GLOBAL FREIGHT FORWARDING MARKET SIZE & FORECASTING 2021-2026

By Ti Research

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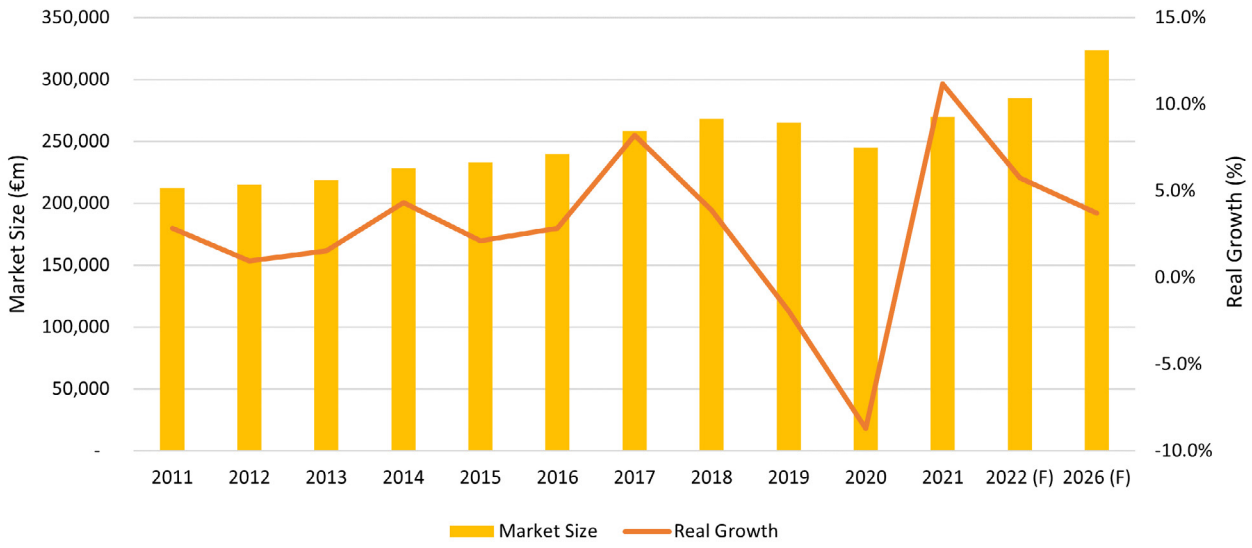
1. GLOBAL FREIGHT FORWARDING MARKET SIZE & GROWTH

1.1. Global Freight Forwarding Market Size & Growth 2021, 2022 (F) and 2026 (F)

After experiencing one of its most challenging years to date amid the Covid-19 pandemic, the global freight forwarding market bounced back strongly and grew by 11.2% in real terms (holding prices and exchange rates constant) in **2021**. This is the largest growth rate since 2011, bringing the market value to **€269,656m**.

Figure 1. Global Freight Forwarding Market Size & Growth (2011 – 2026)



Source: Ti

Growth in the freight forwarding market is a function of macroeconomic conditions and is largely determined by the strength of international trade. According to UNCTAD, global trade reached a record high in 2021, around US$ 28.5 trillion, which is an increase of almost 13% relative to pre-pandemic levels. The strong growth in international trade in 2021 was mainly the result of pandemic restrictions being phased out and surging demand for goods encouraged by government support schemes and economic stimulus packages introduced in many countries. Factors such as the expansion of the e-commerce industry and the rise of free trade agreements have also been contributors to the growth of the global digital freight forwarding market.

Growth in the freight forwarding market was led by air freight. The **air freight** market grew more than double the growth rate of the sea freight forwarding market in 2021. With a real growth rate of 14.9%, the

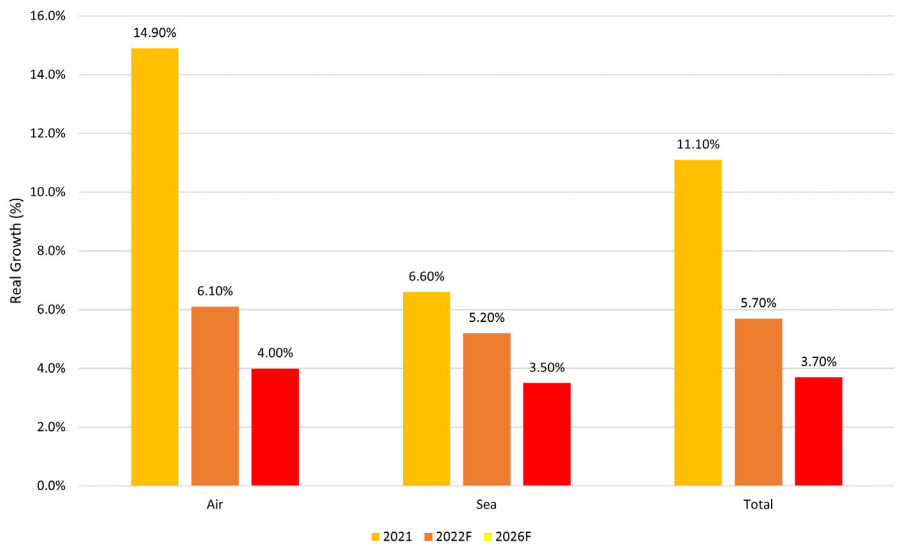
air freight market reached a nominal value of **€121,404m**. Throughout 2021, the growth in the air freight forwarding market was driven by a strong demand for goods, including PPE towards the end of the year which are usually transported by air, as well as supply chain bottlenecks in the sea and land transport. The latter has resulted in some cargo migrating to air freight to get around the shipping problems, providing a boost to the air freight market.

In the **sea freight** forwarding market, growth opportunities were lost due to a shortage of carrier capacity and port congestion. These sector-specific supply factors held back growth in the sea freight forwarding market which grew by 6.6% in 2021 in real terms, to reach a nominal value of **€148,252m**. Demand for sea freight was considerably higher than available capacity, pushing prices up around 69.8%.

As the drivers of the growth momentum are likely to gradually abate, global trade growth is expected to moderate in 2022. As a result of this continued but weakened global economic recovery, the global forwarding market is expected to grow at a slower pace in **2022** (5.7% in real terms) and reach a market value of **€284,868m**. Continuing the trend from 2021, growth will be driven by the **air** freight forwarding market, which is forecasted to grow by 6.1% in real terms. 2022 should see a partial return to more normal conditions in the air freight sector, but growth will still be stronger than usual, resulting in the air freight forwarding market growing faster than GDP and trade growth. The **sea** freight forwarding market will have to endure more months of challenging conditions caused by the capacity crunch as new capacity is not set to kick in till 2023.

2026 forecasts are more pessimistic than previously as inflation challenges intensify, the war in Ukraine threatens global energy supplies and consumer spending slows. As a result, the global freight forwarding market is expected to grow at a **3.7% CAGR** over the five years to 2026. The **air** forwarding market is forecasted to exhibit slightly faster growth, expanding at a 4.0% CAGR over the period, while the sea forwarding market is expected to grow slightly less quickly at 3.6% CAGR over the period. Increases in cross border e-commerce do however provide a bit more optimism, along with the return of capacity via passenger flights after the ending of Covid restrictions.

Figure 2. Total, Air and Sea Freight Forwarding Market Growth (2021, 2022F, and 2026F)

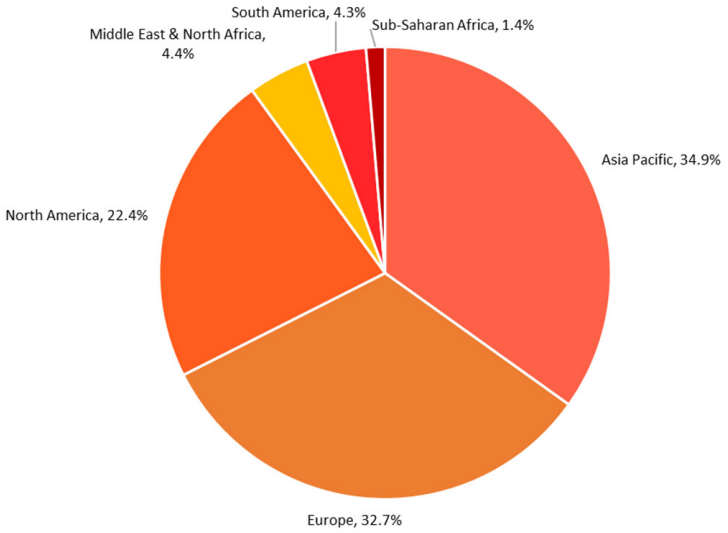


Source: Ti

1.2. Overview of regional performance

In 2021, three regions saw double-digit growth in the total freight forwarding market: Asia Pacific (13.8% growth in real terms), North America (11.2%) and South America (11.1%). The Asia Pacific was the only region to outpace the global growth rate of 11.2%. Europe exhibited weaker growth than the global average but remains the second-largest freight forwarding region.

Figure 3. Total Freight Forwarding Market Size 2021 by Region

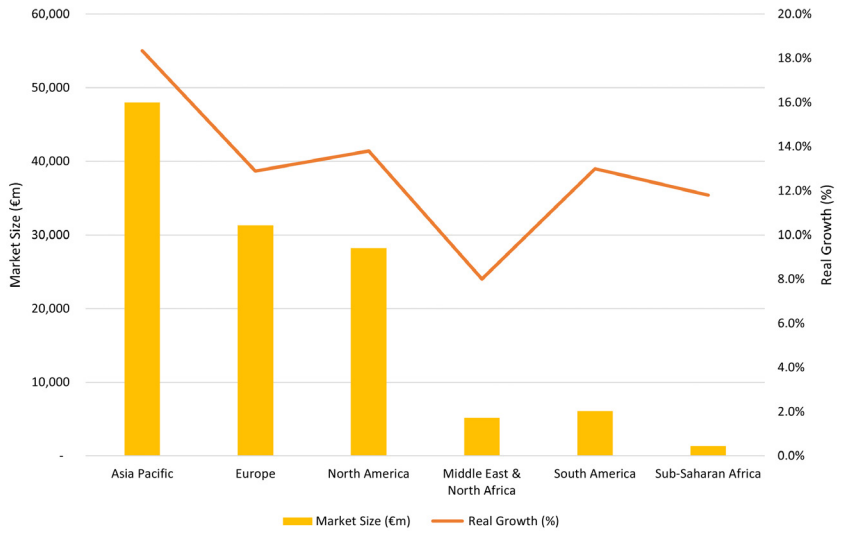


Source: Ti

Air Freight Forwarding

- Growth in the **Air** freight forwarding market was driven by the Asia Pacific (18.3%), the only region to outpace the global growth rate of 14.9%.

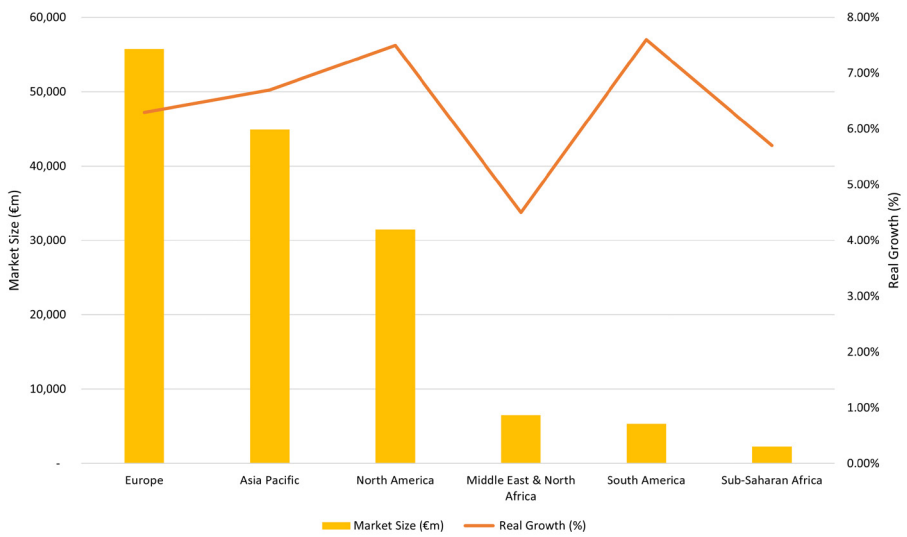
Figure 4. Air Freight Forwarding Market Growth & Size 2021 by Region



Source: Ti

Sea Freight Forwarding

Figure 5. Sea Freight Forwarding Market Growth & Size 2021 by Region



Source: Ti

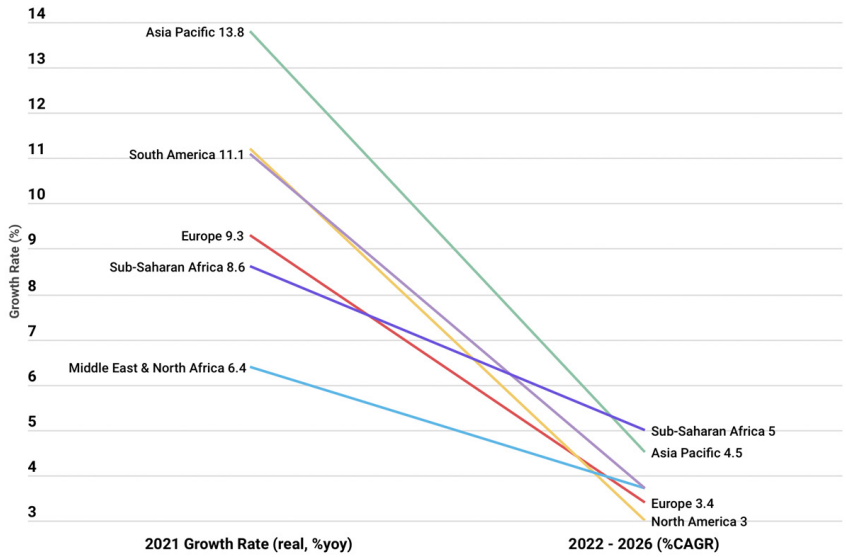
- Growth in the **Sea** freight forwarding market was driven by South America (7.6%) and North America (7.5%).

2022 and 2026 Forecasts

- **North America** is forecasted to grow faster than the Asia Pacific region in both the sea and air freight forwarding market in 2022.

- **Sub-Saharan Africa** is forecasted to be the fastest-growing air forwarding market in 2022 (6.8%) and 2026 (6.0% CAGR over the five years to 2026). The region's sea freight forwarding market is also forecasted to experience the fastest growth rate of all regions in 2026.

Figure 6. Total Freight Forwarding Market Growth Forecasts by Region 2022 and 2026



Source: Ti

2. HIGH-LEVEL MARKET DEVELOPMENT

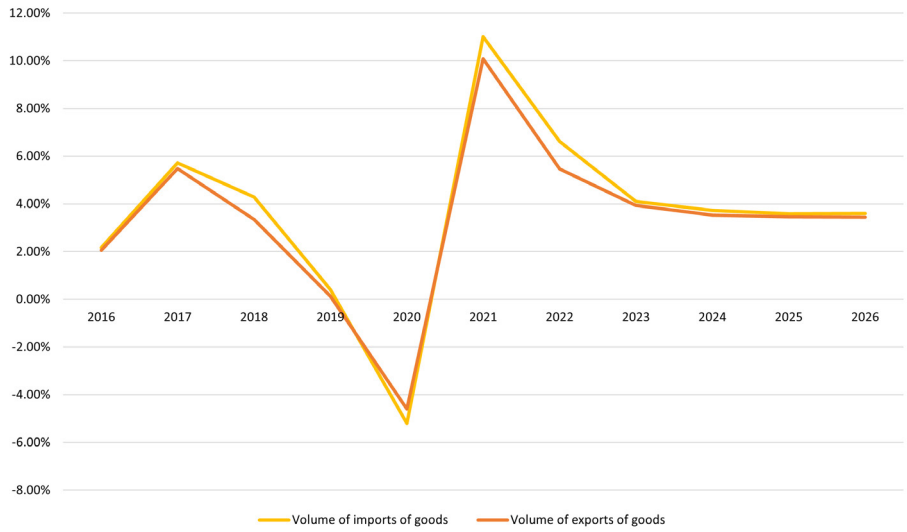
The global freight forwarding sector has been plagued by a number of supply and demand-side factors in the past two years. The following section analyses the key factors influencing demand, growth, opportunities and challenges within the freight forwarding market.

2.1 Demand-side contributions to air and sea freight forwarding growth

- Global trade

IMF data indicates that global trade rebounded in 2021 and saw imports and exports growth rise above pre-pandemic levels. Imports and exports growth is however expected to moderate in 2022 to 5.47% and 6.62% respectively, as trade approaches its pre-pandemic long-run trend.

Figure 7. Volume of imports and exports growth – World 2016-2026



Source: IMF

The new export order component of the manufacturing PMI, which is also a strong indicator of air and sea cargo growth and a reliable indicator of demand changes in the freight forwarding market, continued to increase throughout 2021, according to Markit. It is expected to ease in 2022, signalling dampened growth in the air and sea freight forwarding market throughout the year and beyond.

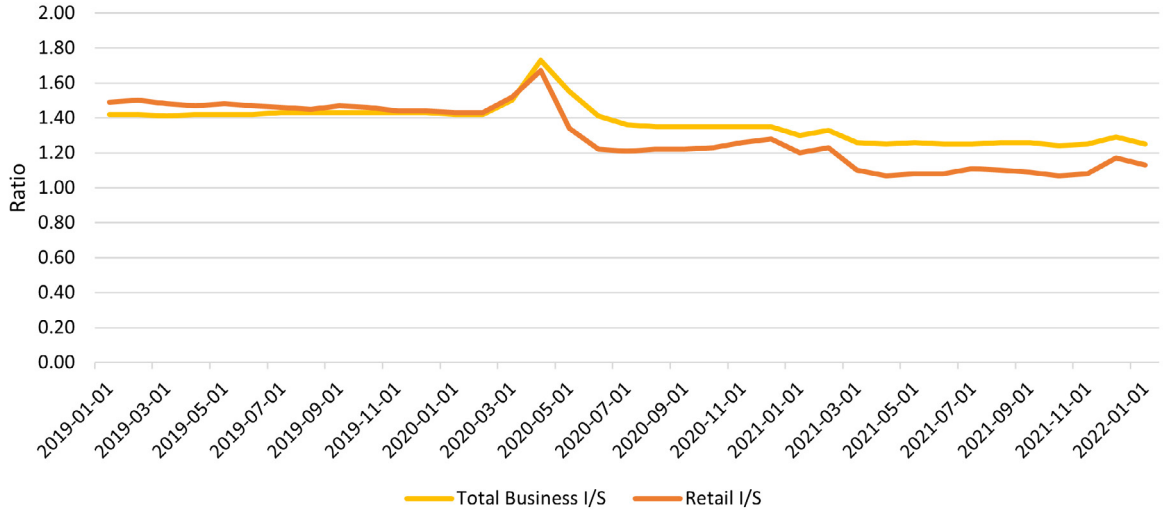
- I/S ratio

Despite the positive trend in manufacturing activity, stocks of goods remained low, with the US inventory-to-sales ratio sustaining record lows throughout 2021 (1.27 in 2021 compared to 1.43 in 2020 and 1.42 in 2019). Retailers in the US faced a particularly low inventory to sales ratio throughout 2021 (1.11).

In periods of low inventory, air freight benefits disproportionately as shippers seek to rapidly move stock into the right locations and replenish stores to match supply with demand. This historically low inventory to sales ratio, therefore, indicates strong air cargo demand. Whilst the re-stocking cycle can be seen as an air freight phenomenon, greater demand still leads to surging sea freight demand.

As a result, in 2021, the US air freight forwarding market benefited greatly from depleted inventory levels and grew strongly in real terms (13.8%) to reach a value of €18,591m.

Figure 8. US Inventories to Sales (I/S) Ratio



Source: US Census Bureau

- Demand for semiconductors

The rising demand for semiconductors amidst the global semiconductor shortage supported air cargo growth throughout 2021. Although shortages have been painful for customers, and in particular auto-manufacturers, the semiconductor industry itself is thriving.

Air cargo operators and forwarders are the main beneficiaries of the rising demand for semiconductors. This type of product is being transported via air because manufacturing times are compressed so there is a need to get to market quickly but also a need for high security and premium handling.

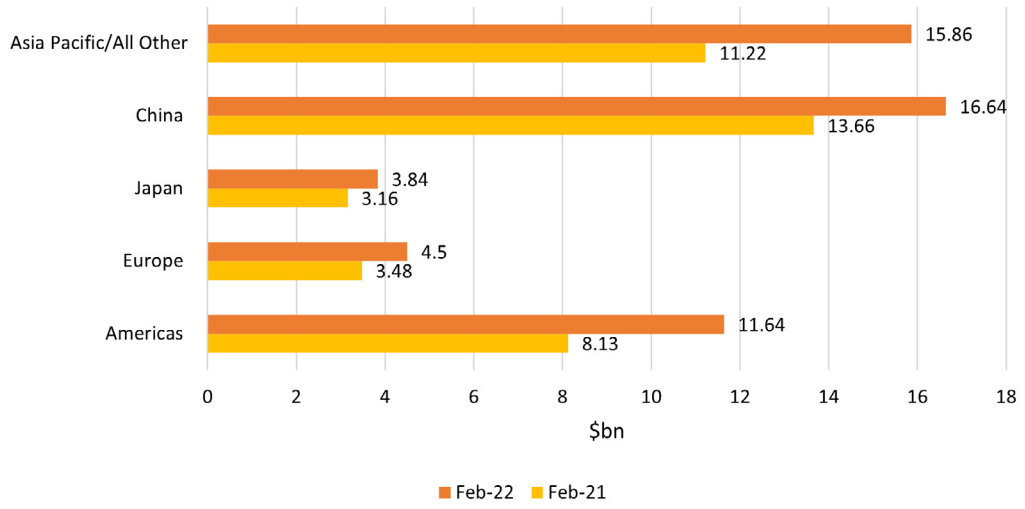
According to the Semiconductor Industry Association (SIA), global semiconductor sales remained strong in February of 2022, increasing by more than 20% for the eleventh consecutive month on a year-to-year basis. Semiconductor demand is expected to keep on rising throughout 2022 and 2023, supporting air freight growth.

The trade lanes benefiting the most from the rising demand for semiconductors are intra-Asia, APAC-Europe and APAC-North America, where the largest exporting and importing countries of semiconductors are situated. With global demand for smart devices and components accelerating, the industry is well-positioned for growth and represents a fast-growing sector for air freight forwarders operating on these trade lanes. Major forwarders, such as DHL and CEVA have been expanding their logistics solutions to respond to the ever-increasing demand that semiconductor manufacturers in the APAC region have been experiencing.

Major semiconductor producers, such as TSMC and SMIC are ramping up production capacities to meet growing demand as the global semiconductor shortage rages on. European semiconductor producers such as Bosch and Infineon as well as US producer Intel have also announced the expansion of operations

to meet demand. Overall, rising demand for semi-conductors will continue to provide a boost to air freight volumes in the short and medium-term.

Figure 9. Global semiconductor sales

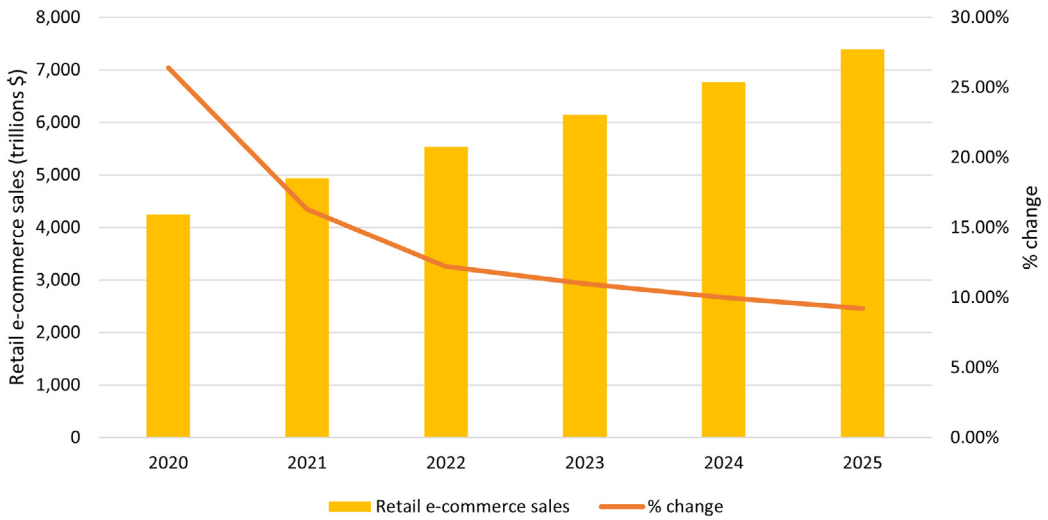


Source: Semiconductor Industry Association/ Ti

- e-commerce

e-commerce continues to contribute strongly to robust air and sea cargo demand. According to eMarketer, global e-commerce sales grew by 16.3% in 2021 and are expected to stabilize in 2022 (12.2%), after two years of unpredictable circumstances and unusual growth patterns. But even in a slower-growth environment, total e-commerce sales will be very strong. As a result, the air and sea freight market will continue to benefit from continued strong demand in e-commerce.

Figure 10. Global retail e-commerce sales 2020-2025



Source: eMarketer/Ti

- Impact of the cost of oil on air and sea freight transport

Sea Freight

Shipping is perceived, indeed perceives itself, as highly exposed to shifts in the price of fuel. Although traditionally it used very cheap bunker fuel, the cost of that fuel has always been a significant feature of the market, so much so that billing is characterised by a 'Bunker Adjustment Factor', or BAF, is attached to any freight bill enabling prices to be increased or decreased with the price of oil. This suggests that fuel is a decisive cost driver in determining the price of sea freight. However, the data suggests that this is not true.

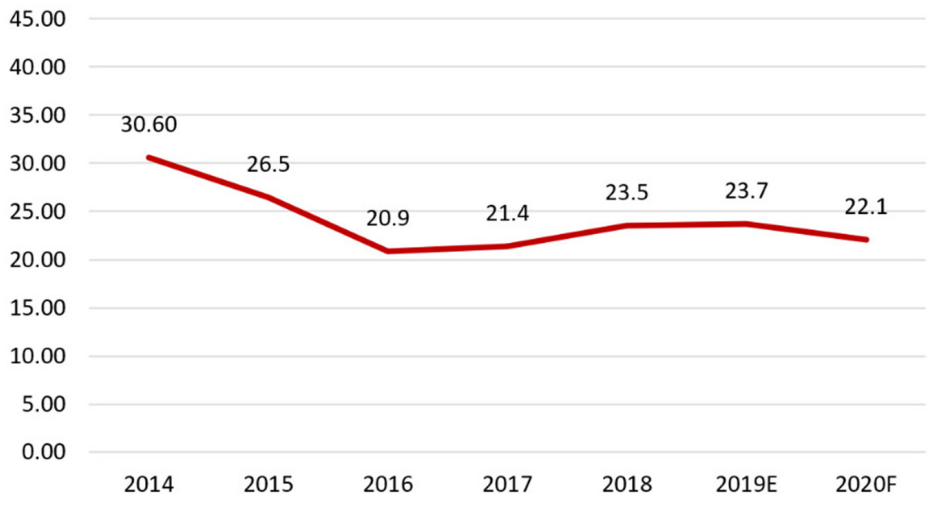
It is essential to grasp that freight rates are determined by the supply and demand of ships and containers. Between Q4 2020 and Q4 2021, the increase in freight rates was driven not by fuel prices but the stripping-out of shipping capacity as a result of congestion in the US and China.

This is not to say that oil price rises cannot affect the price of shipping. For example, if freight rates fall violently and the price of bunker fuel increases equally violently, then this may have an impact in that it would sustain the high costs of sea freight. But the increases in fuel prices would have to be quite violent for this to happen.

Air

Like container shipping, air transport is perceived as being highly dependent on the price of oil and oil products. However, like container shipping, the reality of the role of oil prices in the air freight market is different, with the sector having become somewhat less energy-dependent over the past couple of decades than might be expected.

Figure 11. Fuel as a cost driver in the airline sector (% of total costs)



Source: IATA

Dependent on the price of oil, fuel represents between 15% to 30% of the costs of aircraft operations.

It can be seen that even if the price of fuel is highly volatile, the price of airfreight will probably remain within the bounds of what is called 'viability'. As with container shipping, the price of air freight is determined by demand & supply. Of course, this relationship has been extreme over the past two years.

The disappearance of 90% of belly freight combined with booms in demand for medical equipment, followed by the extreme disruption of airport operations placed possibly the greatest strain on the relationship between demand & supply on aircraft freight capacity in the past fifty years.

In this context, rises in oil prices will have to become fairly extreme to exceed such forces. The overwhelming likelihood is that the air freight market will move towards greater normality, with belly-freight capacity re-entering the market in volume and thus depressing prices. The speed at which this will happen is unclear, however, the impact of higher oil prices is likely to be secondary to this.

2.2 Supply-side constraints to air and sea freight forwarding growth

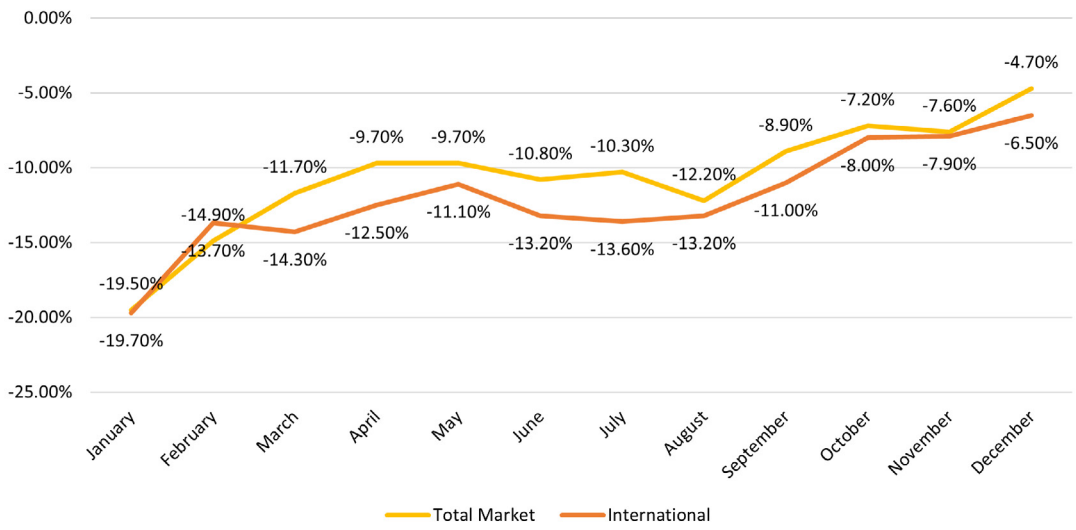
- Air freight capacity

Despite all economic indicators pointing towards continued strong demand for air cargo, capacity constraints resulted in lost growth opportunities. Demand for air freight capacity continues to outstrip supply, contributing to increased yields and revenues among airlines. Even though air cargo capacity gradually increased during 2021 due to improvements in international passenger traffic, it was still 10.9% below 2019 (-12.8% for international operations) measured in available cargo tonne-kilometres (ACTKs), according to IATA. This is because passenger travel is still not at the same levels as pre-Covid, so 'belly' capacity in passenger aircraft, typically used to transport cargo, is limited.

Boeing's vice president of commercial marketing, Darren Hulst, recently stated that Boeing expects the aviation industry to recover to 2019 levels by the end of 2023 or early 2024, with domestic routes recovering first. Long-haul international passenger routes, the main capacity of interest for air cargo, would take the longest to return to 2019-levels, partly due to pandemic-related government restrictions.

A long-term reduction in the capacity provided by belly cargo is also possible. Justin Barrow, head of air freight for China at Maersk Asia Pacific, recently stated that "the Boeing 747, for example, may not return to the skies as airlines opt to renew their fleets and buy newer, more fuel-efficient, but smaller, aircraft for international passenger transport". This will add further pressure on air cargo capacity. What is more, the war in Ukraine is also reducing air cargo capacity.

Figure 12. Available cargo tonne-kilometres (ACTKs) in 2021 (% change vs the same month in 2019)



Source: IATA

In response to these capacity market developments, adding air freight capacity to key trade lanes has been a key objective for forwarders over the past year. These companies have been gradually increasing their access to chartered air freight capacity, particularly out of Asia, to meet the fast-growing e-commerce demand from the US. One notable example is Maersk which has significantly expanded its controlled air cargo capacity with the acquisition of the air freight forwarder Senator International and added five freighter aircraft to its global air network. DHL also expanded its air freight capacity recently, through a "long-term strategic" relationship with Cargojet, a Canadian freighter operator that already sells space on its aircraft to DHL. Kuehne+Nagel, DSV Panalpina and CMA-CGM also continued to build their air freight capacity across their networks with new charter services.

Overall, while all economic drivers that shape the air freight market indicate strong air cargo demand, limited air cargo capacity continues to weigh down air freight growth. However, looking ahead, the removal of travel restrictions by individual countries should be a tailwind for capacity.

- Sea Freight Capacity

Port congestion which created a mismatch between supply and demand characterised global supply chains throughout 2021 and slowed down growth in the sea freight market. According to Maersk estimates, around 12%-15% of global container ship capacity has effectively been taken out of circulation by congestion in 2021. According to Kuehne + Nagel, 80% of the global sea freight disruption is associated with North American ports, which is unsurprising considering the record import volumes from Asia that have overwhelmed US port terminals.

The congestion in the ocean freight market continues to push traditional ocean shippers into the air freight market, adding to demand and driving up air freight rates.

The price difference between air and ocean had narrowed during the past year, making the shift to air slightly less costly than before the pandemic. Before the pandemic, the average price of global air cargo was 12 times more expensive than sea shipping. Towards the end of 2021, the cost to move goods by air was about 2.5 times more expensive than before the pandemic.

Ocean freight and port terminal congestion show few signs of improvement and as a result, air freight will continue to be the only option for shippers to address critical supply chain delays.

- War in Ukraine

As the war in Ukraine continues, more and more companies are ceasing operations in Russia, wreaking further havoc on an already incredibly disrupted supply chain.

The war will act as a drag on the world economy, with developing countries at particular risk. The UNCTAD forecasts a deep recession in Russia and "significant" slowdowns across Western Europe and most of Asia.

Air transport is already being disrupted although not catastrophically. Ukrainian airspace is closed, ending movements by air of roughly 3.3% of total air passenger traffic in Europe, and 0.8% of total traffic globally, per 2021 traffic data, according to IATA. The Russian airspace is also closed to carriers. As a result, flights have to be rerouted or cancelled. The most heavily impacted trade lanes are Europe-Asia and Asia-North America. Airlines are now taking southerly routes for flights between Europe and East Asia, which add to journey times and thus removes some capacity from the air freight market, although in the context of the present distressed state of airlines the development will only add to the volatility in the sector.

In addition to impacting capacity, the war also affects manufacturing and agriculture. Productivity in Ukraine's export sectors has dropped severely, with grain and wheat yield reducing majorly. Neighbouring countries such as Poland are also showing signs of struggle; VW's Polish units recently announced it was halting production amid supply chain problems caused by the Ukrainian war. Electronics is likely to take the largest hit, as Russia supplies over 40.0% of the world's palladium, one of the main resources in the production of semiconductors. Computer chips also require neon, of which Ukraine produces over 70.0% of the world's total supply.

Sea freight is being affected by disruption to operations in the region. Maersk has suspended bookings to Russian ports and other lines have followed. Due to higher fuel costs, rerouting efforts and lack of carrier capacity, the war in Ukraine is expected to lead to even higher freight rates.

- China's strict zero-Covid policy

China's strict Covid lockdown policies are adding uncertainty over the prospects of the global air and sea freight market in early 2022. Ports, airports and trucking operations across the country have been subject to local shutdowns since January in an effort to prevent the spread of the Omicron variant. Flight cancellations added to the capacity crunch in air cargo, reducing international 'belly' capacity and prompting the US to retaliate by suspending flights by Chinese carriers.

The recent spike in Covid cases already resulted in congestion around Chinese ports, with very significant queues of vessels outside the main container terminals, but also in factory closures. The most frequently cited example is that of Tesla which has sustained output, in part by getting its workforce to sleep inside the factory. Other producers have not been so lucky.

Shippers are now looking at alternative cargo options in the Far East. Maersk, Hapag-Lloyd and ONE have announced that dangerous goods and refrigerated containers will be transferred to other ports. Exports have started to shift to Ningbo, however, the situation in that region has also worsened due to an increase in Covid cases, according to Zencargo.

In addition to limiting available cargo capacity and output, the lockdown policies will have a wider-ranging and longer-term impact on global supply chains and freight rates. Global supply chains are likely to end up in a scenario similar to the one experienced in 2021 – once factories re-open, a surge of cargo will come out of China that will need to be shipped to the US and Europe, but there won't be enough capacity in China's ports to load these goods, resulting in another surge of ocean freight rates and a domino effect on global supply chains.

ABOUT TI

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