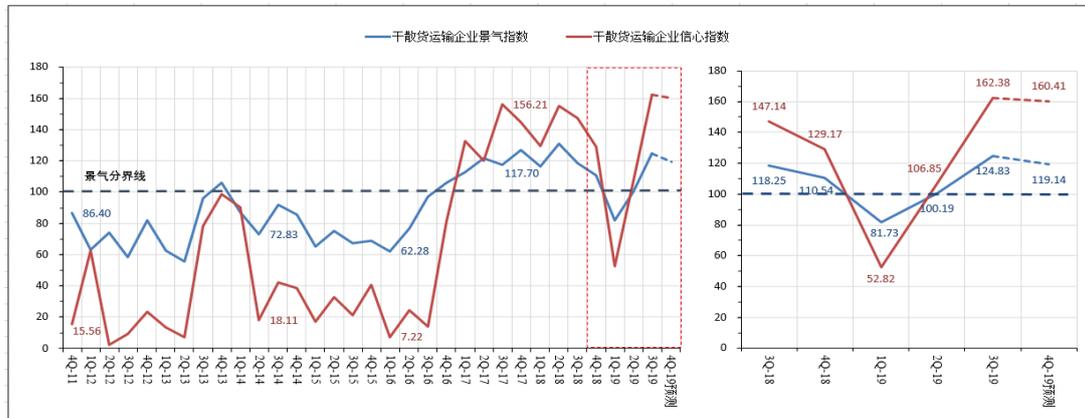
Note: CSPI takes 100 points as its demarcation. Values greater than 100 represent prosperity, while those lower than 100 represent depression. The higher the value is, the more promising the industrial outlook is.

5.2 Projection of Prosperity of China's Dry

China's dry bulks shipping enterprises expected to sustain the sound momentums. In the fourth quarter of 2019, the prosperity index of dry bulks shipping enterprises is expected to hit 119.14 points, a drop of 5.69 points quarter-on-quarter to fall back to the relatively prosperous interval. The confidence index of dry bulks

Bulks Shipping Enterprises

running flat with that in this quarter and remaining in the highly prosperous interval. In general, it is expected that the business performance of dry bulks shipping enterprises may sustain the sound momentums in the fourth quarter and entrepreneurs are still fully confident in the market (see Figure 5-7).



shipping enterprises is expected to reach 160.41 points,

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

Large dry bulks shipping enterprises post the highest prosperity index. In the fourth quarter of 2019, the prosperity indexes of large, medium-sized and small dry bulks shipping enterprises are projected to reach 130 points, 106.88 points and 96.15 points, respectively. Compared with this quarter, large and medium-sized dry bulks shipping enterprises will continue the favorable business performance momentums in the next quarter and their prosperity indexes are all above the demarcation line. In particular, large dry bulks shipping enterprises will post the highest prosperity index. Small dry bulks shipping enterprises, however, may witness a decline in prosperity index quarter-on-quarter to fall into the slightly stagnant interval, indicating worrisome business performance (see

Figure 5-8).

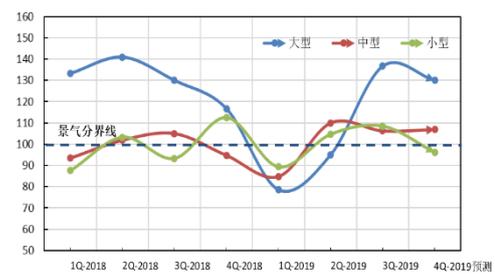


Figure 5-8 Projected Prosperity Indexes of Large, Medium-sized and Small Dry Bulks Shipping Enterprises

Dry bulks shipping profitability to rise sharply. In the fourth quarter of 2019, enterprises will continue to augment shipping capacity launch, which may lead to a slump in ship turnover and a surge of operating costs. However, the rising freight rates will secure the substantial growth of profitability for enterprises, and enterprises will

continue to enjoy sufficient current funds and relatively easy access to capital, with loan liability expected to go down and labor demand to increase. But enterprises will remain cautious about investing in ships and the willingness in investment is relatively low (see Figure 5-9).

干散货运输企业经营指标	下季度景气指数预测值	较本季度情况	景气状况
企业运力	142.31	↑ 23.87	较为景气区间
船舶周转率	76.54	↓ -45.36	较为不景气区间
运费	145.84	↓ -11.61	较为景气区间
营运成本	71.85	↑ 3.12	较为不景气区间
盈利情况	153.25	↓ -6.17	较强景气区间
流动资金	153.25	↑ 1.57	较强景气区间
企业融资	133.41	↓ -1.16	较为景气区间
贷款负债	125.43	↓ -3.13	较为景气区间
劳动力需求	101.97	↑ 1.97	微景气区间
船舶运力投资意愿	87.57	↓ -20.00	相对不景气区间

Figure 5-9 Projected 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.

5.3 Projection of Prosperity of China's

Container shipping enterprises short of confidence. According to the China shipping prosperity survey, in the fourth quarter of 2019, the prosperity index of container shipping enterprises is expected to stand at 103.96 points, down by 7.85 points quarter-on-quarter. The confidence index of container shipping enterprises is projected to hit

Container Shipping Enterprises

69.56 points, a drop of 6.44 points quarter-on-quarter and remaining in the stagnant interval. Container shipping entrepreneurs are comparatively pessimistic about the general market performance in the fourth quarter of 2019 and are short of confidence (see Figure 5-10).

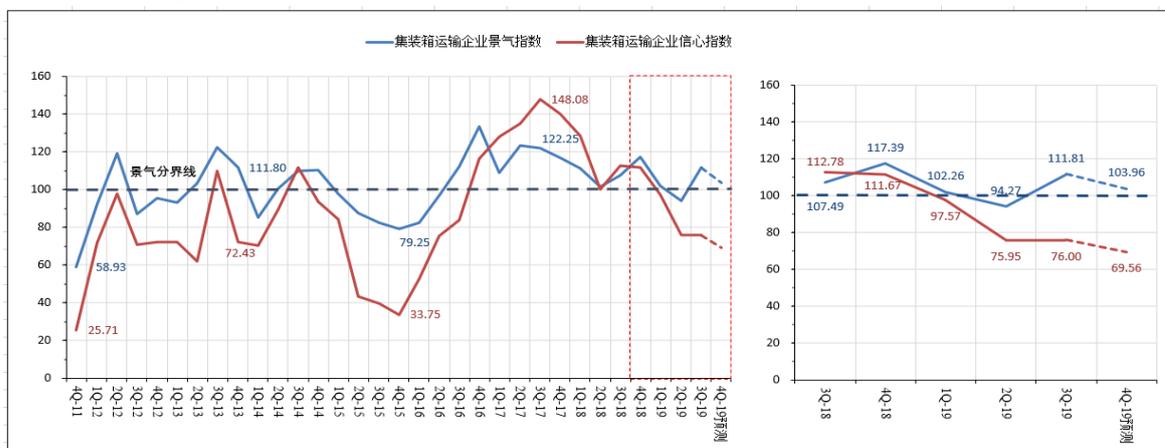


Figure 5-10 Projected Prosperity and Confidence Indexes of Container Shipping Enterprises

Small container enterprises post the lowest prosperity index. In the fourth quarter of 2019, the prosperity indexes of large, medium-sized and small container shipping enterprises may record 104.00 points, 112.22 points and 90.00 points, respectively. Compared with this quarter, large and medium-sized container shipping enterprises will continue the sound momentums in the next quarter, while small container shipping enterprises may witness a decline in prosperity index year-on-year to fall to the slightly stagnant interval, implying worrisome business performance (see Figure 5-11).

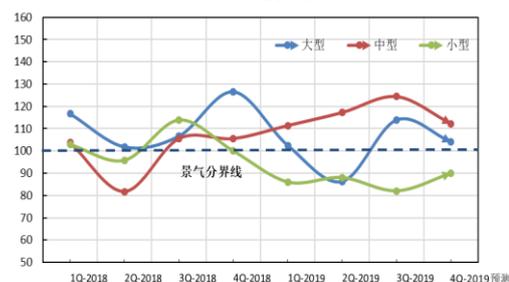


Figure 5-11 Projected Prosperity Indexes of Large, Medium-sized and Small Container Shipping Enterprises

A majority of business indicators of container shipping enterprises decline. In the fourth quarter of 2019, enterprises are expected to sustain their control over shipping capacity, while the space utilization will reduce and shipping freight rates will drop as well. The operating costs will rise, but enterprises may still enjoy profitability

with sufficient current funds and easier access to capital. However, the loan liability may increase, the labor demand will remain low and the willingness to invest in shipping capacity will also stay at low levels (see Figure 5-12).

集装箱运输企业经营指标	下季度景气指数预测值	较本季度情况	景气状况
企业运力	96.56	↑ 18	微弱不景气区间
舱位利用率	96.56	↓ -8.55	微弱不景气区间
运费	99.78	↓ -35.33	微弱不景气区间
营运成本	70.67	↓ -56.55	较为不景气区间
盈利情况	120.78	↑ 3.67	较为景气区间
流动资金	155.89	→ 0.00	较强景气区间
企业融资	138.11	↑ 12.00	较为景气区间
贷款负债	84.78	↓ -21.22	相对不景气区间
劳动力需求	90.78	↑ 0.22	微弱不景气区间
船舶运力投资意愿	85.67	↑ 9.23	相对不景气区间

Figure 5-12 Projected 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.

5.4 Projection of Prosperity of China's Port Enterprises

Port enterprises' confidence in business performance to rally. According to the China shipping prosperity survey, in the fourth quarter of 2019, the prosperity index of port enterprises is forecast at 108.50 points in the slightly prosperous interval, indicating improving business performance. The confidence index of

Enterprises

port enterprises is expected to decline by 12.91 points to 100.42 points into the slightly prosperous interval. In general, China's port enterprises will present relatively stable business performance, but port entrepreneurs are cautious about the prospect of the industry (see Figure 5-13).

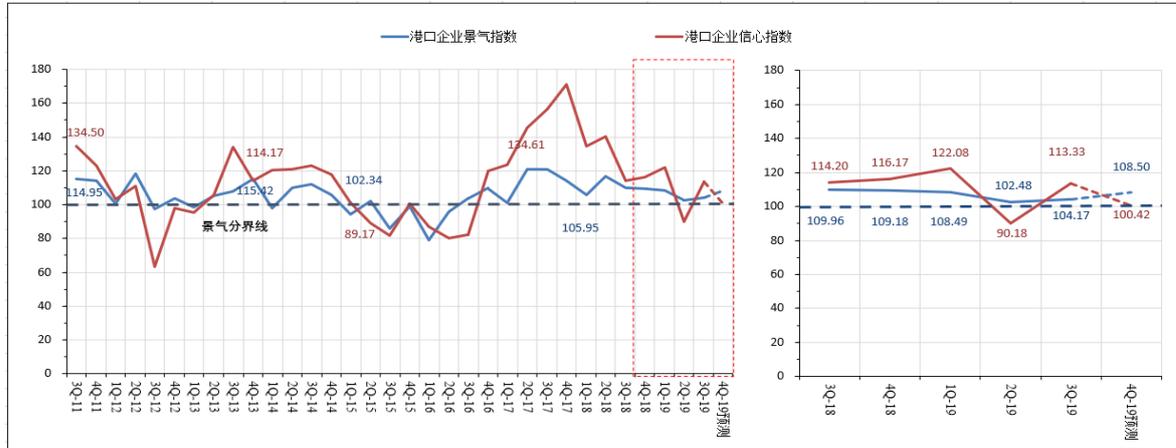


Figure 5-13 Projected Prosperity and Confidence Indexes of Port Transport Enterprises

Medium-sized port enterprises face relatively grim business situations. In the fourth quarter of 2019, the prosperity indexes of large, medium-sized and small port enterprises are forecast at 112.22 points, 86.67 points and 130 points, respectively. Compared with this quarter, large port enterprises will continue a favorable business performance momentum in the next quarter with their prosperity index staying above the demarcation line. The prosperity index of small port enterprises will stay in the prosperous interval. The prosperity index of medium-sized port enterprises may go down slightly quarter-on-quarter and stay in the relatively stagnant interval, implying relatively grim business situations overall (see Figure 5-14).

5-14).



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

Port enterprises to continue enjoying profitability. In the fourth quarter of 2019, it is expected that port throughput and berth utilization will keep rising and charging rates may go up by a narrow margin along with rising operating costs. But enterprises will enjoy significant improvements in profitability, with sufficient

current funds and easy access to capital. Their loan liability will continue to increase and the labor demand will also rally. Meanwhile, the willingness to invest in newly-added berths and machinery will recover to stay relatively prosperous (see Figure 5-15).

港口企业经营指标	下季度景气指数预测值	较本季度情况	景气状况
吞吐量	122.08	↑ 4.16	较为景气区间
泊位利用率	124.17	↑ 21.67	较为景气区间
收费价格	104.58	↑ 6.66	微景气区间
营运成本	70.00	↓ -6.25	较为不景气区间
企业盈利	130.83	↑ 19.58	较为景气区间
流动资金	113.33	→ 0.00	相对景气区间
企业融资	117.50	→ 0.00	相对景气区间
资产负债	82.50	↑ 2.08	相对不景气区间
劳动力需求	102.08	↑ 4.16	微景气区间
新增泊位与机械投资	117.92	↓ -8.75	相对景气区间

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 to fall stagnant again.

In the fourth quarter of 2019, the prosperity index of shipping service enterprises is expected to reach 92.84 points, down by 11.96 points quarter-on-quarter and falling to the slightly stagnant interval. The confidence index of shipping service enterprises is projected to hit

Shipping Service Enterprises

94.44 points, dropping by 14.44 points quarter-on-quarter to the slightly stagnant interval. In general, both the prosperity index and confidence index of shipping service enterprises are expected to fall below the prosperity demarcation and shipping service entrepreneurs are less confident in the future (see Figure 5-16).

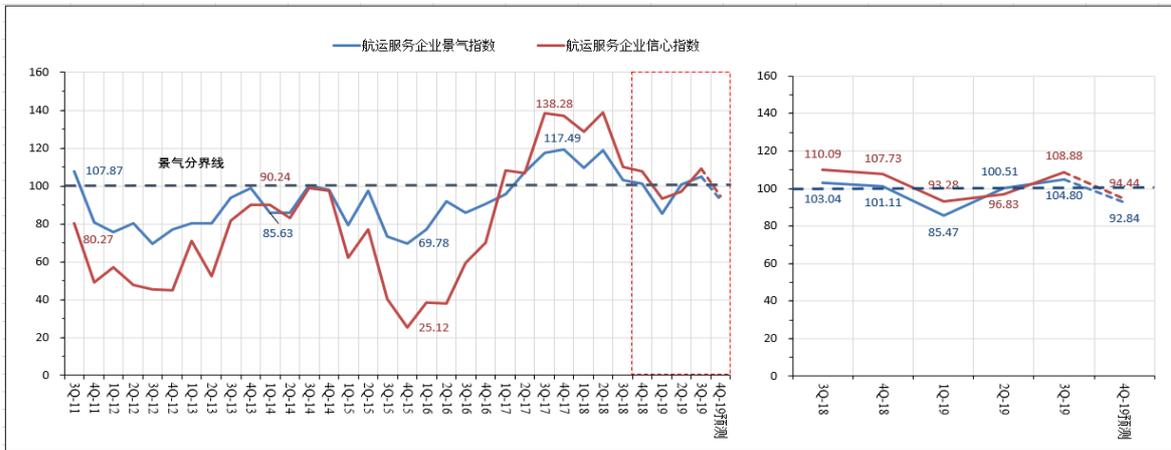


Figure 5-16 Projected Prosperity and Confidence Indexes of Shipping Service Enterprises

Large shipping service enterprises post the lowest prosperity. In the fourth quarter of 2019, the prosperity indexes of large, medium-sized and small shipping service enterprises are forecast at 90.67 points, 96.25 points and 95.83 points, respectively. Compared with this quarter, the prosperity index of large shipping service enterprises may be the lowest in the next quarter, declining by 20.67 points to the slightly stagnant interval. Medium-sized and small shipping service enterprises will continue to suffer declining business performance with their prosperity indexes both below the demarcation, indicating unfavorable business performance overall (see Figure 5-17).

Business indicators of shipping service enterprises worsen across the board. In the fourth quarter of 2019, although the business volume of shipping service enterprises will increase, business orders and charging rates may decline while operating costs will remain high. This will hurt profitability which may fall to the relatively

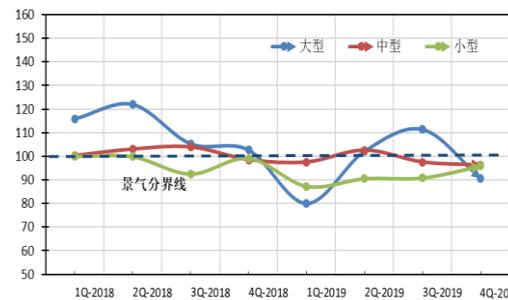


Figure 5-17 Projected Prosperity Indexes of Large, Medium-sized and Small Shipping Service Enterprises

stagnant interval. Enterprises will continue to enjoy relatively sufficient current funds but with more difficult access to capital, along with increasing loan delinquency and reducing labor demand, undermining the willingness to invest in fixed assets (see Figure 5-18).

航运服务企业经营指标	下季度景气指数预测值	较本季度情况	景气状况
业务预订	99.44	↓ -9.97	微弱不景气区间
业务量	105.56	↓ -20.63	微景气区间
业务收费价格	88.25	↓ -18.66	相对不景气区间
业务成本	75.41	↑ 0.85	较为不景气区间
盈利状况	88.72	↓ -38.72	相对不景气区间
流动资金	113.25	↓ -3.22	相对景气区间
企业融资	87.63	↓ -7.37	相对不景气区间
贷款拖欠	80.72	↓ -1.19	相对不景气区间
劳动力需求	99.59	↓ -11.38	微弱不景气区间
固定资产投资	89.81	↓ -9.35	相对不景气区间

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, make summaries and analysis and proposes several suggestions for development, in an effort to provide some reference to various shipping enterprises in their decision making.

6.1 More Than Half of Shipping Transport Enterprises Yet to Comply with BWB Convention

The Ballast Water Management (BWB) Convention entered Phase II implementation on Sept 8, 2019. During this phase, which will last until September 2024, all ships are required to install the ballast water processing systems that comply with the D-2 standard in the next IOPP update inspection before Sept 8, 2024. Against this backdrop, the CSPI Research Office of Shanghai International Shipping Institute conducted a survey on shipping transport enterprises nationwide.

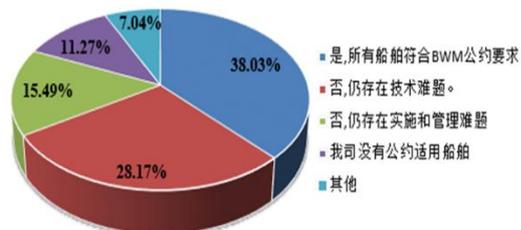


Figure 6-1 Responses of Shipping Transport Enterprises to BWB Convention Requirements

Among the surveyed shipping transport enterprises, only 38.03% said all their ships have complied with the requirement, 28.17% said they were facing technical challenges for installing ballast water processing systems that are compliant with the D-2 standard on their vessels, 15.49% claimed implementation and management challenges for installing ballast water processing systems that are compliant with the D-2 standard on their ships, 11.27% owned no vessels within the applicable scope of the convention, and the rest 7.04% faced other problems.

The above survey result shows that among the surveyed shipping transport enterprises, more than 60% of them fail to comply with the requirements in the BWB Convention. Specifically, only a small fraction are large shipping transport enterprises and most of them are medium-sized and small ones. In view of this, shipping transport enterprises, especially the medium-sized and small ones, should seek solutions to address the technical, implementation and management challenges arising from installing the ballast water management systems compliant with the D-2 standard on their ships.

6.2 More Than 60% of Enterprises Choose to Transfer Additional Costs from LSFO

For the purpose of compliance with the IMO sulfur restrictions to take effect on January 1, 2020, Austral Asia

Line (AAL) started to levy a low sulfur fuel oil surcharge to cover the additional costs arising from using low sulfur fuel oil (LSFO). Maersk, CMA CGM, OOCL, HMM and other companies have also introduced new measures to ease the cost pressure from using LSFO. The CSPI Research Office of Shanghai International Shipping Institute conducted a survey centering around the above situations on shipping transport enterprises nationwide.

According to the survey:

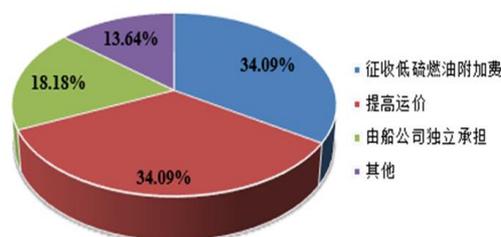


Figure 6-2 Measures Taken by Ship Enterprises to Address Rising Cost from Using Low Sulfur Fuel Oil

Among the surveyed shipping transport enterprises, 34.09% will try to reduce the cost arising from using low-sulfur fuel oil by levying a surcharge; 34.09% will increase the freight rates; 18.18% will bear the rising cost on their own without charging their customers additional fees; while 13.64% will take other measures.

The above result shows that nearly 80% of surveyed shipping transport enterprises will seek to cover the additional costs from using LSFO by levying LSFO surcharges and increasing freight rates among other measures. Ship enterprises should try to figure out better cost sharing mechanisms to cover the rising costs from LSFO use to ease the cost pressure.

6.3 Half of Enterprises Forecast Dry Bulks Shipping Market Boom to Continue till Year End

The Baltic Dry Index (BDI) has been rising all the way with fluctuations since July 2019, and closed at 2,267 points on August 29, hitting a historic high since December 2013 by rising 281% accumulatively over the historic low in February this year. How long will the dry bulks shipping market boom sustain? The CSPI Research Office of Shanghai International Shipping Institute conducted a survey centering around the above questions on dry bulks shipping enterprises nationwide.

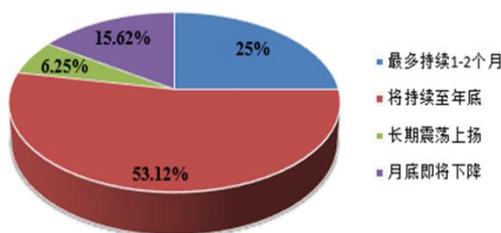


Figure 6-3 Views of Dry Bulks Shipping Enterprises on Duration of Market Boom

Among the surveyed dry bulks shipping enterprises, 25.00% of them believed that the dry bulks shipping market boom will last one to two months at the most, 53.12% held the market boom will continue until the end of the year, 6.25% held that the dry bulks market has stepped into the recovery track and will sustain the fluctuating upward trend for a long time, and the rest 15.62% were pessimistic about the global macro economic prospect and believed that the dry bulks shipping market boom will subside within the month.

The above survey shows that half of the surveyed dry bulks shipping enterprises believed the market boom will continue until the year end. The BDI keeps rising, which can be partially attributed to the weak recovering momentum in the global economy, despite the growth slowdown in major economies in the first half of the year, and partially due to the increasing shipping demand from the surging prices of iron ore and related products.

6.4 Port Digitalization and Terminal Hinterland Expansion to Boost Port Connectivity

The United Nations Conference on Trade and Development (UNCTAD) released the 2019 ranking of world's best-connected ports on August 7, and Shanghai topped the list with a score of 134 points. Port of Singapore, Port of Busan in South Korea and Ningbo Port in China closely followed behind with 124.63 points, 114.45 points and 114.35 points, respectively. Better connectivity of a port usually translates to lower shipping costs and higher competitiveness. To study the measures that enterprises have taken to improve port connectivity, the CSPI Research Office of Shanghai International Shipping Institute conducted a survey on port enterprises nationwide.

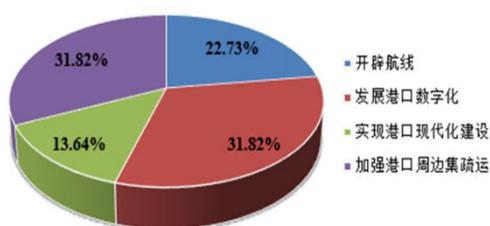


Figure 6-4 Measures Taken by Port Enterprises to Improve Port Connectivity

Among the surveyed port enterprises, 22.73% of them were opening up new routes to connect to more ports, 31.82% of them were implementing port digitalization to improve port development efficiency, 13.64% of the enterprises augmented investment in technologies, institution and talent aspects to achieve modernized development of ports, and the rest 31.82% chose to enhance their cargo collection, distribution and transportation systems around the ports and elevate transportation facilitation levels to expand port hinterlands.

The above survey results show that port and shipping digitalization to improve port development efficiency as

well as improvement of port-surrounding cargo collection, distribution and transportation conditions to expand port hinterlands are the major measures taken by most enterprises. For this reason, to achieve the purpose of enhancing port connectivity, port enterprises are suggested to consider improving road infrastructure construction in port areas and port informatization to improve ports' business environment and attract enterprises and cargoes from neighboring countries or other places in China.

6.5 Define Unauthorized Charges First to Curb Unauthorized Port Charges

The General Office of the State Council printed and circulated the *Plan of Division of Key Tasks as per Business Environment Optimization Teleconference for Deepening Reform of "Administration Streamlining and Institute Decentralization, Power Delegation and Regulation Enhancement, and Service Optimization"* (Document GBF [2019] No. 39), urging to reduce the regular charges per container in the import and export procedures nationwide to within US\$400 before the end of 2020 and curb unauthorized charges at ports, ship enterprises, logistics depots, freight agencies, ship agencies, etc. To study enterprises' responses to the plan, Shanghai International Shipping Institute conducted a survey on port enterprises and container shipping enterprises nationwide.

According to the survey, some port enterprises support the efforts to curb unauthorized charges and optimize the business environment among other key tasks. However, most of surveyed enterprises said the current charged items at ports and terminals are clearly set with some charges becoming cheaper, and that there are no unauthorized charges. Port profits have been squeezed to the extreme, the charging rates have fallen to years' lows. Ports belong to the public utility industry with meager profits. Cutting down the charging rates further will deal a heavy blow to enterprises' revenue. The current business environment of ports does not look promising with enterprises' profitability running low. Reduction of port charges will to some extent force enterprises to initiate transformation and upgrading.

As the survey suggests, most of the surveyed container shipping enterprises said it made sense to curb unauthorized charges, which is conducive to stabilizing China's import and export trade, especially the foreign trade. However, a foremost task should be defining unauthorized charges. The shipping industry is undergoing a tough period in general and operating loss is nothing rare. Profits, even when some enterprises manage to make it, are marginal, and some hidden costs are not covered in existing authorized surcharges. For this reason, it is vital to view the issue of charged items and charging rates. Otherwise, it may result in a rising cost for shipowners against reduced rates overall, which is not conducive to the stable and healthy development of the industry.

The above survey shows that a vast majority of

surveyed port enterprises and container shipping enterprises said the government should further clarify the charged items, charging rates and fee structures for regular charges in the import and export procedures to offer more targeted guidance for charge reduction. Besides, it is necessary to follow the market laws and lift the restrictions on items with market-adjusted rates to allow ports and terminals to price these items based on market competition statuses. Surveyed enterprises also suggested enhancement of paperless and information-based

procedures to promote the integration of shipping service providers and ports on digital platforms, and the reduction or cancellation of document transfer fees and file fees on the ship side. Keeping logistic charges low alone is not the most crucial task at the time being, but improving logistics efficiency, especially the connections between multimodal transport processes, and regulating logistics operations and improving logistics service levels are the pressing issues to be addressed.

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 implies 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 implies their confidence and mentality 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 of which lag behind those of the overall market, and the fluctuations of 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, to the contrary, eye 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
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 of 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: Liao Qingmei, Wu Jun, Chen Yu, Ren Siying, Wang Minjie, Sun Jilei