

Connect Values Navigate Growth



December 2023

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II. Market Outlook

I -1. HMM Overview



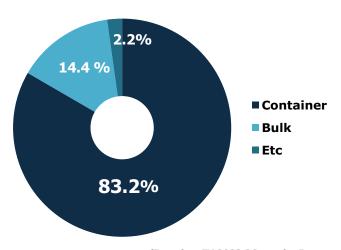
- Brand Identity

-Connect Values



Navigate Growth-

- Structure & Business Portfolio



(Based on FY 2023 3Q result, Revenue %)

Organization

Domestic: 3 Directly under CEO, 3 COO. 4 Special Offices

14 Divisions, 68 Teams, 2 offices

Overseas: 6 headquarters, 24 Subsidiaries, 61 agencies.

6 JVs, 3 Terminals

Employees

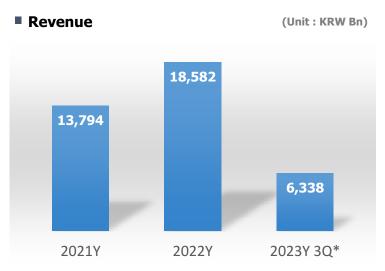
Total	Domestic	Overseas
4,241	2,041	2,200

Based on Y'23 April

I -2. Financial Status



- Summary of HMM Business





Annual Sales Status by Business

(Unit: KRW Bn)

Category		2020	2021	2022	2023 3Q
	Total	6,413	13,794	18,582	6,338
нмм	Container	5,661	12,948	17,305	5,277
	Bulk	542	684	1,094	919
	Others*	209	161	182	141

^{*} Including terminal operation business, rental business, etc.

^{* 2023}Y 3Q Cumulated

I -3-1. HMM Core Value



-Strengthening Global Competitiveness

Category	Unit	2022	2023 3Q
Service routes around the world	Number	Over 60	48
Connected ports around the world	Number	More than 100	134
Various types of ships	By TEU	1,700TEU~24,000TEU	1,700TEU~24,000TEU

-Global Market Share & Capacity

Category	Unit	2021	2022	2023 3Q
*Ship Capacity	TEU	819,790	820,700	783,732
*Global Fleet market share	%	3.2	3.1	2.8
*World container carrier ranking	Ranking	8	8	8
**Asia→ West coast of US	%	5.8	5.2	6.3
**West coast of US→ Asia	%	6.8	7.7	8.8

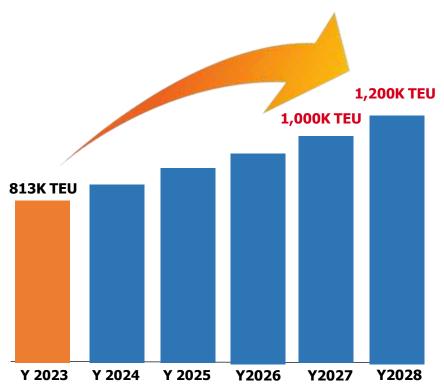
*Source: Alphaliner Top 100 Ranking

^{**}Source: Piers

I -3-2. Expansion Plan







Y2024 13K x 12

- HMM GARNET
- HMM AMETHYST
- HMM AQUAMARINE
- HMM DIAMOND
- HMM EMERALD
- HMM PEARL
- HMM RUBY
- HMM PERIDOT
- HMM SAPPHIRE
- HMM OPAL
- HMM TOPAZ
- HMM TURQUOISE

Y2024



7.7K x 2

LNG Dual Fuel

- HMM OCEAN
- HMM SKY

1.8K x 3

- HMM HARMONY
- HMM MIRACLE
- HMM MASTER

Y2025-26





Methanol Dual Fuel

HMM in 2023 812,800 TEU



HMM in 2028 1,200,000 TEU

I -3-2. Expansion Plan



Strengthening the Competitiveness of the Fleet

- HMM will receive various size of vessels in 2024 (13,000TEU x 12, 7,700TEU x 2, 1,800TEU x 3) 7700TEU x 2 ships are LNG dual fuel ships to help lowering GHG emissions.
- From April 2025, nine vessels of 9000TEU Methanol dual fuel ships will be delivered.
- HMM will continue studying further range of alternative fuel, such as Ammonia and Hydrogen.

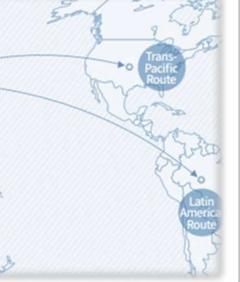
Launching of Independent service: HMM to launch Far East-India-Mediterranean service (FIM)

HMM will be launching a new service connecting Far East-India-Mediterranean to provide with a viable alternative way to ship to our customers. The service is called Far East-India-Mediterranean Service (FIM) and will be operated solely by HMM.

Nine eco-friendly containerships fueled by methanol, worth over 1.1\$billion

This is part of HMM's strategy to expand it's eco-friendly fleet using alternative fuels and Reduce GHG emissions. Methanol significantly reduces emission compared to oil-based Fuels and is biodegradable and water-soluble, reducing the risk to marine environments. This ship will cost 1.1billion and are expected to be delivered from 2025 to 2026, and will be Deployed on the Asia-North/Latin America trade lanes and the Asia-India routes, potentially

Including green shipping corridors.



8

I -3-3. Eco-friendly Logistic and Transportation



Eco-Friendly Transportation system

With the objective to create an environment-friendly transportation system, we have converted fossil fuel-based stevedoring and transportation equipment in terminals into electrified and eco-friendly fuel-based equipment. This continuous effort helps to reduce fuel oil consumption at terminals. Introducing the automated yard cranes that operate using electricity as well as yard trucks that run on LNG-powered are examples of our endeavors. In addition, we have installed solar panels on available space such as the gate roof, as part of our ongoing efforts to save electricity bills and increase energy self-reliance

Eco-Friendly Automated Terminal

We strive to increase the operational efficiency and minimize pollutant emissions at ports by building an eco-friendly automated terminal. By implementing highly efficient equipment and utilizing an automated work management system, operating costs such as labor and power can be lowered while simultaneously increasing productivity and efficiency. Moreover, this approach can reduce carbon or pollutant emissions at the port. Dangerous Cargo Management





^{*} OCR (Optical Character Reader): an optical character reader that reads the serial number written on the container with a camera RFID (Radio Frequency Identification): a wireless identification technology that exchanges data in the form of radio frequency through media such as tags, labels, and cards with embedded semiconductor chips RDT (Radio Data Transmission): a technology that enables wireless data transmission between mobile devices within a terminal



1. Go Green Targets







Sustainability

in shipping

(compared to 2008) Decarbonization -20~30% by 2030, -70~80% by 2040, Net Zero by 2050

(compared to 1990)

- 55% by 2030, Carbon Neutral by 2050

* HMM has declared its commitment to becoming carbon neutral by 2050 and has established a roadmap for reducing GHG emissions as part of its transition to a low-carbon society.

Liner	GHG (Green House Gas) Reduction Target						
HMM	-70% by 2030 (ContaCarbon Neutral by 20	• • • • • • • • • • • • • • • • • • • •	compared to 2008				
MAERSK	 -50% by 2030 (Carbon Intensity) Net Zero by 2040 	OCEAN NETWORK EXPRESS	-70% per TEU- km by 2030Net Zero by 2050				
M	Net Zero by 2050	YANG MING	-20% by 2025 (Carbon Intensity)Net Zero by 2050				
CMA CGM	Net Zero by 2050	Hapag-Lloyd	Net Zero by 2045				

2. Regulations for GHG Reduction

Technical Measure	Operational Measure	Others		
 EEDI: Energy Efficiency Design Index EEXI: Energy Efficiency Existing Index Effective date: January 1, 2023 Dissatisfied vessels will be restricted 	 CII: Carbon Intensity Indicator Grade-scale(A~E) by vessel from January 1, 2023. For D & E grade vessels: corrective action plan needed or to be restricted 	EU ETS, FuelEU Maritime Vessels trading EU nations should pay for EUA(EU Allowance) or penalties depending on emissions or carbon intensity of used fuel.		



3. HMM Counter-Measures & Plan

"tCO2e" stands for "metric tons of carbon dioxide equivalent. total impact of a mixture of greenhouse gases in terms of the amount of CO2 that would have the same warming impact.

HMM Long Term GHG Reduction Plan by 2030

	Green Operation	Green Technology	Green Design	Green Energy
Reduction Target	-2% (150,000 tCO2e)	-0.3% (19,000 tCO2e)	-3.4% (260,000 tCO2e)	-15.8% (1,190,000 tCO2e)
Measure & Plan	Slow steaming and maintain a consistent ship speed	Installation of an ESD (Energy Saving Device)	A transition to CII compliant ships	Low/zero-carbon alternative fuels

► Total **1,620,000 tCo2e reduction** compared to *BAU in 2030 (21.5% ▼)
*BAU (Business as Usual)

Alternative fuel powered ships to be delivered from 2024 All-electric based trucking service in USA

LNG

- 7.7K x 2 vessels to be delivered at the end of '24



- 9 x 9K vessels to be delivered in '25~'26
- More alternative fuel vessels to be in the pipeline



- Plan to set a JV with a reliable logistics service provider in California to create an eco-friendly inland logistics network using all-electric base trucks
- * California Air Resources Board(CARB) aims for 100% zero-emission in transportation by 2035

OCCS (Onboard Carbon Capture System)



HMM has begun feasibility study for installing an OCCS (onboard carbon capture system) on 2.1K containership with domestic shipyards and ship equipment companies. Trial installation of the world's first containership carbon capture system on Aug 2024.



4. Industry-best HMM Fleet Competitiveness

The largest and youngest

* Average of 700 vessels in TPS trade (Source : Alphaliner)

- HMM operates eco-friendly ultra-large container ships in the East-West trade, and none of these vessels are more than 15 years old.
- HMM operates 10,000 TEU vessels in TPS trade, offering sufficient capacity for shippers.



Our **brand new container ships** are fitted with scrubbers and are designed to be energy-efficient, enabling us to offer competitive service to shippers while also **reducing CO2 emissions**. With larger ships having lower emissions per unit, our fleet's high proportion of scrubber-fitted vessels allow us to achieve both economy of scale and sustainability.



5. Green Sailing Service

- Customers can reduce CO2e footprint and report enhanced Scope 3 emissions by using HMM's Green Sailing Service of carbon insetting, which adopts mass balance concept.
- For details of procedure and inquiries, green sailing@hmm21.com

By using HMM's Green Sailing Service,

proactively and directly reduce your CO2e footprint and report enhanced Scope 3 emissions for your stakeholders.

Now Available!

- Just suggest a required amount of GHG^{R1)} you wish to reduce for your Scope 3 reporting
- Receive a quote at the market competitive price
- Be assured of the amount of GHG reduced along with sustainable alternative fuels sourced from certified supply chains
- Sustainable biofuel used for carbon insetting^{R2)}
- LNG available from Nov 2024, Green Methanol available from April 2025
- Mass Balance concept is used

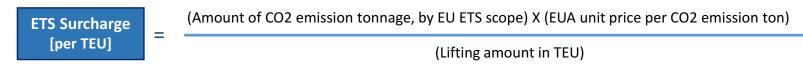
НММ		GHG emission		Customer	GHG emission
Vessel A	Uses conventional Fuel	100 ton CO _{2eq}	Vessel A	Wants GHG reduction, Willing to pay for Green Sailing	20 ton CO _{2eq}
Vessel B	Uses biofuels	20 ton CO _{2eq}	Vessel B	No requirement	100 ton CO _{2eq}

- Regardless of vessel type or deployed service of which actual customer's cargo is on board
- Provides a Green Sailing Service Declaration
- Contains amount of greenhouse gases that customer reduced by using Green Sailing Service
- R1) GHG (Greenhouse Gases): CO2, CH4, N2O (In terms of Well to Wake)
- R2) Carbon insetting directly reduces carbon emissions where they are actually emitted during the business activities, whereas carbon offsetting reduces emissions outside the business realm by purchasing carbon credits from a project a company do not own or operate.



6. EU ETS Surcharge (EES in HMM)

- Basic Methodology of HMM EU ETS surcharge : Main key factors



- HMM EU ETS Surcharge details and final tariff amount per each trade lanes, for the 1st quarter 2024
 - Surcharge Name: EES(Europe Emission Surcharge)
 - EES will be an additional surcharge to the Ocean Freight from 1st of January, 2024

From	То	EUR/TEU (Dry)	EUR/TEU (Live Reefer)
Asia	North Europe	16	25
North Europe	Asia	11	18
Asia	West Mediterranean	14	22
West Mediterranean	Asia	8	14
M.E. & India sub cont	West Mediterranean	27	45
West Mediterranean	M.E. & India sub cont	14	23
Europe	Europe	6	9
Europe	North America	41	62

^{**}The amount to be quarterly reviewed and refreshed by referring to factors such as 3month's average price of EUA(sourced by ICE)

^{**}Europe to Europe: Inter-port routes of HMM mother vessels

^{**}Special Equipment: Same as dry

I -3-(5). ESG -HMM ESG Management



HMM has defined our mission, vision, and core values to realize ESG management. To achieve our commitment, we have identified short-term and mid- to long-term strategic tasks for each of the three ESG areas; environment, social, and governance.

MISSION

Aleader in the global shipping and logistics industry that creates sustainable future values

VISION

Based on continuous innovation and customized services, we strive to build a healthy market ecosystem as a leader in the shipping and logistics industry. We pursue sustainable growth in all fields of economy, society, and environment by communicating with various stakeholders.



Environment

Systematic eco-friendly management and thorough response to climate change

Reinforce carbon emissions management

Increase investment and R&D in green ships and fuels

Enhance environmental management through actions such as preventing marine pollution



Creating a sustainable

community

Tighten the safety and health impact management Implement cargo protection and safe operation of ships Step up ESG cooperation throughout

all value chain Promote responsible human rights

management Nurture talents and advance

human resource management system

Establish a fair compensation system and enhance welfare benefits

Expand social contribution and social impact

Fortify personal data protection and information security



Governance

Establishing sound corporate governance based on risk response and ethical culture

Strengthen the expertise of the BOD Establish a transparent and sound governance Enhance ethical management



I -3-5. ESG – External Performance

Alliance



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	2023 ecovadis Sustainability nating	HMM received a Gold medal, ranking among the top 3% of the world, in the EcoVadis evaluation. EcoVadis evaluates ESG policies and performance of companies based on international sustainability standards such as the Ten Principles of the UN Global Compact, the International Labor Organization (ILO) Convention, the GRI(Global Reporting Initiative) standards, and the UN principles for the implementation of business and human rights.
Global	B	Climate Change: B HMM obtained a Management level, Grade B, in the '2022 CDP Climate Change Response Assessment.' CDP provides information to investors and financial institutions every year on climate change response strategies, GHG emissions, and reduction efforts of major listed companies around the world.
	15.4 Low Risk	ESG Risk Rating: 15.4 [Low Risk] HMM obtained a 'Low Risk' level in the 2023 Sustainalytics ESG Risk Assessment. In the Industry Ranking (Transportation) HMM achieved 7 th , while in the Sub-Industry Ranking (Shipping) HMM ranked 2 nd overall. Every year, Sustainalytics evaluate +15,000 companies of their ESG Risk Ratings considering the manageability of risks that each companies face in the field of ESG.
Domestic (Korea)	A LEGISLAND	Grade: A HMM obtained a Grade A in the ESG (Environmental: A+, Social: A, Governance: B+) management evaluation conducted by the Korea Institute of Corporate Governance and Sustainability (KCGS). Having an Integrated grade A means that HMM's ESG management system is appropriately established in accordance with the model standards of environment, social, and governance, and that HMM is less likely to undermine shareholder value due to non-financial risks.
Etc.	World Benchmarking Alliance	HMM ranked the 3rd grade among global container liner and 17th grade among total of 90 companies. Overview: More than 200 organizations, including CDP, GRI, and UN Global Compact, participate in developing

HMM Co.,Ltd.

assessment benchmarks, evaluating companies, and ranking disclosure.

I -3-5. ESG – Initiative Membership



Initiative	Field	HMM Activities
WE SUPPORT	Human rights, Labor, Environment, Anti-corruption	A participant of the world's largest corporate sustainability initiative aiming to provide feasible measures to accomplish sustainability as well as to encourage companies to embed the Ten Principles on human rights, labor, environment, and anti-corruption into their business management to achieve sustainability.
Smart Freight Centre	Environment	A member of an international non-profit organization that focuses on reducing GHG emissions from freight transportation.
Clean Cargo	Environment	A member of a partnership in which major shippers, shipping companies, and shipping companies around the world participate with the goal of reducing the environmental impact of global freight transportation and promoting the sustainability of the transportation industry.
Getting to Zero Coalition	Environment	A member of a global partnership formed with the goal of commercializing Zero Emission Vessels(ZEV) for deep sea navigation by 2030.
MACN Maritime Anti-Corruption Network	Anti-corruption	A member of the Maritime Corruption Prevention Network.
The Neptune Declaration on Seafarer Wellbeing and Crew Change	Labor, Human rights	Signed a declaration to address the crew welfare issues and crew shift issues caused by COVID-19.

I -3-5). ESG – Performance Highlights



HMM 'greenest' carrier in carbon emission analysis



- Selected as the best eco-friendly company with the lowest carbon emissions :
 - ✓ North Europe East Asia ('23.Q2)
 - ✓ East Asia US West Coast ('22.Q4, '23.Q1)
- Selected by Carbon Emissions Index(CEI) survey, conducted by Xeneta

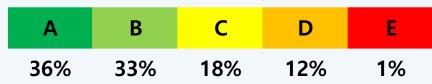
'No. 1' in 'Asia-Europe' route GHG emission intensity



- Ranked 1st as the best shipping company in 'Asia-Europe' route for 2022 GHG emissions per unit, surveyed by *Clean Cargo*.
- HMM's emission is 32.6% lower than the average of other 17 container carriers.

HMM Vessel Performance on 1st Half of 2023





- CII Simulation/Monitoring system that is set with past vessel operation data(Speed, Fuel consumption) to respond CII regulation.
- Simulate CII rating by each speed and monitor CII rating.

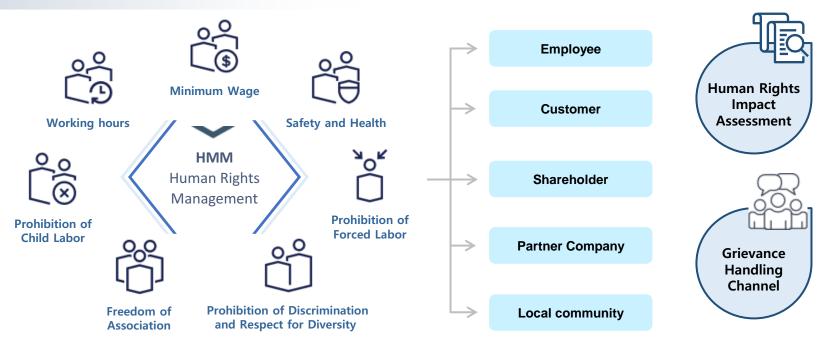


I -3-5. ESG – HMM Human Rights Management



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HMM's Human Rights Policy



Seafarers' Well-being, Safety and Health



Health Care Monitoring



Workplace (Vessel) Safety&Health



Career Development Program

(HOS Training Center)



Welfare Policy for Seafarers



Communication Channel in operation



HMM posts black figures but prepares to cut costs

Nov 10, 2023



South Korean container carrier HMM has posted a profit, however small, for the third quarter according to the interim result published Friday.

The carrier delivered a net profit of KRW 95bln (USD 72m), corresponding to a decline of 95 percent compared with the same periode last year.

Compared with the previous quarter, the decrease amounted to 70 percent.

In that respect, the numbers of the carrier, which is still awaiting a decision from the sales committee regarding the divestment of 40 percent of its shares, reflects what the entire industry has presented so far.

Namely the results, but also revenues have nose dived compared with the Covid-19 hey-days.

HMM's revenue in the third quarter went down with 58 percent compared with the same quarter of 2022 and landed at KRW 2,127bln.

"Container demand is expected to be under downward pressure with no encouraging sign of restoring desire for consumption. This prediction originated from considerable uncertainties mainly related to widespread inflation, economic slowdown and geopolitical tensions," HMM says in a comment to the result.

Sales decision this month

On par with competitors like Maersk and Hapag-Lloyd, HMM forsees a need to reduce costs going forward.

"HMM will focus on various cost-cutting measures and enhance operational efficiency to make its business competitive amid market volatility and uncertainties," the carrier announces.

During 2023 HMM has worked with the diversification of the portfolio which was announced last year. Recently, the carrier made a long term charter agreement of four bulk carriers of USD1bln.

It is expected that the sales committee considering the three remaining bids for 40 percent share put up for sales by the state will announce its final decision later this month. A prediction which seems to gain more support among analysts is that the divestment of the share holding will be cancelled.

Source: Nov 10, 2023. ShippingWatch https://shippingwatch.com/carriers/Container/article16592180.ece

I -4. HMM News



HMM bolsters presence in dry bulk sector

Nov 3, 2023



South Korean shipping line HMM has concluded time charter contracts for four bulk carrier newbuildings.

The charter deal is worth around \$954.2 million with an undisclosed company and is set to last from 2026 to 2042.

The contract marks a significant move in the company's expansion strategy into the bulker sector which has been described as more stable than the more volatile container shipping sector.

HMM wants to grow its dry bulk fleet from 29, as recorded at the end of 2022, to a total of 55 by 2026. To achieve this, the company has already incorporated six new bulk carriers into its fleet in the current year. The plan is to continue this growth trajectory by introducing an additional 11 bulk carriers in the upcoming year.

In August, HMM placed an order for four multi-purpose vessels as part of its strategy to enhance its maritime capabilities and meet evolving industry demands.

HMM is undergoing a privatization process with three finalists in the bidding process. These are Harim, the parent company of Pan Ocean, Korea's largest dry bulk shipping company, LX Holdings, and Dongwon Group, which are likely seeking integration of maritime logistics with their existing land logistics and warehouse operations.

Source: Nov 3, 2023. Offshore Energy

https://www.offshore-energy.biz/hmm-bolsters-presence-in-dry-bulk-sector/

I -4. HMM News



HMM introduces direct service between Korea and Indonesia

Sep 26, 2023



HMM announced that it will relaunch the Intra-Asia Cross Network(ICN) service, linking major ports in Korea, North China, Vietnam, Thailand, and Indonesia, effective 9 October.

This service, launched last May, will be solely operated by HMM. It is also expected to provide the fastest transit time between Korea and Indonesia, taking seven days from Busan, Korea, to Jakarta/Surabaya, Indonesia.

ICN is scheduled to deploy six 1,700 teu containerships and, as a pendulum service, consists of 'string 1' and 'string 2', covering Vietnam/Thailand and Indonesia, respectively.

The port rotation of ICN service will be:

(String 1) Busan(North Port) – Shanghai – Ningbo – Ho Chi Minh – Laem Chabang –Incheon – Qingdao – Busan(North Port)

(String 2) Incheon – Qingdao – Busan(North Port) – Jakarta – Surabaya – Busan(New Port) – Busan(North Port) – Shanghai – Ningbo

An HMM official said, "Our renewed ICN service aims to extend our reach to Indonesia, one of our primary markets. We expect to provide our customers with increased connectivity and better operational agility within and beyond the region."

I -5. E-Business Solution "HI Quote" (1/1)



A non-stop online service from instant quotation to space confirmation

Fixed Price Available 24/7

- Competitive rate on real-time basis
- No need to contact sales for rate request
 - All scope's quotation available soon

Space Guaranteed

- Direct port-to-port cargoes can benefit from space guarantee
- Space secured once booking is confirmed

It's Quick, it's Easy

- Auto-booking confirm within a minute
- A few clicks will show you all freight, surcharges, route details, t-time and more

Hi Quote covers most Asia exports (Asia to North & South America / Europe / South East Asia & South West Asia / Australia) and cargoes out of Europe to Asia as of May 1st 2023.

Please check <u>www.hmm21.com/korea</u>, or contact <u>hiquote@hmm21.com</u> for more details.

I -5. Digital Services [Web]







 Overview for BKG & B/L to be checked among all the shipments



Chatbot

• The supportive tool to help to access BKG & B/L details and search for DEM/DET, Schedule, guidelines, and local PIC per B/L



 A non-stop online service from instant quotation to space confirmation



• The globally implemented function to simplify the process of invoice and payment for DEM/DET & Freight

My Export



• The integrated view to display the realtime data and direct links to BKG & S/I

Digital Services

My Import



• The summarized view to offer the inbound process of all the shipments

Step by Step

• The convenient and clear BKG & S/I input process to support the management of the shipments' details

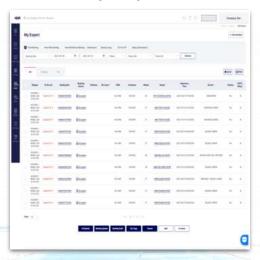
I -5. Digital Services [Web]



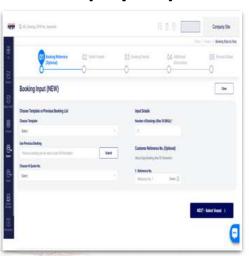
Shipment Dashboard



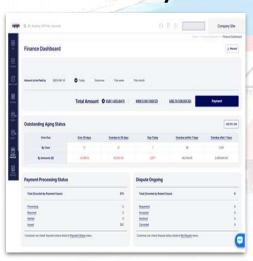
My Export



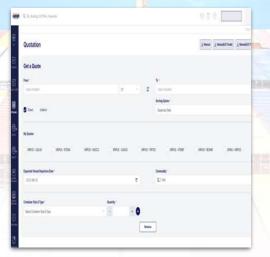
Step by Step



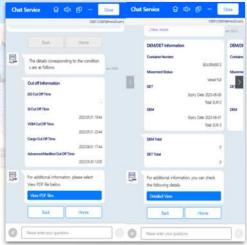
Invoice and Payment



Hi Quote



HMM Chabot Service



I -5. Customer Centricity



- Key Account Management

Building strategic partnerships with customers

HMM established a Key Account Team in 1999, and has been building a sustainable relationship by supporting stable contracts and smooth shipping operations as a strategic logistics partner of major domestic and overseas customers. HMM operates a global committee for each country to provide one-stop service. HMM shares its business know-how with global companies around the world and strives to provide advanced logistics services to key accounts.



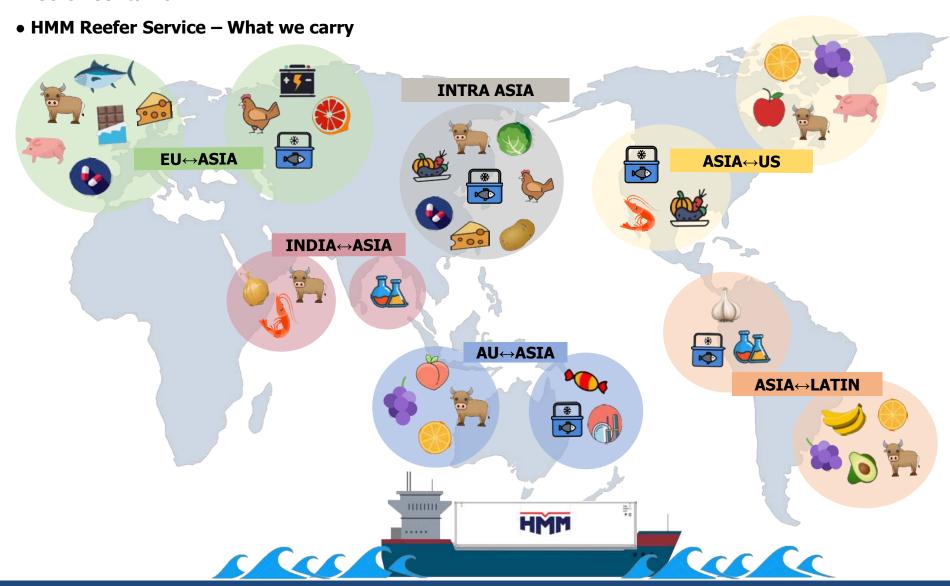
Global Committee Member

U.S.A. RHQ	Pacific South	Pacific North	Mid- West	Atlantic South	Atlantic North	Europe R	ιнQ	China RHQ	S.E. Asia RHQ	Japan	S. China & Hong Kong
Nathan	Ramy	John	Peter	Sheldon	Michael	Joern	Harjit	Julius	Daniel	Nagatsuka	Calvin
Adams	Gobran	Belford	Kim	Shikhel	Vaccaro	Foenschau	Joshi	Mei	Tan	Hajime	Kwok

I -5. Special Cargo Business (1/7)



- Reefer Container



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I -5. Special Cargo Business (2/7)

-HMM

- Special Reefer Container
- CA (Controlled Atmosphere) Container



▶ What is CA container?



Controlled Atmosphere has become an effective way to secure and preserve cargo quality by managing the amount of CO2.

HMM has our own CA containers to keep fruit and vegetables fresh, which allows them to have a loner shelf life by preventing early ageing and ripening.

▶ Benefits of CA for fresh product



Delay of ripening, ageing, decay and related changes prolongs the shelf life of products



Reduction of water loss and weight shrinkage



Longer transit time becomes possible



Higher sales price for the retail trade

▶ Main Commodity





BERRIES



I -5. Special Cargo Business (3/7)



- Special Reefer Container
- UF (Ultra Freezer) Container



▶ What is UF container?

Ultra-freezer is very advanced technology of maintaining the interior of a container below -60°C. All live products usually stop their natural decaying process below -60°C. No matter how far away you are, Ultra Freezer containers allow us to deliver high value fresh products preserving first-day product freshness and taste.

▶ Benefits of UF

Controlling the percentage of inside liquid is the key to maintaining the quality of tuna. This is why Ultra Freezer is needed in order to keep your cargo fresh when it's traveling long distances.

▶ Main Commodity



W 1500

DIPPIN DOTS

I -5. Special Cargo Business (4/7)



- OOG & Break Bulk Business

In Gauge cargo

Special cargo which requires special equipment(Flat Rack, Super Rack or Open Top container) without exceeding the internal dimensions of the container.

Out of Gauge cargo

Special cargo which can be stuffed in a single Flat Rack, Super Rack or Open Top container but the dimensions of the cargo exceed the internal dimensions of the container by length, width and/or height.

Break Bulk cargo

Special cargo which has to be placed on a bed of multiple Flat Racks as it cannot be stuffed in a single Flat Rack, Super Rack or Open Top container because of its heavy weight and/or huge size.



Out of Gauge Cargo: Excavators

▶ Types of Special Containers

		Height	Tare (kgs)	Payload (kgs)	Max. Gross- (kgs)	Internal Dimensions(mm)			
Size & Ty	Length					Width	Height	Extended Height	
20' Flat Rack	Standard	8'6"	2,890	31,110	34,000	5,630	2,438	2,170	-
ZU FIAI RACK	Heavy Duty	8'6"	3,000	42,000	45,000				-
40' Flat Rack	Standard	8'6"	5,000	40,000	45,000	11,650		1,960	-
40 Flat Rack	Heavy Duty	9'6"	5,400	50,000	55,400			2,260	-
/Ol Cunar Dook	Standard	8'6"~13'6"	5,600	39,400	45,000			1,960	2 / 70
40' Super Rack	Heavy Duty	9'6"~13'6"	6,250	50,000	56,250			2,260	3,478
20' Open Top	Standard	8'6"	2,400	28,080	30,480	5,898		2,366	_
/Ol Onen Ten	Standard	8'6"	3,840	28,660	32,500	12,032	2,352	2,360	-
40' Open Top	High Cubic	9'6"	3,750	28,750	32,500			2,650	_

I -5. Special Cargo Business (5/7)

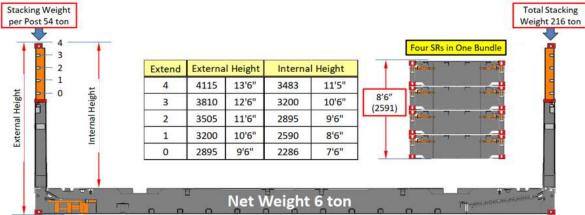


- OOG & Break Bulk Business

▶ Super Rack Containers

HMM maximizes the efficiency and conveniency by fully utilizing Super Rack Containers which are height adjustable & collapsable. Continuous investment in special equipment allows HMM to optimize the space and minimize the cost.





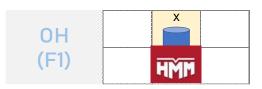
▶ General Guideline for Counting Void Space

■ In-Gauge : No Vo



Max internal dimensions of cargo to be in-gauge

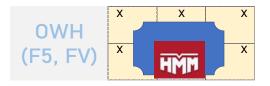
■ Over-Height: 1 Unit of Void



Over-Width: 2 Units of Void



Over-Width & Height: 5 Units of Void (=Full V



I -5. Special Cargo Business (6/7)

HMM

- OOG & Break Bulk Business







Scrubber

Transformer





MPPE (267 tons, 17 meters in height)

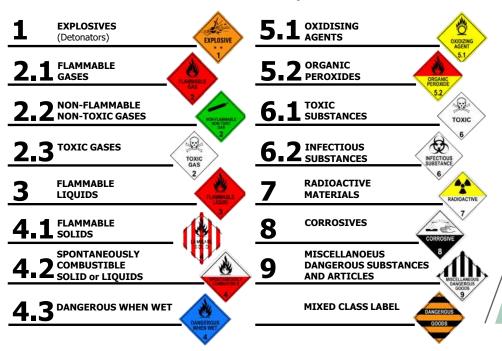
Yacht Propeller

I -5. Special Cargo Business (7/7)

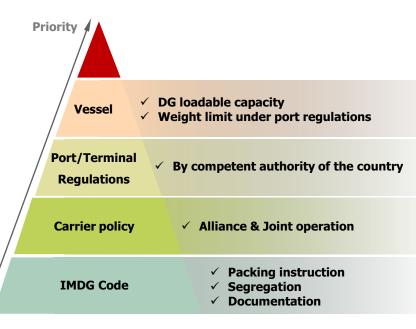


- DG Cargo Business

• 9 Classes of IMDG Code Classification system



Regulations



Dangerous cargo loading process



Classify & Declaration

- IMDG Classification
- DG Declaration
- Compliance with packing instruction

Loading & Securing

- Segregation
- Proper securing
- DG Label & Placard

Documentation

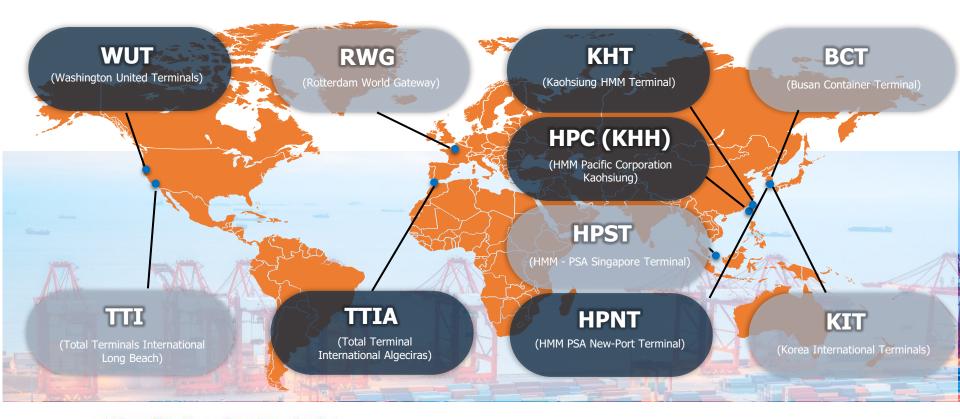
- DG Cert(DGD)
- MSDS
- Tank inspection Cert
- Others



☞ Classification of dangerous cargo shall be made by the shipper/consignor with full responsibility

I -5. HMM Terminals





Benefits from key terminals>

- O Cost Saving
 - Logistical expense reduction
- O Stable berth operating
 - Reduction of waiting time and expense
- O Additional benefits from new terminal business
- Business extension to the 3rd party via terminal business

HMM Own Terminal

Participation Terminal

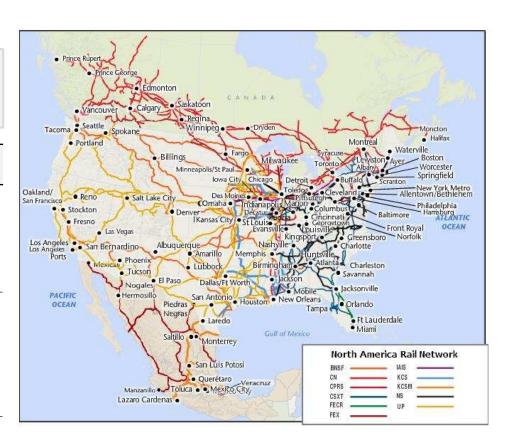
I -5. Intermodal & Feeder Networks (1/4)



(1) Intermodal Network in N. America

- Providing North America intermodal service optimized with HMM's gateway/service products
- Connecting major North America hub points served by Class 1 railroads

	U.S. West Coast	U.S. East Coast	Canada
Rail Service Provider	RAILWAY UNION PACIFIC	NORFOLK SOUTHERN EC Florida East Co	Dast CN
Coverage	U.S. Pacific Coast to/from Chicago, Midwest, Gulf, Memphis, South East	From/To East Coast, Chicago/Memphis Beyond svc via I/C with Western Railroads	Western Canada to Canada inland and U.S. Midwest (Chicago, Minneapolis, Detroit)



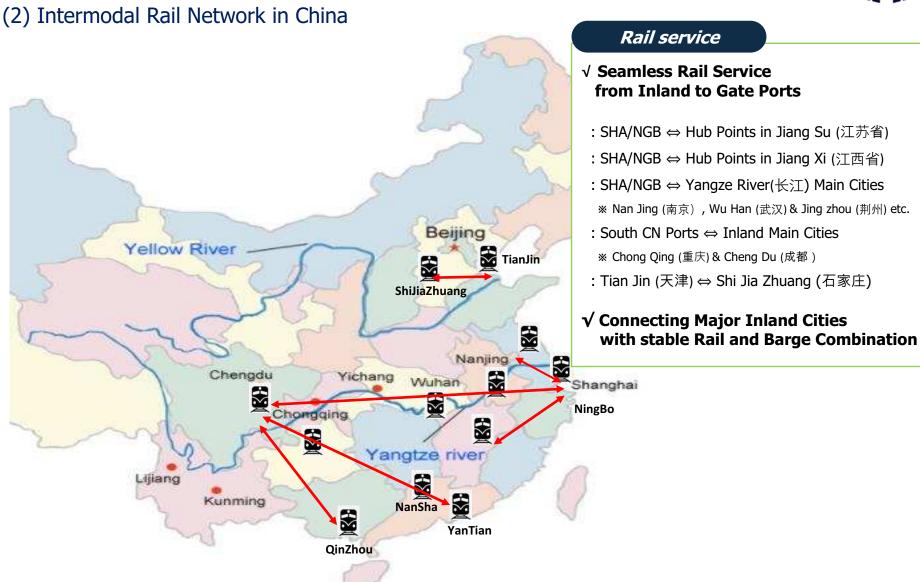
HMM Advantage

- Superior Transit time extending PN/PS service routes in/out to Inland points
- Seamless Rail Service with volume handling WC terminals (LA/LB: APMT, TPC, YTI, ITS, WBCT / TIW: WUT)
- >> Tailor made Service with Western/Eastern railroads combination

I -5. Intermodal & Feeder Networks (2/4)



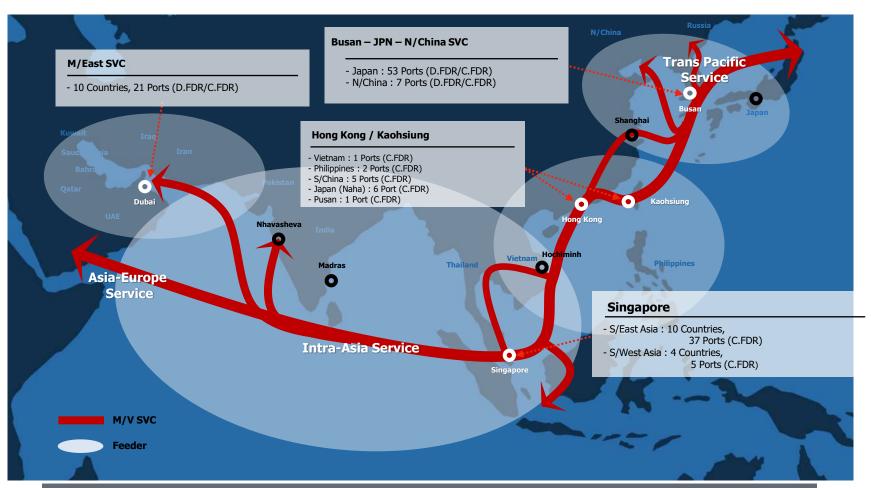
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I -5. Intermodal & Feeder Networks (3/4)



(3) Intermodal Network in Asia



- **>> HMM** provides comprehensive & feeder network services through timely & seamless connection with main haul routes.
- >> For more detailed information, please find appendix "Feeder Service" on the last page

I -5. Intermodal & Feeder Networks (4/4)



(4) Introducing new combined intermodal service for Chongqing business



New service

- As-Is
 - Shanghai/Ningbo (Barge/Rail) Chongqing
- New Service
 - 1) Singapore (Feeder) Qinzhou (Rail) Chongqing
 - 2) S.China (Feeder) Qinzhou (Rail) Chongqing

Advantages & Details

- Faster transit time (Max 2 weeks)
- Can avoid barge delay issue in Yangzi River
- >>> Rail frequency : Daily basis

Restrictions

- >> DG shipment is not accepted
- Chemical goods need 'Test Certificate' for rail movement

Contents



I. About HMM

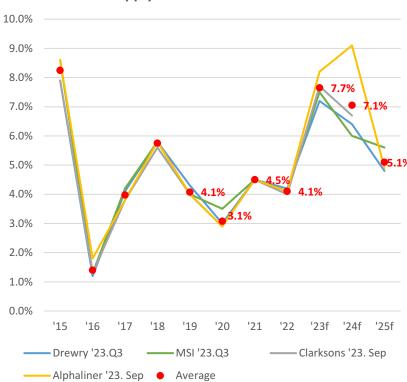
II. Market Outlook

1. Supply & Demand	40
2. Market Issue	 43

II -1. Supply & Demand (1/3)

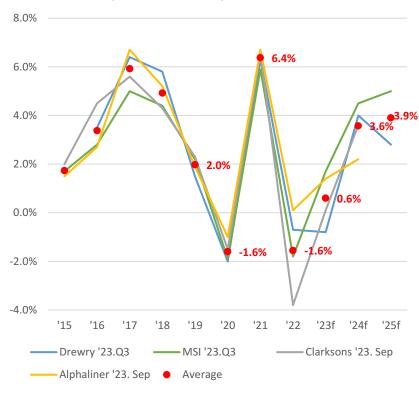






- With less newbuild containership delivery slippage and fewer demolitions of older conventionally fueled units, Drewry expects global supply and demand balance will be the worst in 2024.
- Containership fleet growth is expected to be above demand growth rates in 2025-26.

Demand (Container Trade) Growth Rate Forecast

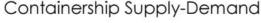


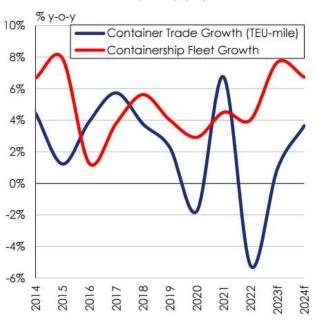
- Global trade and investments are slowing, while unilateralism, protectionism and geopolitical risks are rising.
- Drewry's World Container Index is back on a downward trend, after rising for a few weeks in July and August.

(Source: Alphaliner '23.Sep, Clarksons '23.Sep, MSI '23.Q3, Drewry '23.Q3)

II -1. Supply & Demand (2/3)





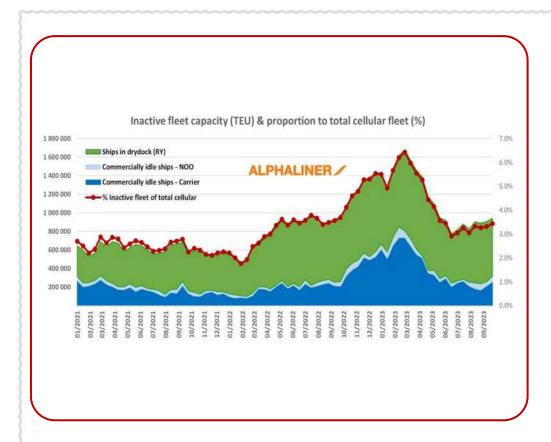


- Global container trade is expected to grow through second half of 2023 but this will be mainly due to weak trends in late 2022.
- Pressure on global container trade has eased recently but headwinds remain in key regions and a material global rebound has not yet been seen.
- 2023 is on track to be another weak year, though a full year decline could possible be avoided. A moderate rebound is projected for 2024 as the global economy potentially 'bottoms out' while shifting trade patterns could impact in the medium term as the economic and geopolitical landscape evolves.

(Source: Clarksons Container Intelligence Monthly, Sep 2023)

II -1. Supply & Demand (3/3)





■ Inactive Containership Fleet (Sep 25, 2023): 271 Units / 942,035 TEU / 3.4% of total fleet

- ☐ Inactive container fleet shows slight uptick in September and the rise in the number of idle ships was mainly the small and medium size.
- ☐ The upward momentum in idle tonnage is expected to continue to build as the market enters the traditional slack period which typically lasts through Q4 and Q1.

TEU Range	Units Inactive^	Trend	Idle**		DV#
			Carrier Units	NO0 Units	RY* Units
< 1 Kteu	66	-	11	17	38
1-2 Kteu	70	7	25	10	35
2-3 Kteu	40	-	7	4	29
3-5.1 Kteu	34	-	11	3	20
5.1-7.5 Kteu	22	•	5	0	17
7.5-12.5 Kteu	26	7	8	1	17
12.5-18 Kteu	12	*	2	0	10
18+ Kteu	1	+	1	0	0
Total units	271	-	70	35	166

^{*}RY: Normal maintenance, emergency repair, retrofit, and etc.

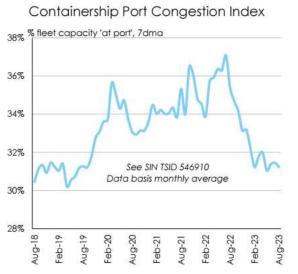
(Source: Alphaliner Weekly Newsletter, Issue 40 2023)

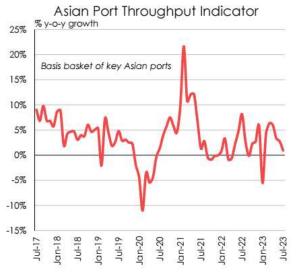
II -2. World Container Ports

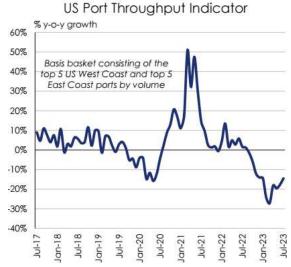


☐ World Port News (Sep, 2023)

- Port congestion and logistical disruption remain below significant levels seen across 2021 1H 2022. Clarksons' Containership Port Congestion Index averaging 31.2% of fleet capacity 'at port' in Aug, below pre-Covid (2016-19) average of 31.6%.
- However, there remains some localized congestion with reports that weak trade volume have led to a backlog of empty containers in China.







(Source: Clarksons Container Intelligence Monthly, Jul 2023)

II -2. Market Issue (1/5)



□ EU scraps competition law exemptions for shipping lines

- The European Commission said on Tuesday that the exemption, which for years has enabled shipping lines to place containers on each other's ships, no longer appeared "fit for its purpose" and will not be renewed when it expires next April.
- While the decision does not in itself end co-operation between shipping groups, it has the potential to upend the business of global trade, which has become increasingly dominated by a handful of container shipping companies which control most of the market through so-called alliances.

□ Coming end to European block exemption evokes mixed reaction from analysts

- Alphaliner believes its abolition will have little impact on the industry given the relatively modest number of what are defined as consortia still in operation.
 - "Despite the attention being given to the carrier exemption regulation across the container shipping supply chain, Alphaliner believes its abolition **will have little impact on the industry** given the relatively modest number of what are defined as consortia still in operation."
- Ruling may 'backfire'
 - Drewry Shipping Consultants believes the end of the block exemption was likely to **backfire on shippers** that have called for its abolition since the CBER came into force in 2009 "end of the block exemption will effectively coerce lines to operate independently, with each carrier having to downsize service portfolios in terms of frequency and connectivity."
- German shipowners fear supply chain disruption without block exemption
 - German shipowners' association, Verband Deutscher Reeder (VDR), "This could lead to further complications in the handling of international sea-based supply chains and logistics processes. Transport capacities could then be used less efficiently"

(Source: FT, "EU scraps competition law exemptions for shipping lines" Oct 11, 2023 JOC, "Coming end to European block exemption evokes mixed reaction from analysts" Oct 11, 2023 Shippingwatch "German shipowners fear supply chain disruption without block exemption" Oct 12, 2023)

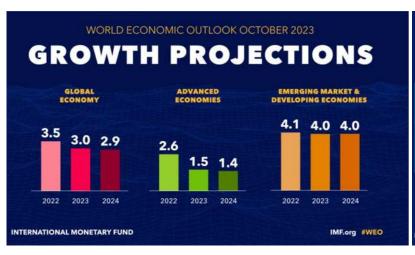
II -2. Market Issue (2/5)

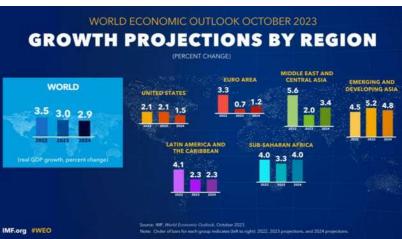


> IMF World Economic Outlook

☐ IMF: Global recovery remains slow, with growing regional divergences and little margin for policy error

- The baseline forecast is for global growth to slow from 3.5 percent in 2022 to 3.0 percent in 2023 and 2.9 percent in 2024, well below the historical (2000–19) average of 3.8 percent.
- Advanced economies are expected to slow from 2.6 percent in 2022 to 1.5 percent in 2023 and 1.4 percent in 2024 as policy tightening starts to bite. Emerging market and developing economies are projected to have a modest decline in growth from 4.1 percent in 2022 to 4.0 percent in both 2023 and 2024.
- Global inflation is forecast to decline steadily, from 8.7 percent in 2022 to 6.9 percent in 2023 and 5.8 percent in 2024, due to tighter monetary policy aided by lower international commodity prices. Core inflation is generally projected to decline more gradually, and inflation is not expected to return to target until 2025 in most cases.





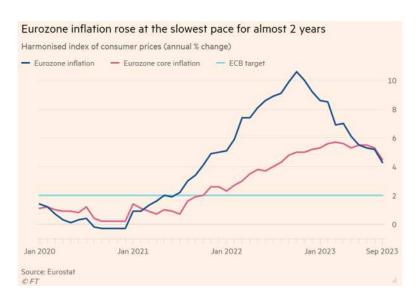
(Source: IMF, "World Economic Outlook" Oct 2023)

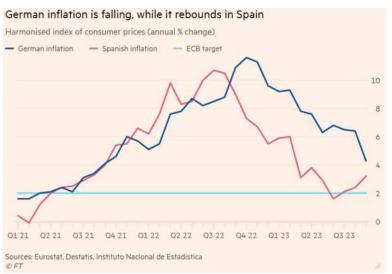
II -2. Market Issue (3/5)



☐ Eurozone inflation hits 2-year low as US price pressures ease

- Data signals prospect of end to interest rate rises on both sides of Atlantic.
- Eurozone inflation has fallen to its lowest level for almost two years and US price rises last month were less than expected,
 raising the prospect that interest rate rises on both sides of the Atlantic have come to an end.
- Consumer prices in Europe's single currency bloc rose 4.3 per cent in September, below economists' expectations of 4.5 per cent and August's rate of 5.2 per cent. The last time inflation was lower was in October 2021.





(Source: FT, "Eurozone inflation hits 2-year low as US price pressures ease" Sep 30, 2023)

II -2. Market Issue (4/5)



☐ US inflation higher than expected in September

- Latest consumer price index data raises prospect of further rate rise from Federal Reserve.
- US inflation was higher than forecast in September, raising the prospect that the Federal Reserve may raise interest rates following similarly robust recent data on the strength of the jobs market.
- The consumer price index rose 3.7 per cent year on year, according to the Bureau of Labor Statistics, the same pace as the previous month. Economists had expected a slight decline.

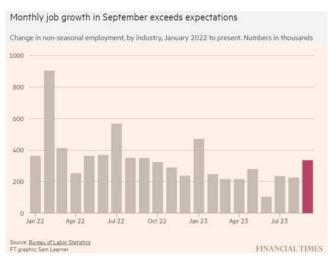
(Source: FT, "US inflation higher than expected in September" Oct 13, 2023)

☐ US jobs growth surges past expectations with 336,000 new posts

- The US added 336,000 new jobs in September, far more than expectations of 170,000 new jobs which was also far more than August's upwardly revised total of 227,000.
- The report provides the Fed with an important data point as the central bank decides whether its mission to quell inflation is succeeding — or whether rates, already at a 22-year high, need to rise further. The Fed meets again at the end of the month"

(Source: FT, "US jobs growth surges past expectations with 336,000 new posts" Oct 7, 2023)



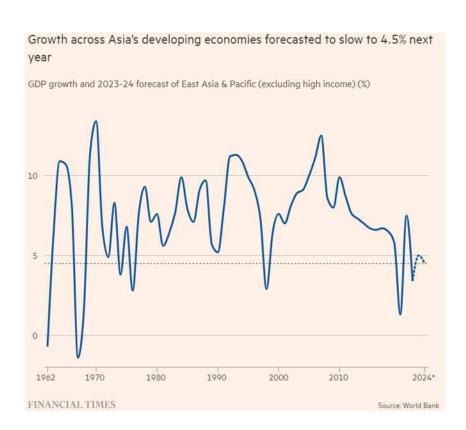


II -2. Market Issue (5/5)



☐ Asia faces one of worst economic outlooks in half a century, World Bank warns

- Sluggish post-pandemic recovery, China's property crisis and US trade policies expected to hinder growth next year.
- The World Bank has cut its forecast for China's growth next year and warned that east Asia's developing economies are set to expand at one of the lowest rates in five decades, as US protectionism and rising levels of debt pose an economic drag
- The gloomier 2024 forecasts from the bank underline the mounting concern over China's slowdown and how it will spill into Asia. China's policymakers have already set one of the lowest growth targets in decades for 2023, of about 5 per cent.
- The worsening forecasts also reflect that much of the region —
 not just China is starting to be hit by new US industrial and
 trade policies under the Inflation Reduction Act and the Chips
 and Science Act.



(Source: WSJ, "Asia faces one of worst economic outlooks in half a century, World Bank warns" Oct 2, 2023)



"Thanks for your attention."



More information available in our web-site: https://www.hmm21.com