

Sector: Shipping | BSC RESEARCH

Recommendations FOLLOW

HAI AN TRANSPORT & STEVEDORING JSC (HSX: HAH)  
GROWTH IN 2023 DEPENDS ON THE INTERNAL BUSINESS

Current Price: **64,400**  
Previous target price:  
New target price: **78,000**  
Dividend yield:  
**Upside: 24%**

Report writing date: 24/8/2022  
Outstanding Shares (Million): 68  
Market capitalization (billion VND): 4,555  
Average liquidity: 1,364,817  
Foreign ownership: 21.5%

**SHAREHOLDER STRUCTURE**  
HAI AN INVESTMENT AND TRANSPORT 11.4%  
JOINT STOCK COMPANY 3.4%  
DC DEVELOPING MARKETS 3.3%  
VIETNAM HOLDING LTD 3.1%  
GREEN FIELD JSC

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**VALUATION**

We recommend **FOLLOW** for **HAH** shares with a 2023 fair value of **78,000/share** (equivalent to **24%** Upside from the reference price dated August 24, 2022), based on a P/E approach with a target P/E of 2022 = 6.5, lower than the average P/E (2019-2021) = 7-8x due to concerns about the risk of operating new vessels in 2023.

**FORECASTING BUSINESS RESULTS**

In 2022, BSC forecasts HAH to record net revenue = 3,128 billion VND (+60% yoy), NPATMI = 920 billion VND (+107% yoy), equivalent to EPS FW 2022 = 13,477 VND, P/E FW 2022 = 4.8x, P/B FWD 2022 = 1.8x. In 2023, BSC forecasts HAH to record net revenue = 3,656 billion VND (+17% yoy), NPATMI = 819 billion VND (-11% yoy), equivalent to EPS FW 2023 = 11,991 VND, P/E FW 2022 = 5.4, P/B FWD 2022 = 1.4, based on the assumption:

**1. Port operation:** In 2022, revenue = 222 billion VND (+4% yoy) thanks to output +3% yoy, service price +1% yoy. In 2023, revenue = 229 billion VND (+3% yoy) thanks to output +2% yoy, service price +1% yoy. Port operating gross profit margin = 57.7% in 2022 and 58.3% in 2023

**2. Shipping activities – Excluding joint venture ZIM – HAH**

■ In 2022, REVENUE self-exploited = VND 2,094 billion (+46% yoy) thanks to volume – 11% yoy (reduced contribution from HAIAN MIND ship), and freight rate + 82% yoy – 5% lower than the average rate of 1H.2022. Net revenue leased for a term = VND 656 billion (+110% yoy) thanks to the contribution of HAIAN LINK, HAIAN MIND, HAIAN WEST, HAIAN EAST, HAIAN CITY. Gross margin of shipping = 49% based on NVL/SL cost assumption +52% yoy; dvmn cost/number of rounds assumed + 15% yoy due to (1) increased oil prices, (2) intra-Asian routes with higher port fees; depreciation expense + VND81 billion, mainly from HAIAN CITY. Compared to 2021, gross profit margin increased by +14.5% due to self-running rates and increased T/C.

■ In 2023, BSC makes a forecast based on the assumption of average oil price = 90 USD /BBL (-10% yoy), freight rate – 16% yoy: Self-exploited revenue = 2,238 billion VND (+23% yoy) with the assumption of output + 33% yoy (mainly from HAIAN CITY and HAIAN WEST), freight rate -16% yoy. revenue lease term = 476 billion VND (-27% yoy) thanks to contributions HAIAN MIND, HAIAN WEST, HAIAN CITY. Gross profit margin = 40% yoy based on materials/volume cost assumption -10% yoy, assuming a slight decrease in out-of-pocket/round service cost of -6% yoy due to falling oil prices, depreciation expense of +105 billion VND due to the contribution of A ROKU, 2 new ships received Q4.2023. Compared to 2022, gross profit margin decreased by 9.9%, due to (1) a sharper drop in freight rates than oil prices, (2) increased depreciation.

**3. ZIM – HAH joint venture:** BSC forecasts that ZIM – HAH will record revenue = 12 billion VND, LNG = -0.4 billion VND in 2022, and revenue = 459 billion VND, LNG = 2 billion VND in 2023.

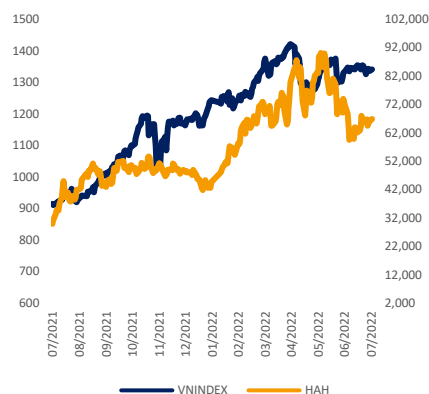
**BUSINESS UPDATES**

■ In 1H.2022, HAH recorded net revenue = 1,582 billion VND (+96% yoy), NPATMI = 440 billion VND (+195% yoy). In which: 1. REVENUE port operation = 112 billion VND (+8% yoy) due to output + 6% yoy, price +2% yoy. 2. REVENUE operates ships = 1,566 billion VND (+106% yoy) thanks to i) average freight + 115% yoy, ii) fleet size for term lease +2 svck ships with higher rates

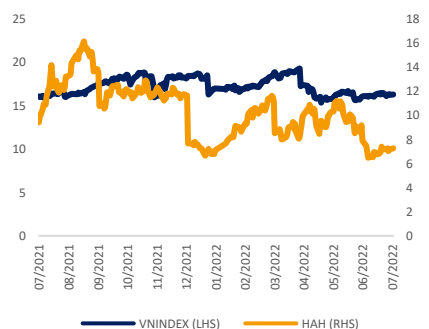
**RISK/POTENTIAL CHANGE FORECAST**

■ (1) HAH re-signs fixed-term leases at high robbery prices. (2) HAH operates new vessels to intra-Asian service lines with high rates, better output than assumed by BSC. (3) Freight rates and oil prices fluctuate more positively than BSC's assumptions.

Price comparison table of stocks and VN- Index



Comparison table of P/E and VN index



	2021	2022	Peer	VN-Index
PE (x)	5.5	4.8	8.3	17.2
PB (x)	1.6	1.8	1.15	2.7
ROE (%)	23%	30%	12.5%	15.8%
ROA (%)	14%	19%	5.12%	2.6%

	2020	2021	2022F	2023F
Net revenue	1,192	1,955	3,128	3,656
Gross profit	239	714	1,522	1,287
NPATMI	138	446	920	819
EPS	2,835	9,133	13,477	11,991
EPS Growth	14%	222%	48%	-11%

## I. BUSINESS RESULTS UPDATE Q2.2022

HAH_Bil VND	Q2.2021	Q2.2022	%QoQ	%YoY	1H.2021	1H.2022	%YoY	Reviews
<b>Revenue</b>	<b>449</b>	<b>929</b>	<b>42%</b>	<b>107%</b>	<b>808</b>	<b>1582</b>	<b>96%</b>	<b>In 1H.2022, HAH recorded revenue = 1,582 billion VND (+96% yoy), NPATMI = 440 billion VND (+195% yoy). In which:</b>  <b>1. Revenue port operation = VND 112 billion (+8% yoy) due to production+ 6% yoy, price +2% yoy.</b>  <b>2. Revenue ship operation = 1,566 billion VND (+106% yoy) thanks to i) average freight + 115% yoy, ii) fleet size for term lease +2 yoy ships with higher rates</b>
Port operation	80	94	27%	18%	103	112	8%	
Ship operation	442	931	46%	110%	649	1,372	112%	
Other	54	81	13%	52%	56	97	73%	
Except Internal	(126)	(176)			-	-		
<b>Gross profit</b>	<b>141</b>	<b>434</b>	<b>28%</b>	<b>207%</b>	<b>238</b>	<b>774</b>	<b>225%</b>	
Port operation	32	41	26%	27%	64	74	17%	
Ship operations	94	366	30%	288%	147	647	340%	
Different	14	27	-3%	87%	27	53	94%	
Except Internal	0	(1)		-954%				
Financial income	7	16	312%	131%	11	20	85%	<b>Financing expenses +66% YoY</b> due to increased borrowings to purchase HAIAN WEST, EAST, CITY
Financial expenses	(8)	(15)	59%	81%	(15)	(25)	66%	
Interest expense	(8)	(14)	55%	73%	(15)	(24)	61%	
Profit from joint ventures/associations	3	8	-11%	146%	6	18	208%	
Selling expenses	-	-			-	-		
SG&A expenses	(24)	(28)	17%	17%	(40)	(51)	27%	QLDN costs remain under stable control
<b>Profit from business activities</b>	<b>120</b>	<b>415</b>	<b>30%</b>	<b>247%</b>	<b>199</b>	<b>736</b>	<b>269%</b>	<b>Other costs = -19 billion VND, mainly from the cost of repairing HAIAN City</b>
Other income, net	(3)	(19)		497%	19	(19)	-201%	
<b>Profit before tax</b>	<b>116</b>	<b>396</b>	<b>24%</b>	<b>240%</b>	<b>218</b>	<b>717</b>	<b>229%</b>	
CIT	(19)	(72)	25%	284%	(35)	(130)	271%	
<b>NPAT</b>	<b>98</b>	<b>324</b>	<b>24%</b>	<b>232%</b>	<b>183</b>	<b>587</b>	<b>220%</b>	
<b>NPATMI</b>	<b>82</b>	<b>240</b>	<b>20%</b>	<b>191%</b>	<b>149</b>	<b>440</b>	<b>195%</b>	
<b>Gross profit margin</b>	<b>31%</b>	<b>47%</b>			<b>29%</b>	<b>49%</b>		<b>Gross profit margin of +5% due to increased production</b> <b>Gross profit margin of the ship operation segment + 24% due to increased freight rates.</b>
Port operation	40%	44%			61%	66%		
Ship operations	30%	49%			23%	47%		
Other	27%	33%			49%	55%		
<b>Net profit margin</b>	<b>22%</b>	<b>35%</b>			<b>23%</b>	<b>37%</b>		

Source: HAH Financial Statements

### POSITIVE PORT OPERATION THANKS TO PRODUCTION+6% YOY, PRICE + 2% YOY

By the end of 1H.2022, HAH recorded port operation revenue = VND 112 billion (+8% yoy) thanks to:

- Output + 6% yoy**, mainly comes from HAH's fleet.
- Average service prices +2%**, due to HAH increasing some service prices at the yard + 10-20% yoy. Since the beginning of the year, most ports in Hai Phong region (including HAH) have applied service tariffs at new yards +15% yoy due to the shortage of empty containers in Asia. BSC believes that this ~ bullish trend can be maintained in 2H.2022 due to the lack of containers that have not been completely removed.

**In 2H. 2022, BSC assesses that port operations will still be positive** thanks to HAH maintaining 5-6 self-propelled vessels—compared to the beginning of the year. Therefore, BSC believes that mining output in the second half of the year will still

be guaranteed 105,000-108,000 TEUS / quarter, equivalent to 1H.2022. Accordingly, BSC forecasts both 2H.2022 mining revenue = 110-115 billion VND.

Figure 1: In 1H.2022, port output reached 205,000 (+6% yoy)

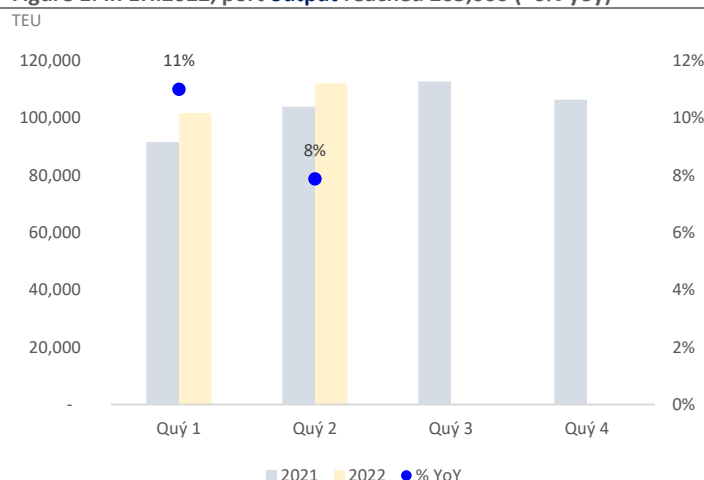


Figure 2: In Q2.2022, yard service prices + 10-20% yoy

Service price	Jan-2021	Jan-2022	%Ytd	Jun-2022	%Ytd
Cont. Domestic Lift Charges					
20'					
- Rowed	560,000	620,000	11%	650,000	5%
- Hollow	360,000	440,000	22%	460,000	5%
40'					
- Rowed	760,000	840,000	11%	880,000	5%
- Hollow	520,000	630,000	21%	660,000	5%
Lifting charges Cont. Export					
20'					
- Rowed	590,000	650,000	10%	680,000	5%
- Hollow	360,000	440,000	22%	460,000	5%
40'					
- Rowed	760,000	880,000	16%	920,000	5%
- Hollow	520,000	630,000	21%	660,000	5%
Cont withdrawals					
20'	960,000	1,060,000	10%	1,120,000	6%
40;	1,640,000	1,800,000	10%	1,890,000	5%

Source: HAH, BSC Research

### TRAIN OPERATION IS VERY ACTIVE THANKS TO AVERAGE FREIGHT RATES OF + 115% YOY

In 1 H.2022, HAH recorded ship operating revenue = 1,372 billion VND (+112% yoy). Inside:

1. Estimated term rental revenue = VND 365 billion (+450% yoy), thanks to (1) fleet size of term lease + 2 svck ships (HAIAN MIND and HAIA WEST), (2) average term rental rates+60% yoy.

In Q3, the fleet structure of leased vessels with a term of -1 ship compared to the beginning of the year:

- **Reduction:** In April, the HAIA LINK vessel ended its lease and was sent back to run inland. In September, HAIA EAST will also end the lease, and will likely be included by HAH in the ZIM - Hai An joint venture. October + December, HAIA MIND and HAIA WEST are scheduled for 1 month.
- **Increase:** Haian CITY has completed the repair period, was returned to the factory in Singapore in August, and is expected to contribute to the rental revenue from 9 to 3/2023.

Therefore, BSC estimates that the rental revenue is expected to lowern = 291 billion VND (-20% QoQ) in 2H.2022 due to (1) a decrease in the contribution of HAIA LINK, HAIA EAST ships compared to 1H and (2) there are 2 ships on the momentum.

Ship	2021												2022												2023													
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12		
EXTERNAL LINKS																																						
HAIAN MIND																																						
HAIANWEST																																						
HAIAN EAST																																						
HAIAN VIEW																																						
HAIAN PARK																																						
HAIAN TIME																																						
HAIAN BELL																																						
A ROKU																																						
HAIAN CITY																																						
New Ship 1																																						
New Ship 2																																						
ANBIEN BAY*																																						

Note: Blue – fixed rental period, yellow – self-run time; green – repair time \* ANBIEN BAY vessel belongs to an associate company of HAH.

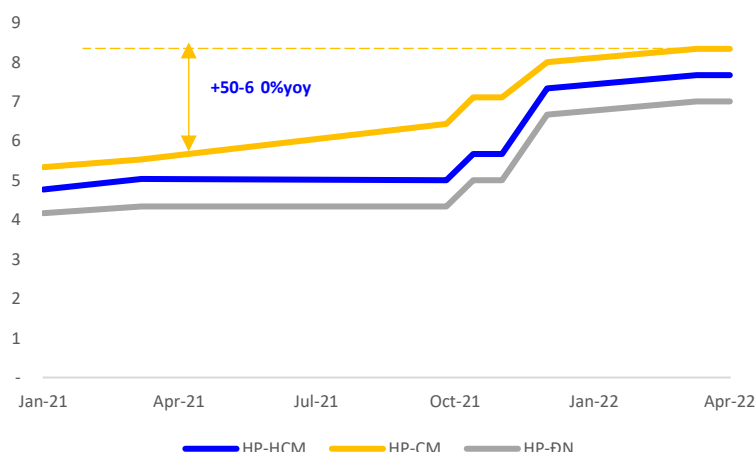
Source: HAH, BSC Research

2. Estimated self-mining revenue = VND 1,007 billion (+73% yoy) thanks to average freight rates + 115% yoy. BSC believes that the reason for the increase in freight rates comes from 2 factors:

**(1) Picked up by domestic rates + 50-60% yoy.**

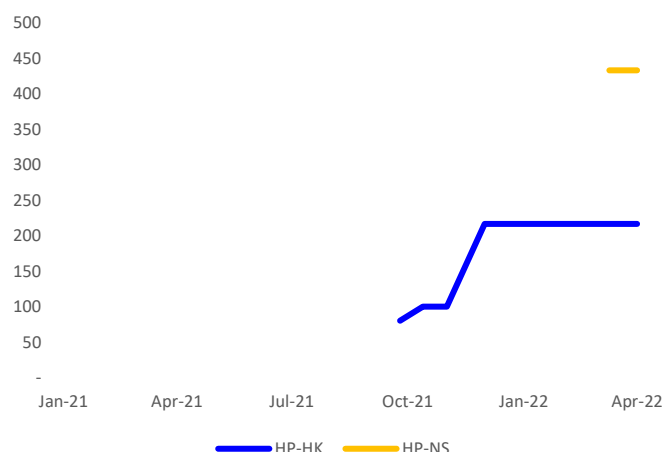
**Figure 3: Cont rates. domestic routes +50-60% yoy**

Million VND/20' +40'



**Figure 4: Cont. international route rates**

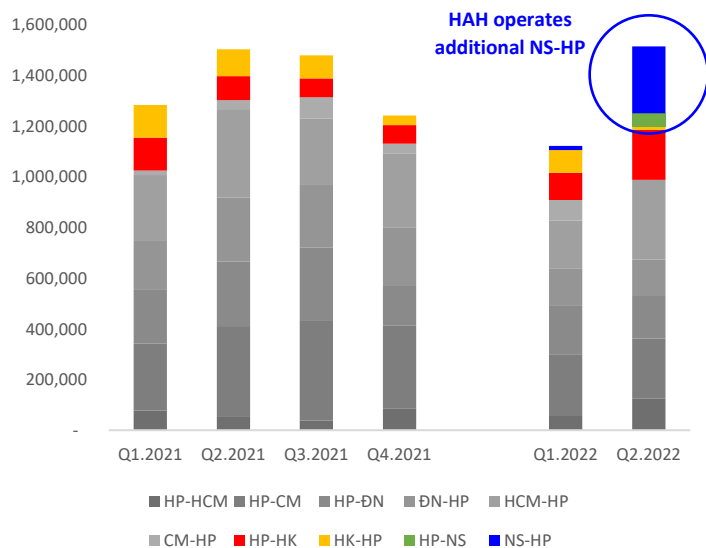
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Source: HAH, BSC Research

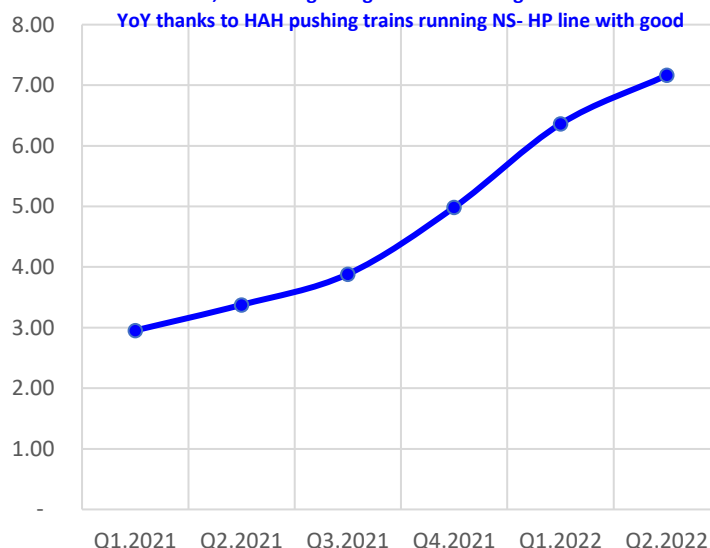
**(2) HAH allocates its fleet to international routes.** In Q2, HAH pushed HAIAN LINK to exploit the Hai Phong – NanSha international route (SCX) with good output, freight rates 40-50% higher than the average domestic price. BSC estimates that the expansion to the SCX line in Q2 helped the average rate of a HAH + 15% QoQ compared to Q1.

**Figure 5: Total capacity of ships arriving at Hai An port by route**



**Form 6: Rates average according to train capacity of service lines**

In 1H.2022, the average freight rate according to train CS +114% YoY thanks to HAH pushing trains running NS- HP line with good



\*BSC does not take into account the service routes from CM / HCM - Da Nang.

Source: HAH, BSC Research

**In 2H.2022, BSC assesses that self-exploitation activities will still be positive thanks to:**

- The size of the self-operated fleet still maintains 5-6 ships and HAH continues to maintain 20-30% of the self-operated fleet size to run the haiphong – NanSha and Haiphong – QinZhou international routes (newly opened T6) with high rates.
- The level of domestic rates continues to be high compared to the above (*Details see part II*).

## II. BUSINESS OUTLOOK 2H.2022 – 2023

### 2H.2022: SHIPPING ACTIVITIES REMAIN POSITIVE THANKS TO HIGH ANCHOR RATES

By the end of 1H.2022, domestic and intra-Asian rates decreased by -10-15% ytd, while international rates decreased by -25-35% ytd:

1. The average international container freight rate decreased by 25-35% ytd; fixed-term rental rates were flat as import demand in major countries such as the US and EU slowed down amid rising inflation and supply chain disruptions in China.

Figure 7: Global Container Spot Rate Index -35% ytd

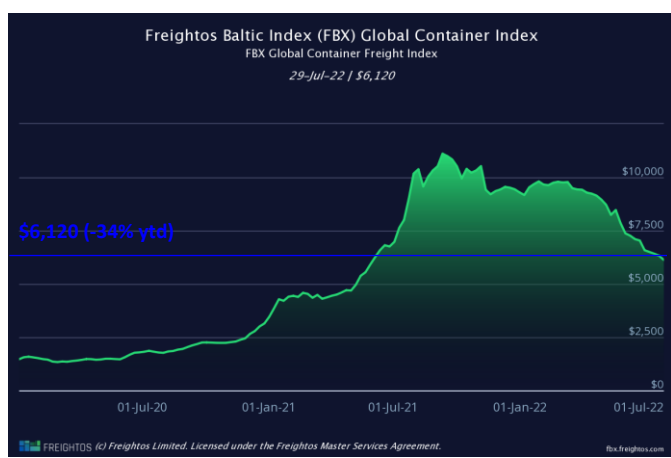


Figure 8: Main freight rates from China to the US and EU decreased by 25-30% ytd

Service routes	Rates US\$/40 feet			%YoY	% Ytd
	T7/21	T1/21	T7/22		
Shanghai - Rotterdam	12,954	13,658	9,182	-29.1%	-32.8%
Shanghai - Los Angeles	9,733	10,520	7,480	-23.1%	-28.9%
Shanghai - Genoa	12,685	12,779	10,829	-14.6%	-15.3%
Shanghai - New York	11,825	13,518	10,164	-14%	-24.8%

Source: Drewry, FBX

Figure 9: Fixed-term rental rates of 1,100 -2,500 flat at 35,000-56,000 USD/day in 1H.2022

#### 1100 - 2500 TEU - Last 6 Months

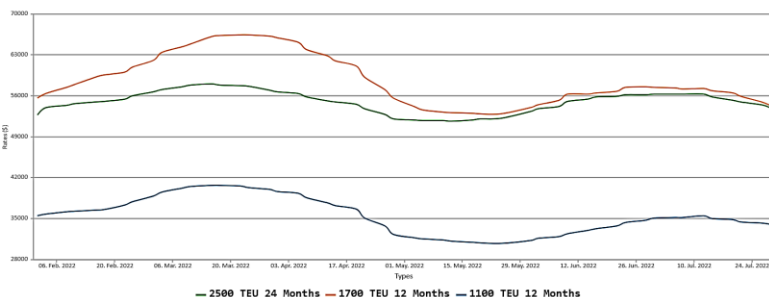
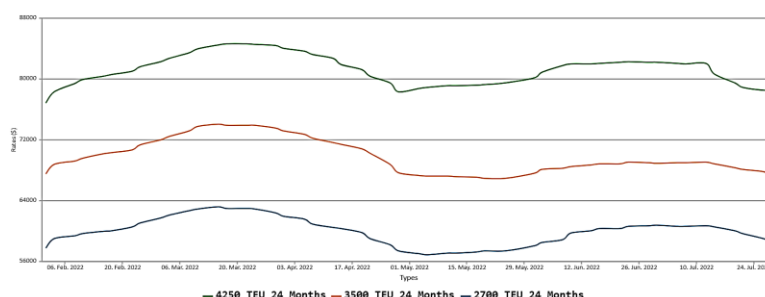


Figure 10: Train term rental rates of 2,700-4,250 flat at \$58,000-80,000/day in 1H.2022

#### 2700 - 4250 TEU - Last 6 Months



Source: VHBS

2. Meanwhile, domestic and intra-Asian freight rates only decreased by -10-15% ytd. The level of reduction is less than the general level of international prices due to:

- (1) **Supply chains in Asia are broken again** due to China's application of epidemic prevention measures in Q1 2022.
- (2) **Domestic ship supply remains limited.** In 2021, carriers withdrew domestic Lines for term leases/ or run international Lines. BSC estimates that the total size of Vietnam's fleet will decrease by 30% yoy in 2021. In early 2022, the supply bottleneck has not been removed because (i) the domestic freight rate level is still high, helping domestic firms to exploit internationally still well. (ii) Besides, domestic trains are still running international T/C. Therefore, the domestic container transport market is still unbalanced, helping domestic freight rates to anchor high in the first half of the year.

(3) **Seasonal factors:** Freight rates decrease due to reduced output in the mid-year low season.

Figure 11: Port congestion in China in Q1 2022

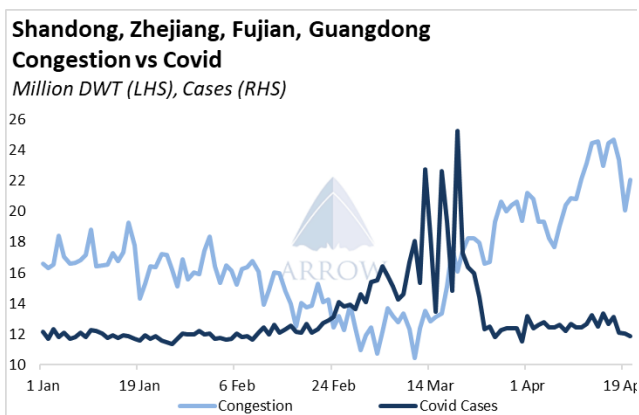
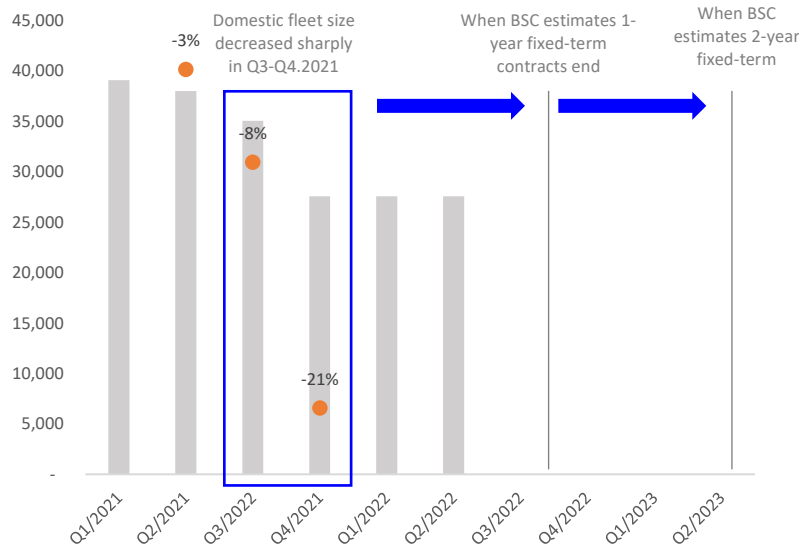
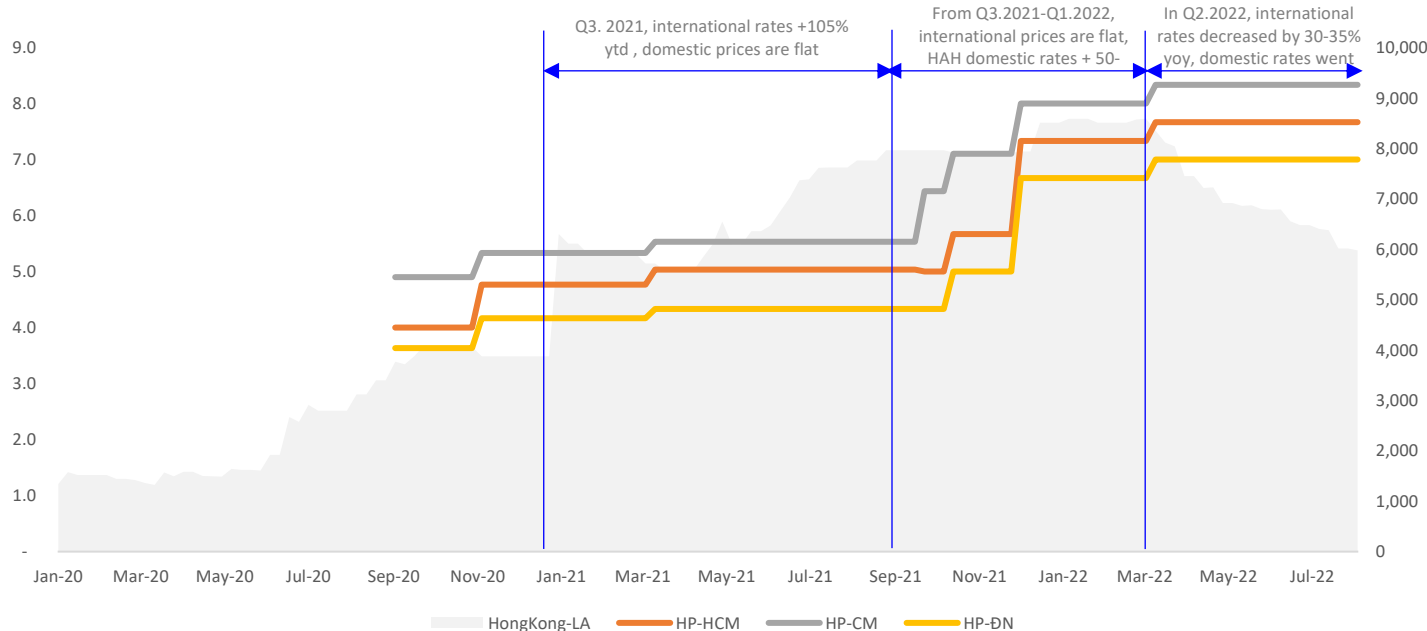


Figure 12: Inland fleet size (BSC estimate based on HP port authority data)



Source: BSC Research

Figure 13: The domestic transport market lags behind the international market



BSC uses domestic rates according to HAH's 20' container and 40' container average tariffs.

Source: BSC Research

**2H.2022 – Q1.2023, BSC believes that the domestic and Asian markets will continue to lag behind the international market.** Inside:

1. **International freight rates will continue to decrease by -10-12% QoQ** due to (1) import and export activities still slowing down from high inventory levels in 2021 –Q1.2022, and rising inflation, (2) ship handover drop points starting from 2H.2022.
2. **However, domestic rates will be flat (+/-5% QoQ) due to:**
  - i. **The supply bottleneck has not been removed as fixed-term leases remain in effect.** According to BSC's estimates, domestic ship supply suffered a sharp decline in Q3-Q4.2021. Since T/C contracts usually last 1-2

years, BSC believes that it will take until the end of Q1.2023 for international term charter vessels to return to the domestic market, helping to increase supply.

- ii. **The domestic market has almost no supply from new ships.** According to BSC statistics, VIMC, VOS, GMD, VTB, HAH - accounting for 67% of the domestic transport market share - have no plans to buy new ships, or push trains back to run domestically in 2021-2022.
  - iii. **Transport demand will enter the peak season of the year (T10-T11)** – due to Christmas, New Year' Day.
3. **Intra-Asian prices will fall slightly (+/-8-10% QoQ).** The level of decline is lower than in the international market as a whole because port congestion in Asia has not yet fully resolved.

## Q2-2H.2023: FALLING RATES - OUTLOOK DEPENDS ON THE POSSIBILITY OF INCREASING OUTPUT

1. **As of Q2.2023, BSC believes that domestic freight rates may begin to come under downward pressure as (1)** international freight rates will generally decrease when the point of delivery of medium-sized vessels in 2H.2022-2024, **(2)** domestic vessels for international leases expire in mid-year. , and began to return to the domestic market. **BSC forecasts a 15-20% yoy decline in domestic rates in 2023.**

Figure 14: Fleet size growth rate 2019-2025F. The drop point handed over the ship on 2H.2022-2024.

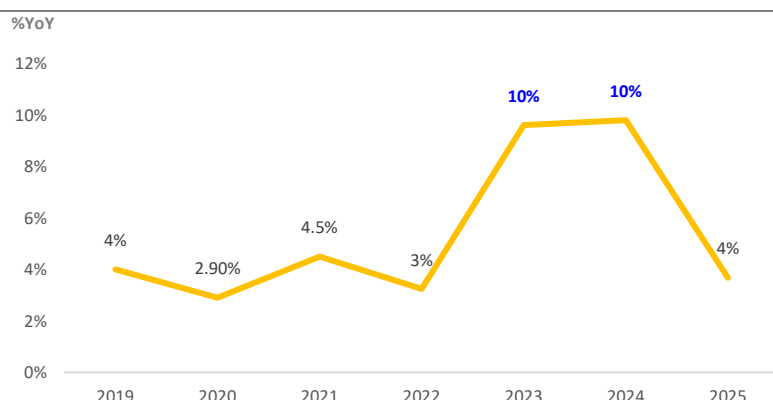
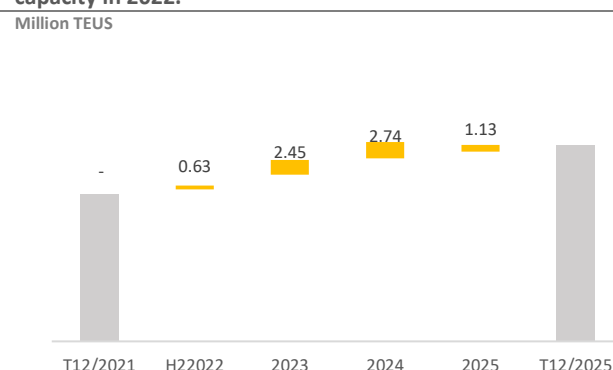


Figure 15: In 2H/2022, global ship capacity is forecast to increase by 630,000 TEUS – accounting for 70% of the total handover capacity in 2022.



Source: BIMCO

Figure 16: In Q3.2022, the asia-west coast fleet capacity is forecasted to be +10-11% over the same period in 2019.

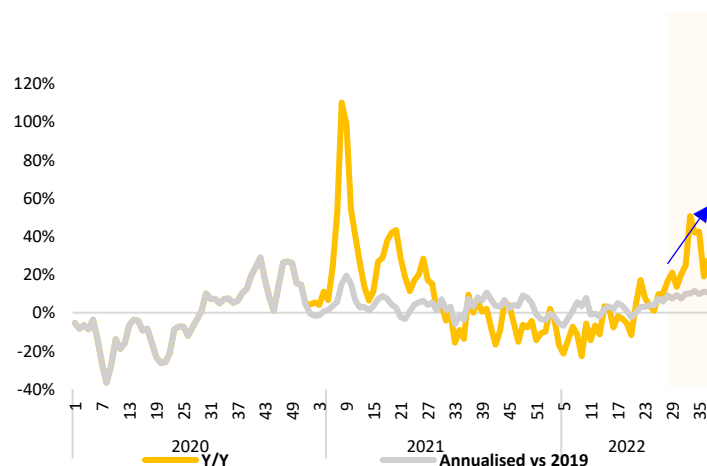
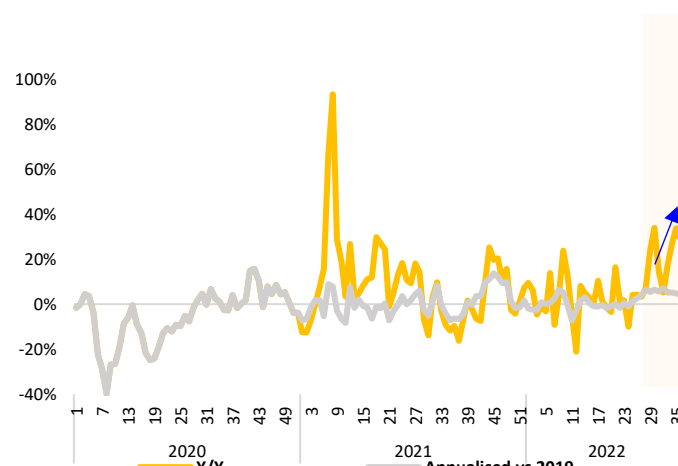


Figure 17: In Q3.2022, fleet capacity of Asia - Europe route is forecasted to be +5-6% over the same period in 2019



Source: Sea Intelligence

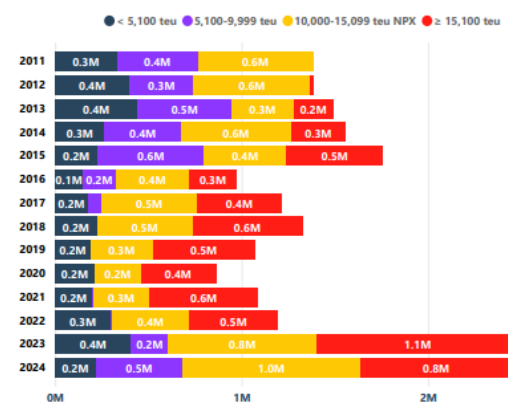


2. **BSC forecasts that intra-Asian freight rates will decline by 15-20% YoY in 2023** due to the drop point of handing over new vessels. However, BSC said that the intra-Asian level is still 30-50% higher than the pre-epidemic level due to 2 factors:
- The **ships handed over in 2H.2022-2024 are mainly mother ships (>10,000 TEUS)** serving long routes from Asia to the EU. Meanwhile, the supply of small vessels (<3,000 TEUS) for short routes such as Inner Asia is less redundant. According to Alphaliner, newly built small vessels make up only 7% of the new-built fleet structure, or 12% of the current fleet size. Therefore, BSC expects the intra-Asian market to not be oversupplied.
  - BSC **believes that the demand for Asian routes has been higher than before the epidemic** due to the trend of shifting production facilities from China to neighboring countries such as Southeast Asia. Therefore, it is required that feeder ships rotate goods from Southeast Asia to major ports in China for export to the US and EU.

Figure 18: Details of the structure of the new ship by size

Size Range	Ships On Order	TEU On Order	Of which Chartered Ships	Of which Chartered TEU	% Chartered TEU	Orderbook/Existing %
18,000-24,000	52	1,233,320	16	384,928	31.2%	40.5%
15,200-17,999	87	1,369,712	46	719,424	52.5%	139.0%
12,500-15,199	130	1,857,034	60	881,160	47.4%	50.0%
10,000-12,499	17	202,550	15	178,830	88.3%	9.8%
7,500-9,999	18	140,784	18	140,784	3.3%	3.3%
5,100-7,499	77	500,565	39	247,765	49.5%	18.3%
4,000-5,099	18	83,052				2.9%
3,000-3,999	69	222,306	14	49,800	22.4%	24.5%
2,000-2,999	104	258,819	30	78,486	30.3%	13.4%
1,500-1,999	108	199,508	41	74,890	37.5%	17.8%
1,000-1,499	66	74,626	25	28,959	38.8%	9.1%
500-999	6	4,275				0.8%
100-499	5	1,370	2	420	30.7%	2.4%
<b>TOTAL</b>	<b>757</b>	<b>6,147,921</b>	<b>306</b>	<b>2,785,446</b>	<b>45.3%</b>	<b>24.6%</b>

Figure 19: Ship handover schedule by size



Source: Alpha Liner

FIGURES AT T2.2022

In the context of fake rates, **BSC believes that the business prospects for 2023 will depend on HAH increasing production to compensate for i) a 15-20% yoy drop in freight rates and ii) 180 billion VND (-27% yoy) fixed-term rental revenue:**

- BSC forecasts a HAH +43% yoy self-mined fleet size, mainly from HAIAN CITY, HAIAN WEST.** By the end of Q2.2022, HAH owns a fleet of 9 ships (excluding ANBIEN BAY). In which, there are 3 limited-time trains and 6 self-operated ships. By 2023, the self-operated fleet is expected to increase from 6 vessels to 9-11 contributing vessels thanks to **(1) HAIAN CITY, HAIAN MIND, HAIAN WEST** expiring on T3, T11, T9.2023, **(2) 2 new recipients** from T10.2023.

Figure 20: Projected running time of the HAH fleet in 2022-2023.

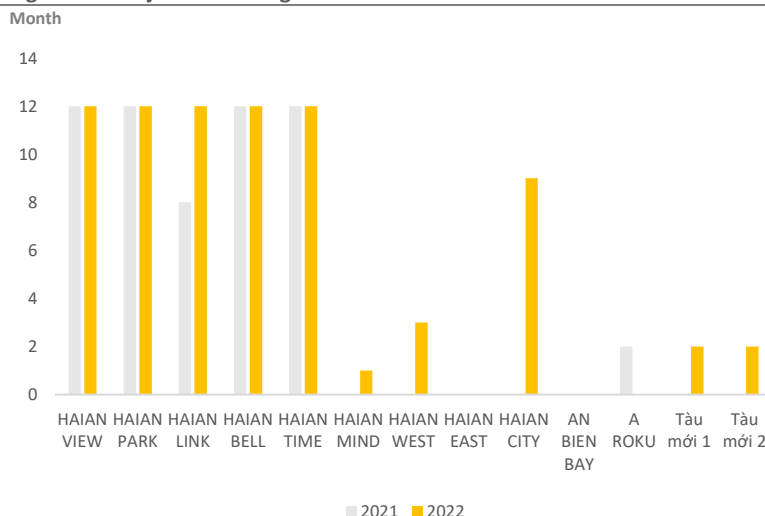
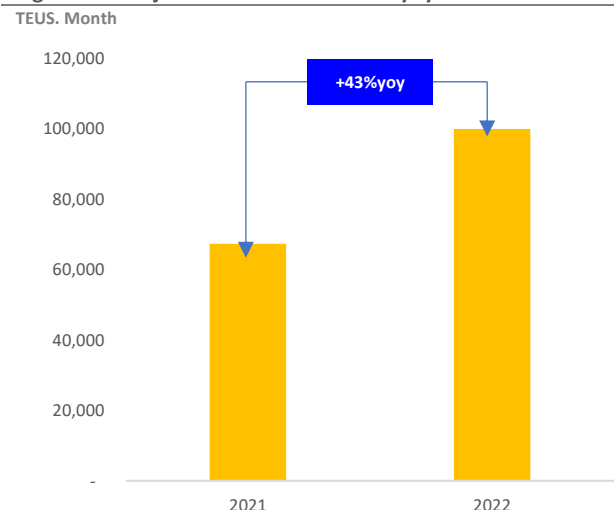


Figure 21: Projected fleet size of +43% yoy



Source: HAH, BSC Research calculations



2. **Given the size of the self-running vessel + 43% yoy, the increase in production will depend on the intrinsic factor of HAH.** Since 2H.2021, HAH plans to penetrate deeply into the Inner Asia market. In the next 3 years, HAH plans to continue expanding routes from Haiphong to the central ports of China (such as Shanghai, Ningbo) and the north (such as Busan – South Korea).

BSC believes that the effective exploitation of the new fleet will come from the internal factors of HAH such as price, quality, accompanying service package, relationship with the parent shipping line, capacity of the Board of Directors, . . . BSC assesses HAH will face the following key challenges:

- i) **High competition with large shipping lines.** According to JOC.com, the Intra-Asian transport market is relatively concentrated, focusing on a number of carriers such as OOCL, Maersk, Evergreen, CNC, SITC, Wan Hai. Compared to HAH, this ship has a much greater advantage in terms of source and customer base due to the exploitation of both routes to the US and EU.
- ii) Before 2021, HAH only operated the Ho Chi Minh - Singapore route. The company has only just begun to really push to the Intra-Asia route since 2H.2021.

However, BSC also expects 2 positive factors:

- i) **HAH is participating in the ZIM-HAH joint venture**, so it is possible to learn how to deploy intra-Asian routes from ZIM shipping lines.
  - ii) **HAH is exploiting Hai Phong – NanSha routes with good output.** BSC expects the demand for this line to continue to increase in 2023, accordingly, HAH will push 1-2 more vessels to operate.
3. Assuming freight rates fall by 16% yoy, oil prices -10% yoy, **BSC thinks that business results can still be positive (VND 800-900 billion) if production increases by at least + 30% yoy in 2023.** In particular, the key factor to increase production is that HAH needs to **(1)** two effective waterfalls HAIAN CITY and HAIAN WEST on the new Intra-Asia routes as these two vessels account for about 70% of the additional capacity increase in 2023, or **(2)** the speed of train turnaround/occupancy rate on existing lines. Under a conservative scenario, BSC forecasts production of +30% yoy, despite a fleet size of +43% yoy.

### III. FORECAST OF BUSINESS RESULTS

In 2022, BSC forecasts HAH to record net revenue = 3,128 billion VND (+60% yoy), NPATMI = 920 billion VND (+107% yoy), equivalent to EPS FW 2022 = 13,477 VND, P/E FW 2022 = 4.8x, P/B FWD 2022 = 1.8x. In 2023, BSC forecasts HAH to record net revenue = 3,656 billion VND (+17% yoy), NPATMI = 819 billion VND (-11% yoy), equivalent to EPS FW 2023 = 11,991 VND, P/E FW 2022 = 5.4, P/B FWD 2022 = 1.4, based on the following key assumptions:

#### 1. Port operation:

- In2022, revenue = 222 billion VND (+4% yoy) thanks to output +3% yoy, service price + 1% yoy.
- In2023, revenue = 229 billion VND (+3% yoy) thanks to production +2% yoy, service price +1% yoy.
- Port operating gross profit margin = 57.7% in 2022 and 58.3% in 2023 based on the assumption of sea exchange cost / output +1% yoy / year, depreciation expense = 47 billion VND.

#### 2. Marine loading activities – Excluding ZIM – HAH joint venture

In 2022,

- Self-exploited revenue = VND 2,094 billion (+46% yoy) thanks to gleaning– 11% yoy (reduced contribution from HAIAN MIND ship), and freight rate + 82% yoy – 5% lower than the average rate of 1H.2022.
- Net revenue leases intend to lowern (excluding leasing ZIM – HAH Joint Venture) = 656 billion VND (+110% yoy) thanks to the contribution of 5 ships: HAIAN LINK (4 months), HAIAN MIND (11 months), HAIAN WEST (11 months), HAIAN EAST (9 months), HAIAN CITY (4 months).
- Gross margin of shipping = 49% based on the main assumption of raw material cost/SL +52% yoy (assuming average oil margin in 2022 = 100 USD/BBL (+52% yoy)); out-of-pocket service costs (mainly port fees, towing costs, navigators, . . ) /number of hypothetical laps + 15% yoy due to (1) rising oil prices, (2) HAH exploiting higher intra-Asian routes; depreciation expense + VND 81 billion due to additional contributions mainly from HAIAN CITY. Compared to 2021, gross profit margin increased by +14.5% due to increased self-running rates and average term rental prices.

In 2023, BSC makes a forecast based on the assumption of average oil price = 90 USD / BBL (-10% yoy), freight rate – 16% yoy:

- Self-mining REVENUE = VND2.238 billion (+23% yoy) assuming output + 33% yoy (mainly from HAIAN CITY and HAIAN WEST), robbery price-16% yoy.
- REVENUE for term lease (excluding ZIM – HAH Joint Venture lease) = VND 476 billion (-27% yoy) thanks to the contribution of 3 ships: HAIAN MIND (11 months), HAIAN WEST (9 months), HAIAN CITY (3 months).
- Profit marginp = 40% yoy based on raw material cost assumption/ SL -10% yoy, assuming the cost of purchasing services (mainly port fees, towing costs, navigators, . . ) /number of rounds slightly decreased -6% yoy due to falling oil prices, depreciation expense +105 billion VND due to the contribution of A ROKU, 2 new ships received in Q4.2023. Compared to 2022, gross profit margin decreased by 9.9%, mainly due to (1) a sharper drop in freight rates than oil prices, (2) increased depreciation expenses.

#### 3. ZIM – HAH Joint Venture

BSC forecasts ZIM – HAH will record REVENUE = 12 billion VND, LNG = -0.4 billion VND in 2022, and REVENUE = 459 billion VND, LNG = 2 billion VND in 2023, based on the assumption of a charter price of 8-1 0.000 USD/day, robbery price= 3,600 (VND/TEU) per 1 KM of transport and 3,025 (VND/TEU) per 1 KM of transport (-16% yoy), oil price IMO 380 = 555 USD/ton and \$500 per ton (-10% yoy) in 2022 and 2023.

Overall profit margin+12% in 2022 thanks to gross profit margin of shipping segment + 15%. Gross profit margin of -13% in 2023 due to gross profit margin of transport segment– 9.9% and recognition of ZIM – HAH joint venture.

- Financial expenses = VND 58 billion (+77% yoy)/VND 91 billion (+56% yoy) in 2022/2023 due to increased debt to buy HAIAN CITY, A ROKU, 2 new ships.
- Interest from affiliated companies = 57 billion VND (+194% yoy)/76 billion VND (+33% yoy), of which, interest from ANBIEN BAY = 17 billion VND/34 billion VND in 2022-2023 assuming debt = 60% TTS, interest rate 7% / year.

	2018	2019	2020	2021	2022F	2023F
<b>Net revenue</b>	<b>1,054</b>	<b>1,109</b>	<b>1,192</b>	<b>1,955</b>	<b>3,128</b>	<b>3,656</b>
Port operation	203	168	173	214	222	229
Ship operation	796	880	945	1,604	2,750	2,818
Depot	55	61	74	137	144	150
ZIM - HAH	-	-	-	-	12	459
<b>Gross profit</b>	<b>219</b>	<b>219</b>	<b>239</b>	<b>714</b>	<b>1,522</b>	<b>1,287</b>
Port operation	90	79	88	122	128	133
Ship operation	111	113	126	561	1,359	1,112
Depot	19	28	25	32	36	39
ZIM - HAH	-	-	-	-	(0)	2
<b>Gross profit margin</b>	<b>21%</b>	<b>20%</b>	<b>20%</b>	<b>37%</b>	<b>49%</b>	<b>35%</b>
Port operation	44%	47%	51%	57%	58%	58%
Ship operation	14%	13%	13%	35%	49%	40%
Depot	34%	45%	33%	23%	25%	26%
ZIM - HAH					-3%	0%
Financial income	15	15	17	26	31	60
Financial costs	(10)	(17)	(25)	(33)	(58)	(91)
Interest expense	(7)	(17)	(23)	(32)	(60)	(91)
Profit/(loss) from the joint venture company	2	3	6	19	57	76
Insurance Cost	-	-	-	-	-	-
QLDN Cost	(61)	(67)	(68)	(85)	(138)	(161)
<b>Profit from the board of directors</b>	<b>164</b>	<b>153</b>	<b>170</b>	<b>642</b>	<b>1,415</b>	<b>1,171</b>
Other income, net	23	3	0	20	(50)	38
<b>Profit before tax</b>	<b>188</b>	<b>156</b>	<b>170</b>	<b>662</b>	<b>1,365</b>	<b>1,209</b>
CIT	(29)	(23)	(24)	(112)	(227)	(197)
<b>NPAT</b>	<b>159</b>	<b>133</b>	<b>147</b>	<b>551</b>	<b>1,138</b>	<b>1,012</b>
<b>NPATMI</b>	<b>135</b>	<b>121</b>	<b>138</b>	<b>446</b>	<b>920</b>	<b>819</b>
<b>EPS</b>	<b>2,771</b>	<b>2,488</b>	<b>2,835</b>	<b>9,133</b>	<b>13,477</b>	<b>11,991</b>

Source: BSC Research forecasts

In 2023, BSC believes that there are 2 main risks to HAH's os:

1. Fluctuations in freight rates and oil prices, will directly affect HAH profitability.
2. HAH operates new vessels inefficiently. As a result, the increase in output was not strong enough to compensate for the drop in freight rates.

Accordingly, BSC offers a sensitivity table on NPATMI in 2023 according to:

1. Moving rates and oil prices (keeping the same assumption: production+33% yoy):

		% decrease in oil prices compared to 2022							
		-4%	-6%	-8%	-10%	-12%	-14%	-16%	-19%
% Discount rates compared to 2022	-10%	898	914	931	947	963	980	996	1,021
	-12%	855	872	888	904	921	937	953	978
	-14%	813	829	845	862	878	894	911	935
	-16%	770	786	803	819	835	852	868	893
	-21%	663	679	696	712	728	745	761	786
	-26%	556	573	589	605	622	638	654	679
	-31%	449	466	482	498	515	531	548	572

Base rate in 2022 = 4.96 million VND/TEU, base oil price in 2022 = 100 USD/BBL.

Source: BSC Research forecasts

## 2. Fluctuations in transport output (keep the assumption: robbery price-16% yoy, gradual price-10% yoy).

	% increase in output							
	42%	39%	36%	33%	30%	27%	25%	22%
NPATMI	863	848	833	819	804	790	775	761

Base output in 2022 = 422,000 TEUS

Source: BSC Research forecasts

### Risks/Potential changes forecast in 2023:

- HAH re-signs fixed-term leases with high rates.
- HAH operates new trains to intra-Asian service routes with high rates, better output than BSC's assumptions.
- Freight rates, oil prices in general fluctuate more positively than BSC's assumptions.

## IV. PRICING AND RECOMMENDATIONS

We recommend **FOLLOW** for **HAH** shares with a 2023 value of **78.000/SHARE** (equivalent to **24%** Upside from the reference price of 24/08/2022), based on the P/E methodology with target P/E 2022 = s6.5, lower than average P/E (2019-2021) = 7-8x due to concerns about the risk of operating new vessels in 20233.

P/E method	Value
EPS FW 2022	11,991
Target P/E	6.5
Fair value	78,000

Source: BSC Research forecasts

## APPENDIX

Income statement (Billion VND)	2020	2021	2022F	2023F
Net revenue	1,192	1,955	3,128	3,656
Cost of goods sold	(952)	(1,241)	(1,606)	(2,369)
<b>Gross profit</b>	<b>239</b>	<b>714</b>	<b>1,522</b>	<b>1,287</b>
Financial income	17	26	31	60
Financial expense	(25)	(33)	(58)	(91)
Interest expense	(23)	(32)	(60)	(91)
Profit from joint ventures	6	19	57	76
Selling expenses	-	-	-	-
SG&A expenses	(68)	(85)	(138)	(161)
Operating profit/loss	170	642	1,415	1,171
Other income	0	20	(50)	38
Profit before tax	170	662	1,365	1,209
CIT	(24)	(112)	(227)	(197)
NPAT	147	551	1,138	1,012
Benefits of Business	8	105	217	193
NPAT of Parent Company	138	446	920	819
<b>EPS</b>	<b>2,835</b>	<b>9,133</b>	<b>13,477</b>	<b>11,991</b>

Balance sheet (Billion VND)	2020	2021	2022F	2023F
Cash and cash equivalents	221	485	1,393	1,877
Short-term investment	80	87	91	95
Short-term receivables	308	633	257	283
Inventory	46	48	63	92
Other short-term asset	41	34	63	73
<b>Short-term asset</b>	<b>695</b>	<b>1,287</b>	<b>1,866</b>	<b>2,420</b>
Long-term receivables	-	0	0	0
Fixed assets at full price	1,822	2,386	3,660	4,910
Depreciation	(724)	(851)	(1,134)	(1,523)
Full price	-	-	-	-
Depreciation	-	-	-	-
Long-term unfinished asset	1	7	7	7
Long-term tel	50	148	205	280
Other long-term asset	250	255	250	293
<b>Long-term asset</b>	<b>1,400</b>	<b>1,945</b>	<b>2,987</b>	<b>3,966</b>
<b>General asset</b>	<b>2,095</b>	<b>3,232</b>	<b>4,853</b>	<b>6,386</b>
Bank liabilities	209	387	413	476
Payday loans	111	234	269	271
<b>Total Current Debt</b>	<b>320</b>	<b>621</b>	<b>682</b>	<b>747</b>
Long-term loans	348	559	981	1,503
Other long-term debt	90	151	151	151
<b>Total Long-Term Debt</b>	<b>438</b>	<b>710</b>	<b>1,132</b>	<b>1,654</b>
<b>Total Liabilities</b>	<b>759</b>	<b>1,330</b>	<b>1,814</b>	<b>2,402</b>
Capital contribution	488	488	683	683
Equity surplus	116	192	192	192
Other equity	213	280	280	280
Undistributed interest	252	592	1,317	2,069
Benefits	267	350	567	761
<b>Total equity</b>	<b>1,336</b>	<b>1,902</b>	<b>3,040</b>	<b>3,985</b>
<b>Total capital</b>	<b>2,095</b>	<b>3,232</b>	<b>4,853</b>	<b>6,386</b>

Cashflow (Billion VND)	2020	2021	2022F	2023F
Profit before tax	170	662	1,365	1,209
D&A	137	164	284	389
Changes in working capital	(42)	(28)	76	(332)
Other adjustments	11	(8)	3	15
<b>CFO</b>	<b>277</b>	<b>790</b>	<b>1,727</b>	<b>1,281</b>
Cash for purchase of fixed assets	(349)	(567)	(1,273)	(1,250)
Other investments	(34)	(83)	(3)	(4)
<b>CFI</b>	<b>(383)</b>	<b>(650)</b>	<b>(1,277)</b>	<b>(1,254)</b>
Dividend payment	(47)	(67)	-	(67)
Cash from net borrowing	140	92	458	524
Other revenues	(8)	99	-	-
<b>CFF</b>	<b>85</b>	<b>124</b>	<b>458</b>	<b>457</b>
<b>Beginning of year CF</b>	<b>243</b>	<b>221</b>	<b>485</b>	<b>1,393</b>
CF in the year	(22)	264	908	484
<b>Ending of year CF</b>	<b>221</b>	<b>485</b>	<b>1,393</b>	<b>1,877</b>

Ratio	2020	2021	2022F	2023F
<b>Solvency</b>				
Current ratio	2.2	2.1	2.7	3.2
Quick ratio	1.9	1.9	2.6	3.0
<b>Capital structure</b>				
Debt/Total Asset	36%	41%	37%	38%
Debt/Equity	57%	70%	60%	60%
<b>Operational capacity</b>				
DSO	18	14	14	14
DPO	94	118	30	28
<b>Profit margin</b>				
Gross profit	20%	37%	49%	35%
NPAT profitability	12%	28%	36%	28%
ROE	10%	23%	30%	21%
ROA	7%	14%	19%	13%
<b>Growth</b>				
Net revenue growth	7%	64%	60%	17%
EBIT Growth	12%	259%	105%	-9%
EBT growth	9%	289%	106%	-11%
EPS Growth	14%	222%	48%	-11%
No. outstanding shares (million shares)	49	49	68	68

Source: BSC Research forecasts

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