





Reefer Market Outlook

20 September 2022



Summary

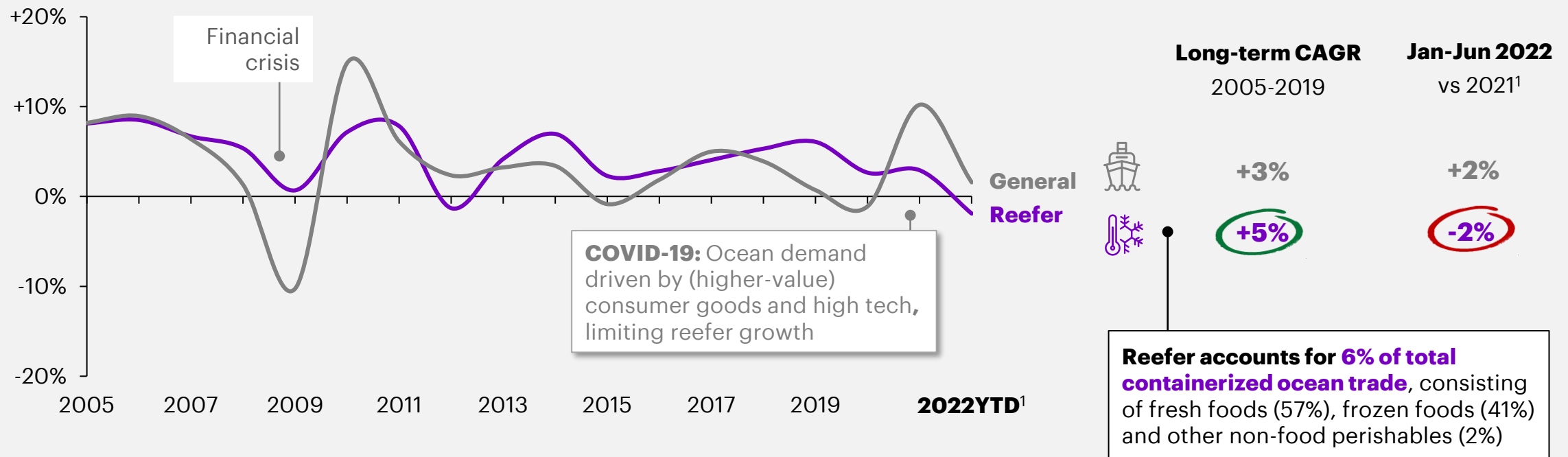
Reefer Market	2022 YTD developments	Short term outlook	Operational impact
			
<p>Reefer are a small but stable segment of the market</p>	<p>Reefer is -2% in 2022 H1, both fresh & frozen declining</p>	<p>Demand for 2022 is forecast to be lower than 2021</p>	<p>Operational outlook is improving for reefer</p>
<ul style="list-style-type: none"> ▪ Volume share of reefer on total container market is <10% ▪ Up to 2019, reefer growth has been steady, and slightly higher than dry cargo ▪ Since COVID-19, dry cargoes grew much faster than reefer volumes ▪ Reefer market, especially fresh foods, is highly seasonal 	<ul style="list-style-type: none"> ▪ Loss in frozen market purely down to China's lower demand in frozen pork <ul style="list-style-type: none"> ▪ China's domestic production has recovered from Asian Swine Flu outbreak in 2018 ▪ Fresh market more mixed, but Russia's imports have recovered very quickly since April 	<ul style="list-style-type: none"> ▪ Demand outlook for 2022 determined by the end of China's frozen pork import boom ▪ Recovery is expected in 2023 ▪ Forecast is subject to high volatility, due to uncertain economic outlook 	<ul style="list-style-type: none"> ▪ Lower dry (spot) rates make reefer cargo relatively more attractive to lines ▪ Equipment availability is improving <ul style="list-style-type: none"> ▪ A record number of new reefer boxes were produced last year ▪ Less surplus boxes ending up in China



Long-term historic growth of reefer trade (approx. 5% p.a.) outgrows dry containerized ocean trade

Annual growth of containerized ocean trade, 2005-2022YTD

Year-over-year TEU change (%)



Reefer volumes decreased in 2022, after a decade of continuous growth



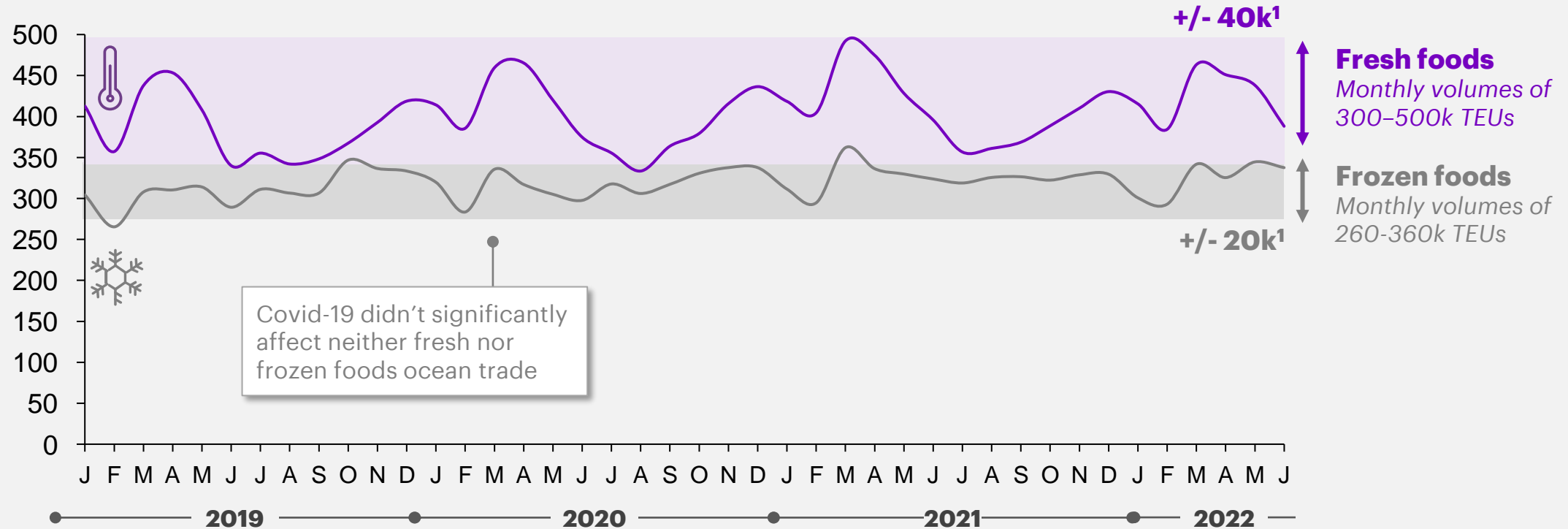
Note: Container ocean trade only; Reefer container trade described as "Temperature Control" in Seabury databases; 1) Includes only Jan-Jun data, compared against Jan-Jun 2021
Source: Seabury Cargo Global Ocean Trade Database; Seabury Cargo analysis (September 2022)

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Container trade of fresh foods is highly seasonal and poses a challenge for Lines to manage their capacity

Global ocean trade of perishables, Jan 2019 – Jun 2022

Thousand TEU

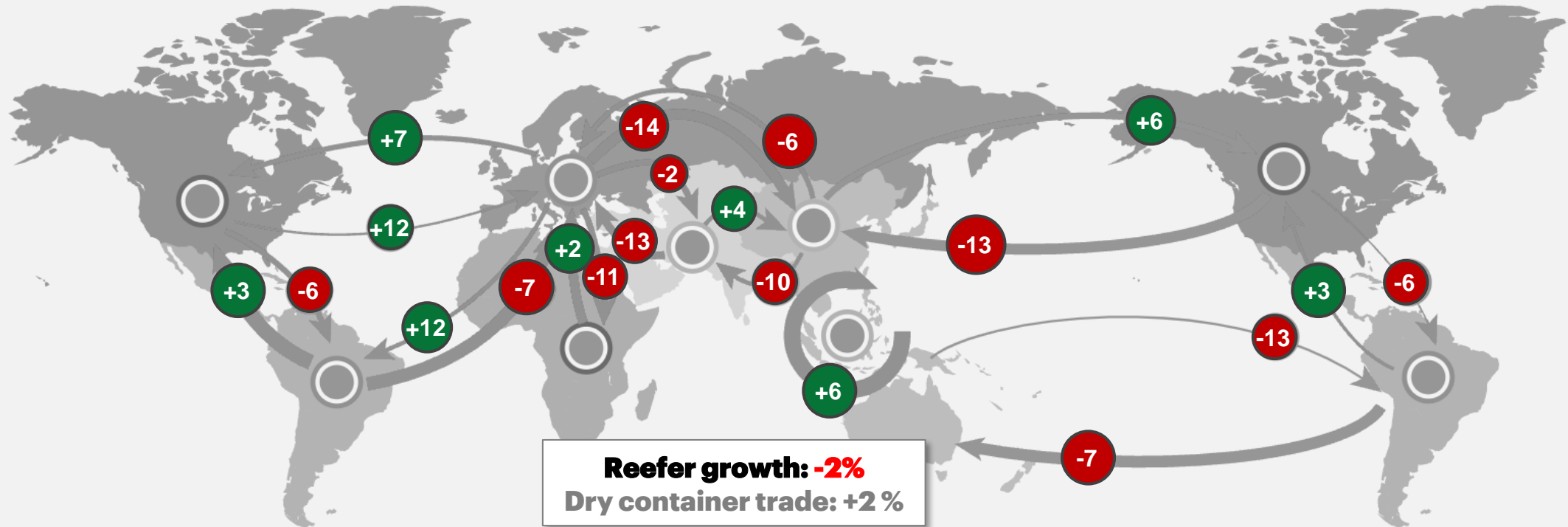


Container trade in frozen foods is reasonably stable across the year

Reefer trades grow less than dry trade in 2022, especially into Asia Pacific and from Latin America to Europe

Reefer trade growth by trade lane, 2022 YTD¹ vs. 2021

TEU change (%)



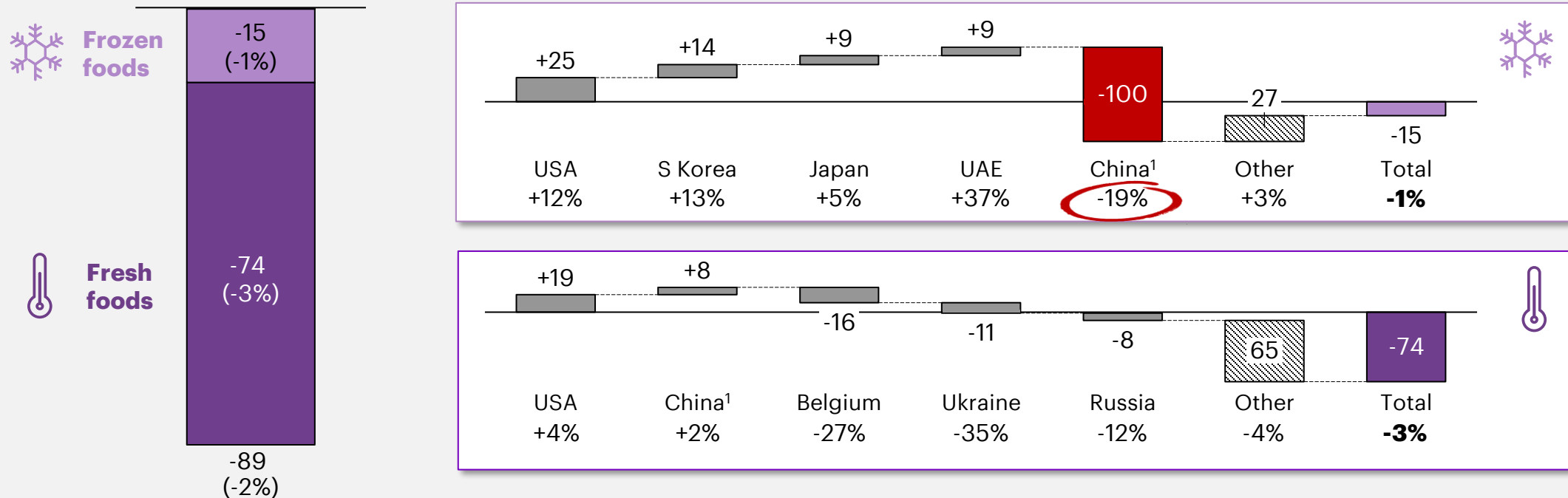
Positive growth is mainly seen on the smaller reefer trade lanes



Both fresh and frozen foods trade saw negative growth in 2022 YTD

Growth of perishables trade by product type and destination, 2022 YTD² vs. 2021

Thousand TEU



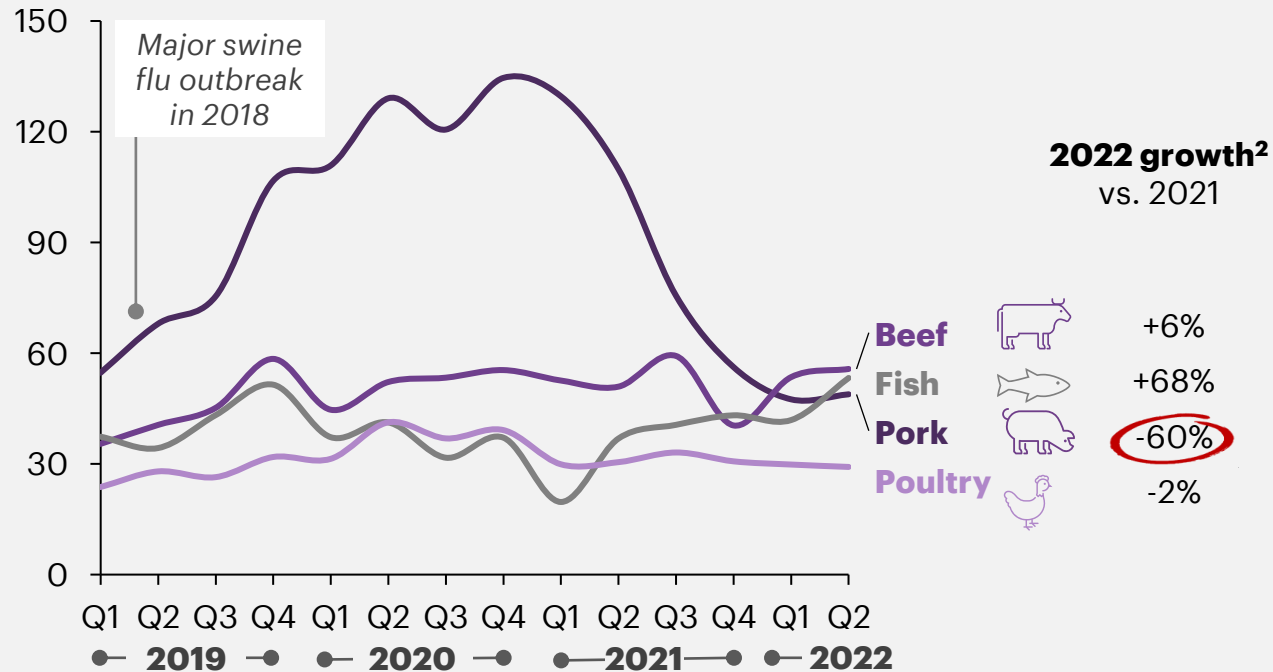
Frozen food imports into China (&HK) are the main reason for the decline in reefer trade



China's frozen food import mix has drastically changed this year, and pork is no longer the biggest commodity

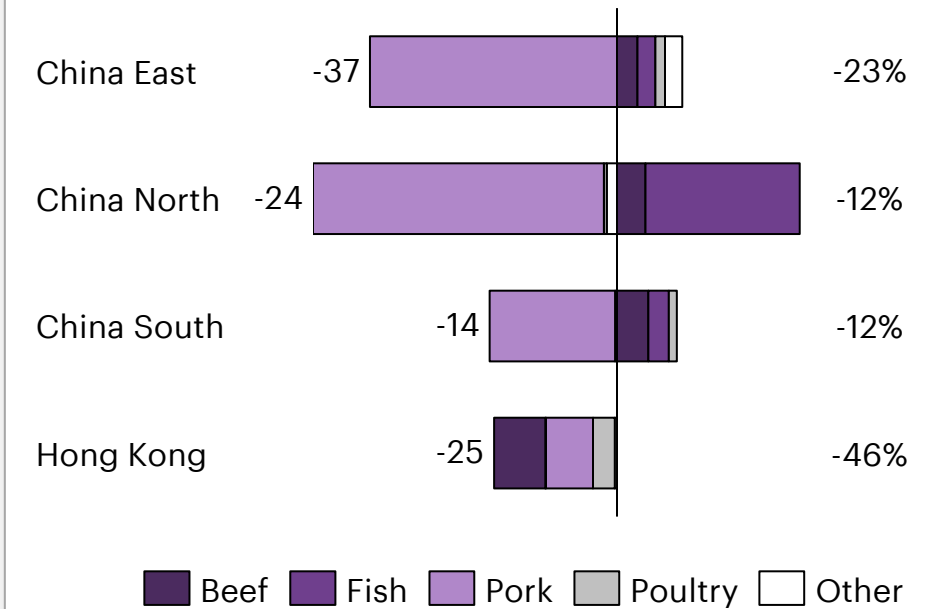
Frozen food ocean imports into China¹, 2019-2022

Thousand TEU



Frozen foods ocean import growth, by region

Thousand TEU change (Jan-Jun 2022 vs. 2021)



China's frozen pork import boom seems to be over



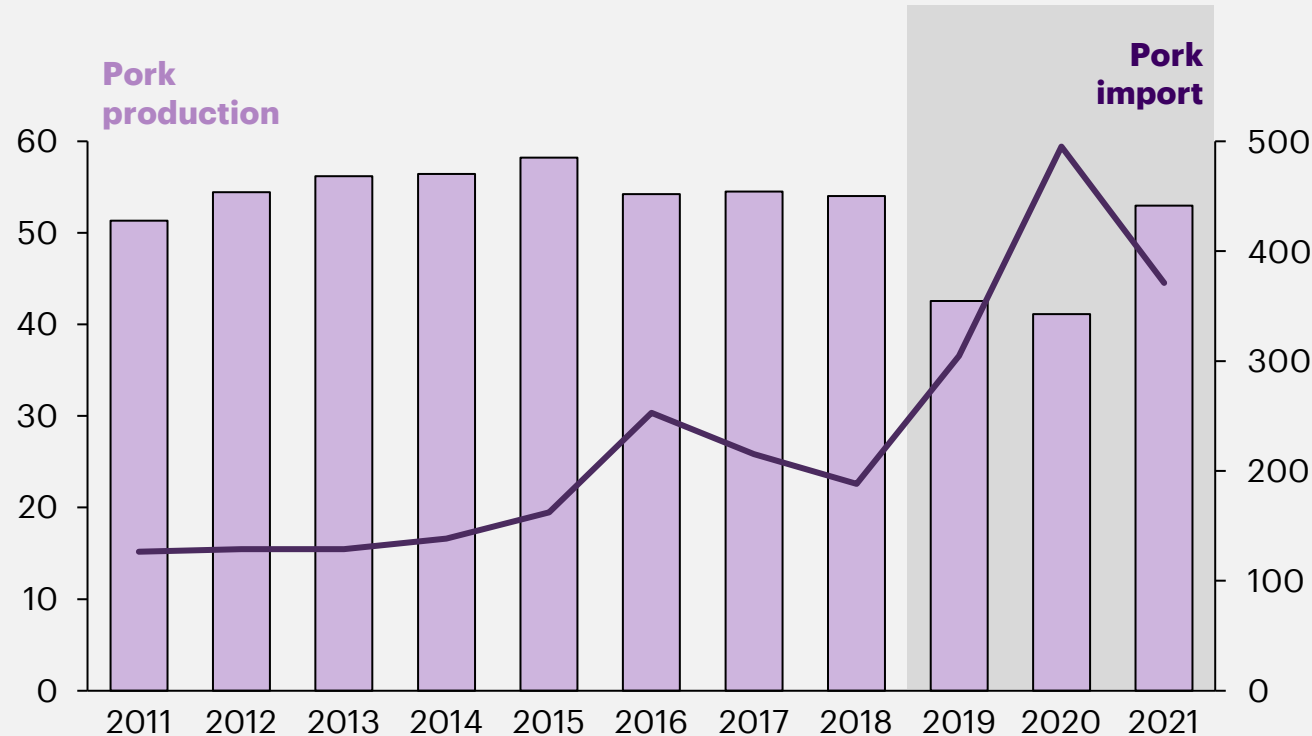
Note: 1) China includes Hong Kong; "Other" frozen food imports (e.g. Seafood, Fruits & Vegetables) not shown for illustrative clarity; 2) Comparison of Jan-Jun 2022 vs Jan-Jul 2021
Source: Seabury Cargo Global Ocean Trade database; Seabury Cargo analysis (September 2022)



With domestic production back to normal, **China's frozen pork imports** have come down

China¹ pork production and frozen pork containerized import, 2011-2021

Million metric tons, Thousand TEU



Comments

- Main origins of frozen pork are USA, Spain, Brazil
- Global **port market was highly dependent on China's imports**, with a share of >60% in 2020, which dropped to 37% in 2021
- There are **no real substitutes in the market** for China, as China lost 143k TEU, but other markets in total only gained about 19.5k

China's frozen pork import boom was driven by lack of domestic production



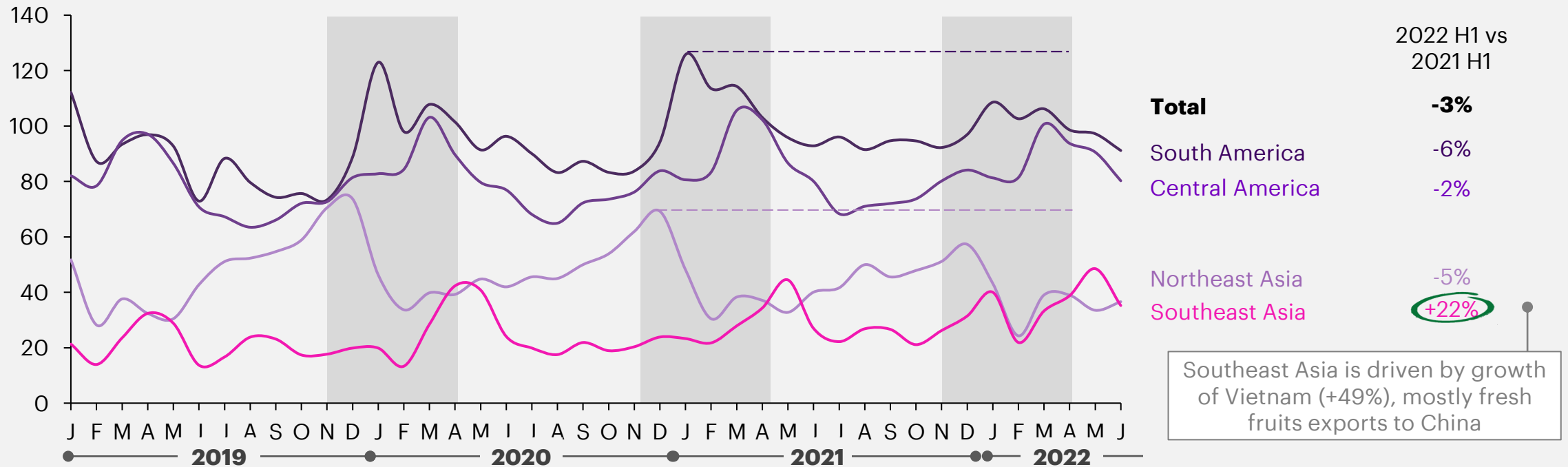
Note: 1) China includes Hong Kong
Source: statistica.com (National Bureau of Statistics of China), Seabury Cargo Global Ocean Trade database; Seabury Cargo analysis (September 2022)

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Fresh foods ocean trade recorded a much weaker peak season this year, especially from Latin America

Fresh foods ocean trade top exporting regions, 2019 - 2022

Thousand TEU

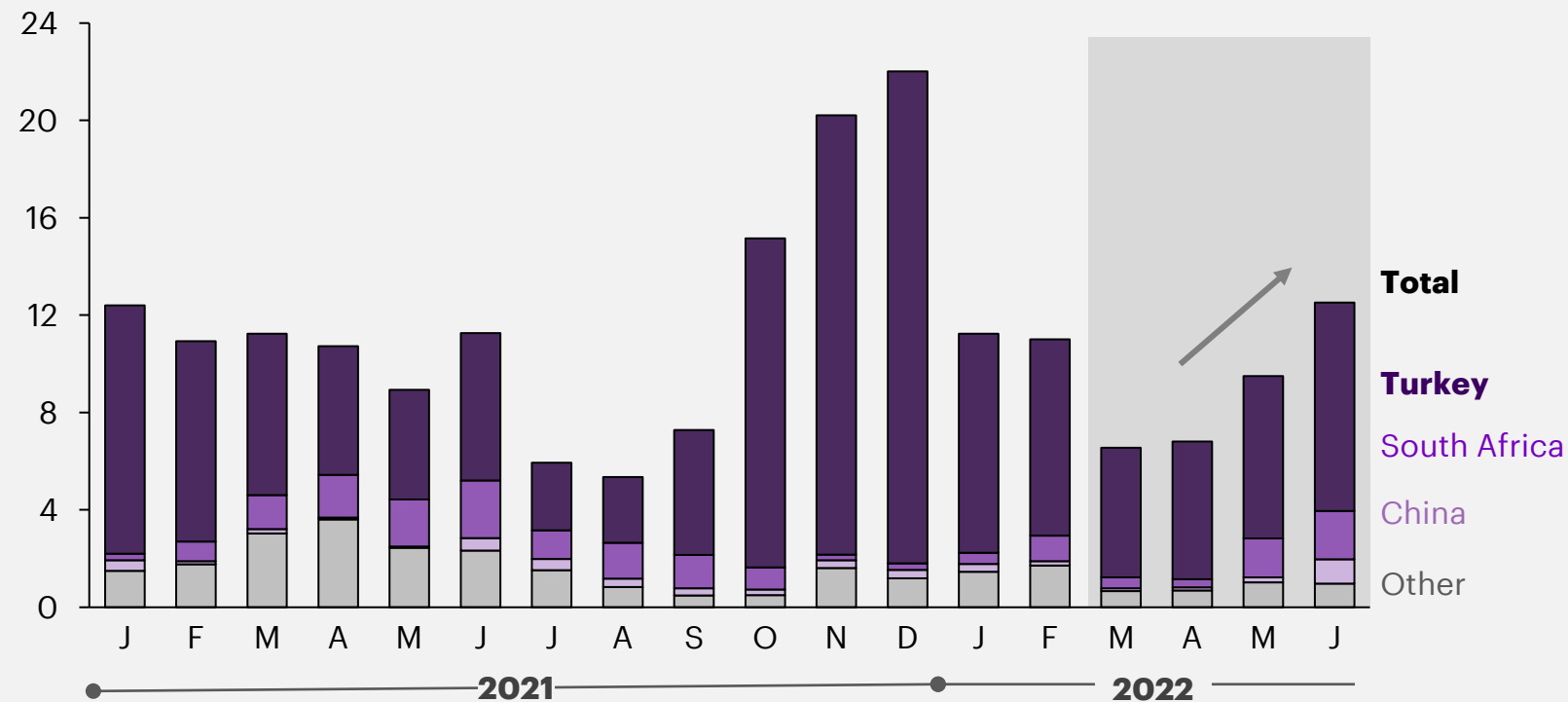


Only Southeast Asia shows significant export growth in 2022 (+22% v 2021)

Russia fresh foods ocean imports decreased in March (-42% vs '21), but are already recovering in June (+11% vs '21)

Fresh foods ocean imports to Russia by origin, Jan 2021 – Jun 2022

Thousand TEU



Most of the Russian fresh food imports from Turkey consist of **fresh fruits** (citrus fruits, apples, apricots and peaches)

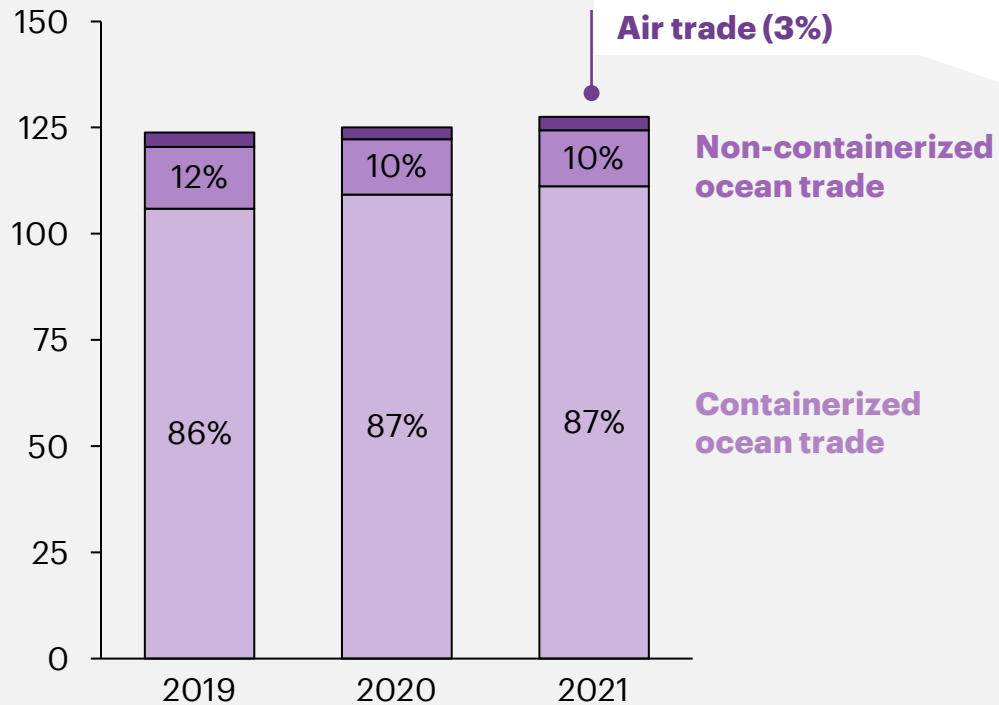
	March '22 vs '21	June '22 vs '21
Total	-42%	+11%
Turkey	-20%	+42%
South Africa	-67%	-16%
China	-42%	+94%
Other	-78%	+58%

After only two months of decrease, Russian imports are back to normal levels

Air cargo market for reefer cargo is very small compared to the ocean-going market

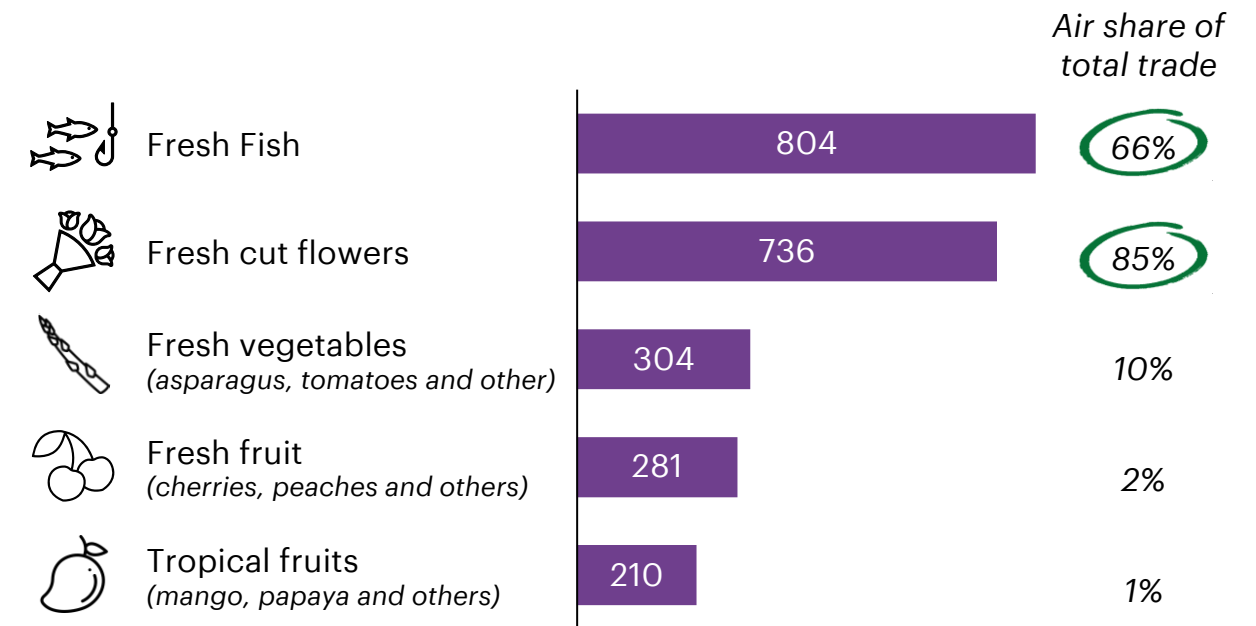
Total perishables market, 2019-2021

Million metric tons



Top perishable commodities shipped by air, 2021

Thousand metric tons





There are only few perishable commodities, such as fresh fish and fresh cut flowers, which are predominantly shipped by air



Global ocean trade forecast has been adjusted down based on recent developments, partially driven by reefer decline

Ocean trade forecast, 2022 – 2023

YoY growth

	2022F		2023F	
	May'22 Forecast	September '22 Review	May'22 Forecast	September'22 Review
 Reefer	+1.8%	-0.8%	+3.4%	+4.0%
		-2.6 p.p.		+0.6 p.p.
 General	+2.2%	+1.3%	+3.4%	+3.1%
		-0.9 p.p.		-0.3 p.p.

Comments

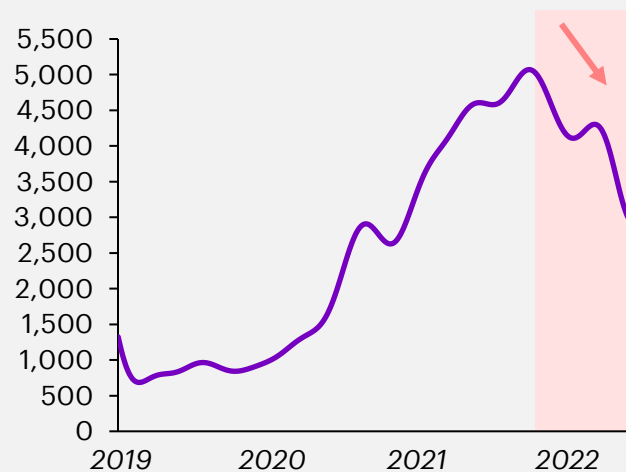
- Demand forecast based on **economic indicators**
- Population growth and income growth generally determine demand for refrigerated goods
- **Economic outlook uncertain**, and **downside risk** is larger than upside, due to high inflation/energy costs in European consumer market
- **High freight rates** might limit supply, particularly of fresh foods, as shippers can't trade at a profit

Reefer volumes in 2022 are expected to be lower (-0.8%) than last year



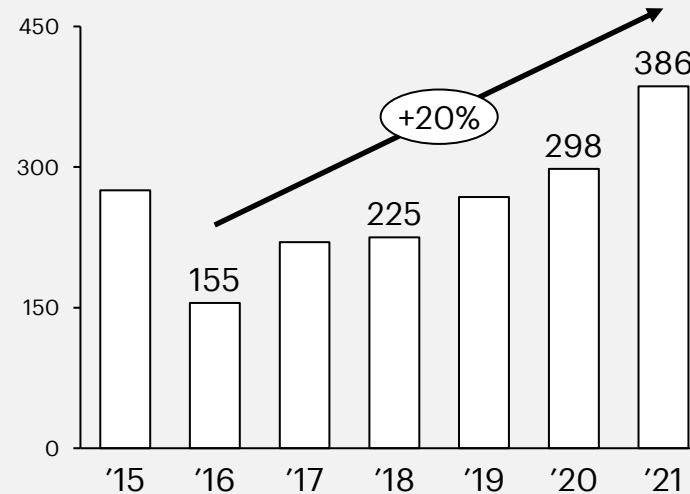
The reefer market depends on developments in the overall container market

SCFI, 2019-2022
USD/TEU or USD/FEU



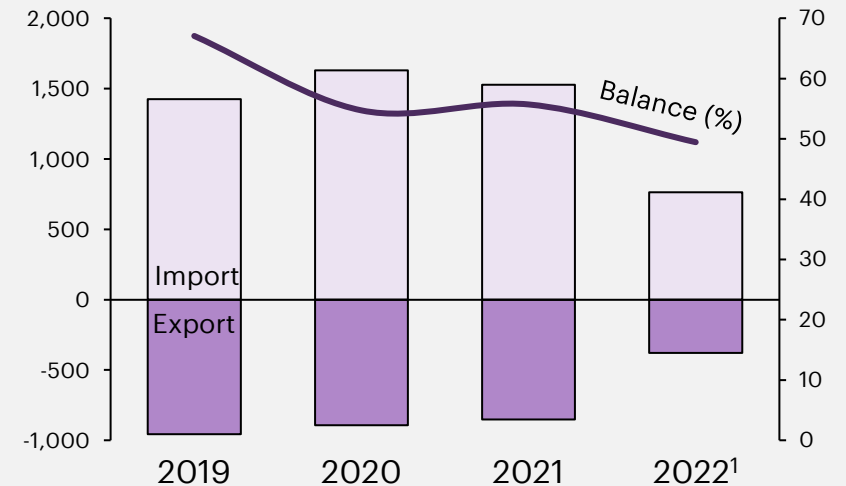
Container (dry) **spot rates are dropping**, making reefer business relatively more attractive, provided reefer rates drop less

Newbuild reefer production
TEU (Thousand)



New reefer equipment has been ordered and manufactured, helping global reefer equipment availability

China reefer trade, 2019-2022
TEU (Thousand), %



Imbalance for Chinese market has improved in 2022 YTD. This also has a **positive effect on global reefer equipment availability**

Despite uncertain demand, operationally the outlook for reefer shippers is improving compared to the last 2 years

Contact us for more information



Michel Looten

Director Maritime | Seabury Cargo

Accenture Strategy & Consulting

Email: michel.looten@accenture.com

Phone: +31 68 264 1019

Website: www.seaburycargo.com

