Transport & Logistics Barometer

2023 mid-year analysis

M&A deals, joint ventures and strategic alliances
in the transport and logistics industry

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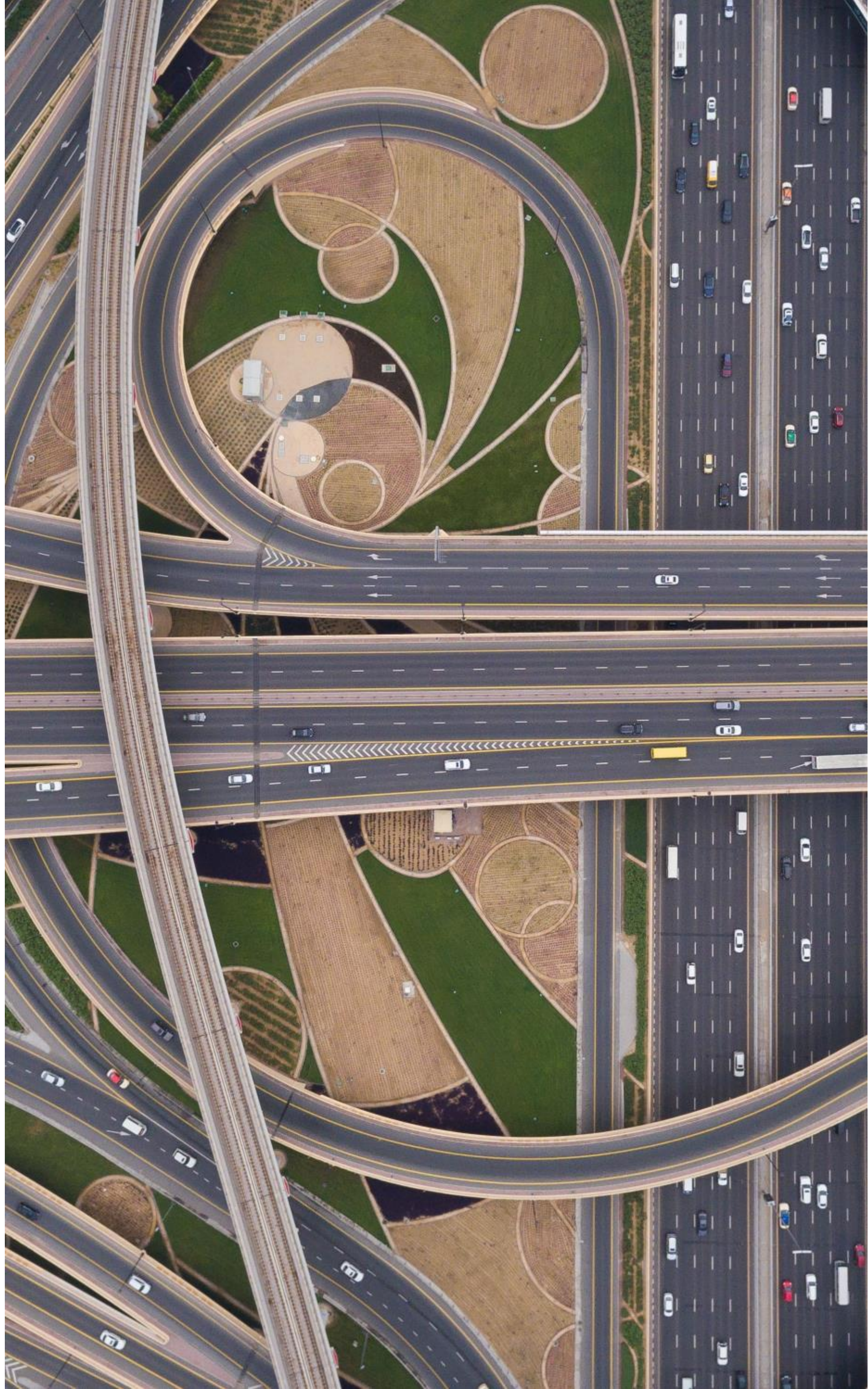
Agenda



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Summary

Summary

85

mergers and acquisitions (M&A) worth at least $50 million were announced in the transport and logistics (T&L) industry in the first half of 2023 - the lowest level of deal activity in the last ten years. The significant slump was felt across all industries and regions, triggered by the fragile economic and geopolitical environment. The total deal value in T&L bottomed at $34.3 billion (average of the last ten half-years: $75.1 billion), while the average deal value of $404 million was last lower in the first half of 2020 when COVID-19 spread worldwide.

38%

of the total deal value is attributable to financial investors, a strong setback compared to 2022 (64%), and 52% of the total number of deals. Difficult financing conditions based on central banks' tight monetary policy to allay inflation have led to reluctance with a focus on smaller acquisitions. Although the elevated median sales multiple of 3.1 reflects that investors are still willing to pay an increased price for selected, high-quality targets, it is to a lesser extent than in the past years. This is also indicated by the low number of 5 megadeals, deals with a value >$1 billion. Strategic investors have also engaged in fewer deals, but they are currently less dependent on debt capital as many T&L companies benefited from the crisis years with high profits.

40 deals in Logistics and Trucking

Including three megadeals, this was again the most active segment when it came to M&A deals and strategic partnerships. Many deals were made by organisations from outside of the T&L industry, primarily financial investors but also strategic investors from a variety of industries. In the parcel segment, some major industry players established joint ventures or strategic alliances to enhance delivery performance and customer service. Alliances are also a means of choice when it comes to enhancing supply chain visibility through AI-powered solutions.

The Shipping subsector

was responsible for the largest acquisition of the year so far, which is representative of the expansion strategy of shipping lines in recent years to become fully integrated logistics providers. CMA CGM completed the acquisition of Bolloré Logistics for $5.1 billion. Although there is still a lot of capital available, we believe that such large acquisitions are becoming less likely in the coming months due to the lack of suitable targets. In total, the Shipping subsector accounted for 22% of all announced deals, seven of which related to port infrastructure.

The outlook

for the T&L industry is highly uncertain as many downside risks persist. However, we expect a momentary slowdown rather than long-term recessionary developments. M&A activity is likely to remain subdued throughout 2023 but we anticipate a number of small- to medium-sized deals, take-privates and capability-building mergers and acquisitions. Large players will continue to be busy with the integration of past acquisitions and active cost management to cope with deteriorating profit margins.

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Introduction

Signs of fragile recovery

The year 2022 was marked by trade disruptions and soaring commodity and energy prices. In combination with persistent inflationary pressures and central banks' tight monetary policies, this ultimately triggered reorientation and adjustment in many economies (e.g. gas flows). The reason for the loss in global growth momentum was the outbreak of the Russian war against Ukraine and increasing geopolitical fragmentation accompanied by ongoing COVID-19 policies, particularly in Asia.

Although these factors are still reverberating, it seems that the global economy has started to improve in the first half of 2023, albeit with high fragility. Global headline inflation has been decreasing for multiple months now due to lower fuel and energy prices as supply constraints ease and demand weakens, particularly in the United States, Europe and Latin America, and China's full abandonment of its COVID-19 measures, which has stimulated economic activity. Core inflation, in contrast, is proving persistent, and both global headline and core inflation rates remain elevated at twice their pre-2021 levels, significantly above targets.

According to the World Trade Organization, global trade remained subdued in the first quarter of 2023 but with first signs pointing to a potential upswing in the coming months. The WTO Goods Barometer latest reading increased to 95.6 from 92.2 in March (baseline = 100). The Barometer's component indices, however, draw a diverse picture and imply an uneven recovery: While both the export orders index (102.7) and the automotive products index (110.8) have risen above trend, the indices for container shipping (89.4), air freight (93.5), electronic components trade (85.2) and raw materials trade (99.0) remained below trend.

Sources: International Monetary Fund (IMF), OECD, World Trade Organization (May 2023)

Investment climate disturbed

Interest rates remained high in most markets as central banks are continuing to tame unusually high inflation with tight financial conditions. This has led to some financial institutions whose businesses rely on a continuation of a low interest rate environment faltering. The turmoil in the banking sector in the spring of 2023 has evoked tensions in the global financial system and caused concerns about financial stability.

The resulting uncertainty amid a fragile economy has created an unfavourable environment for deal-making as investors become more sensitive in the deals they conduct. Deal financing has become more expensive, causing financial investors to focus on smaller value deals in the middle market, which require fewer loans and lenders than megadeals. In addition, targets and assets with less debt on their balance sheets and lower-risk target sectors like agriculture or infrastructure are gaining in attractiveness, but financial investors compete with strategic acquirers in this space.

The T&L industry has witnessed a solid base of financial investors in recent years, encouraged by an unprecedented level of asset-light opportunities and a low-interest environment. In the first half of 2023, financial investors engaged in about half of all deal announcements but they only accounted for 38% of the total deal value (2022: 64%). This represents a significant drop but confirms the general picture that megadeals are rather being avoided. This is also confirmed by the fact that the share of deal announcements with a value of less than $50 million in the total number of all announced deals has increased slightly compared to the previous two half-years. Looking at subsectors, it is not surprising that financial investors sought most targets in Logistics and Trucking, while a bunch of deal announcements concerned infrastructure targets. The rest is distributed with small shares among the other subsectors.

Strategic investors - unlike financial investors - are less dependent on external financing but can draw on their own capital for acquisitions. Many T&L players, e.g. shipping companies, have benefited greatly from record freight rates in the past crisis years and generated tremendous profits. They are now seeking opportunities to expand networks and extend their reach, e.g. through vertical or horizontal integration, and are taking advantage of financial investors’ reluctance in the current lending environment. They remain cautious about large deal values but the uncertain environment offers T&L players good chances to make selected acquisitions.

In the first half of 2023, strategic investors accounted for a share of 48% (2022: 52%) in the total number of deals and of 62% (2022: 36%) in the total deal value with a focus on targets in Logistics and Trucking, followed by Shipping. A total of 27% of the deals announced by strategic investors were infrastructure-related. This shows that they also have targets on their radar that are considered to have a lower risk profile.

Overall, the increase of the median sales multiple from 1.7 in 2022 to 3.1 shows that investors are still willing to pay higher prices for selected, low-risk targets in the T&L industry. This is particularly true for financial investors, who paid almost thrice as high prices as strategic investors with a median sales multiple of 7.2 and 2.5, respectively.

Sources: IMF, Pitchbook, Refinitiv, PwC analysis

M&A activity bottomed

High uncertainty and increased cost of capital, coupled with the depressed economic situation, have resulted in the lowest level of M&A activity in the T&L industry and across all sectors in the past ten years. A total of 85 deals worth at least $50 million were announced in the first half of 2023 (H1 2022: 144, H2 2022: 117). The total deal value of $34.3 billion (H1 2022: $131.3 billion; H2 2022: $50 billion) fell to its lowest level in a decade. The average deal value of $404 million (H1 2022: $911.7 million; H2 2022: $427.5 million) was last lower in H1 2020, when the COVID-19 pandemic spread worldwide.

Only five megadeals, deals with a value >$1 billion, were announced by both financial and strategic investors with targets in Europe, India and the United States. The regional distribution of all announcements reveals that M&A activity in Asia Pacific was highest by number of deals, and primarily comprised local and inbound transactions. However, the gap to other regions is not large and was much more pronounced in previous years. More than two thirds of the deal announcements in Asia Pacific have Chinese participation, both on the buy and sell side. It is noticeable that these are exclusively local transactions within mainland China.

More than half of them are related to shipping and port infrastructure. For example, Shanghai Waigaoqiao Shipbuilding planned to acquire a 35% stake in Shandong Shipping, one of China's largest shipowners, a subsidiary of state-run ship building group CSSC, for $665 million. COSCO Shipping Ports announced the acquisition of the remaining 30% stake, which it did not already own, in Xiamen Ocean Gate Container Terminal to strengthen container-related business. The highest deal value and second highest number of deals were observed in Europe, driven by local deals. One deal that stands out is the pending acquisition of Austrian Cargo-Partner by publicly listed Japanese third-party logistics provider Nippon Express for $1.5 billion. The deal is handled by Nippon Express's German subsidiary and will diversify geographic coverage. North America was in third place in terms of the number of deals, the total deal value was second highest.

A 22% share of all deal announcements targeted infrastructure like toll roads, ports and airports, and primarily took place within Asia but also in small parts in North and South America and Europe.

	2017	**2018**	**2019**	**2020**			**2021**			**2022**			
	Total	**Total**	**Total**	1H20	2H20	**Total**	1H21	2H21	**Total**	1H22	2H22	**Total**	1H23
Number of deals	280	223	257	103	150	253	148	175	323	144	117	261	85
Total deal value ($bn)	131.7	113.8	141.9	37.1	62.8	99.8	94.5	119.7	214.1	131.3	50.0	181.3	34.3
Average deal value ($m)	470.4	510.8	552.0	359.7	418.4	394.5	638.3	683.8	662.9	911.7	427.5	694.7	404.0

Sources: PwC analysis, based on Refinitiv

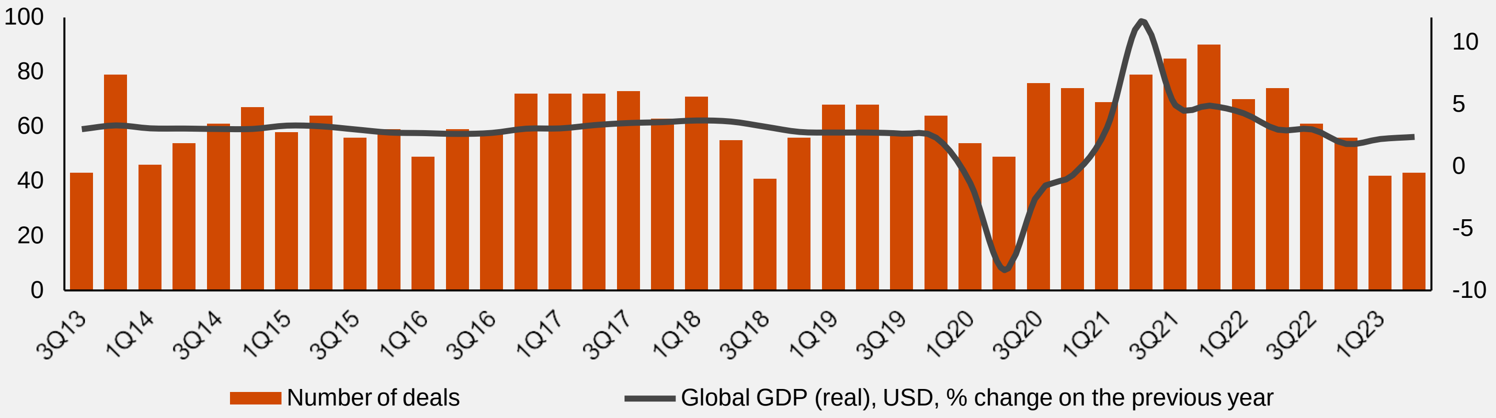
T&L deal activity mirroring GDP

M&A activity in Q1 2023 mirrored, with some delay, the slump in GDP from 3.0% in Q3 2022 to 1.8% in the last quarter of 2022. M&A announcements dropped from 56 to 42 in Q1 2023 and have since remained at the low level with 43 M&A deal announcements in Q2 2023. This is in line with GDP growth that has only recovered slightly (Q1: 2.2%, Q2: 2.4%). Overall, this marks the slowest start into a year since the financial crisis in 2009.

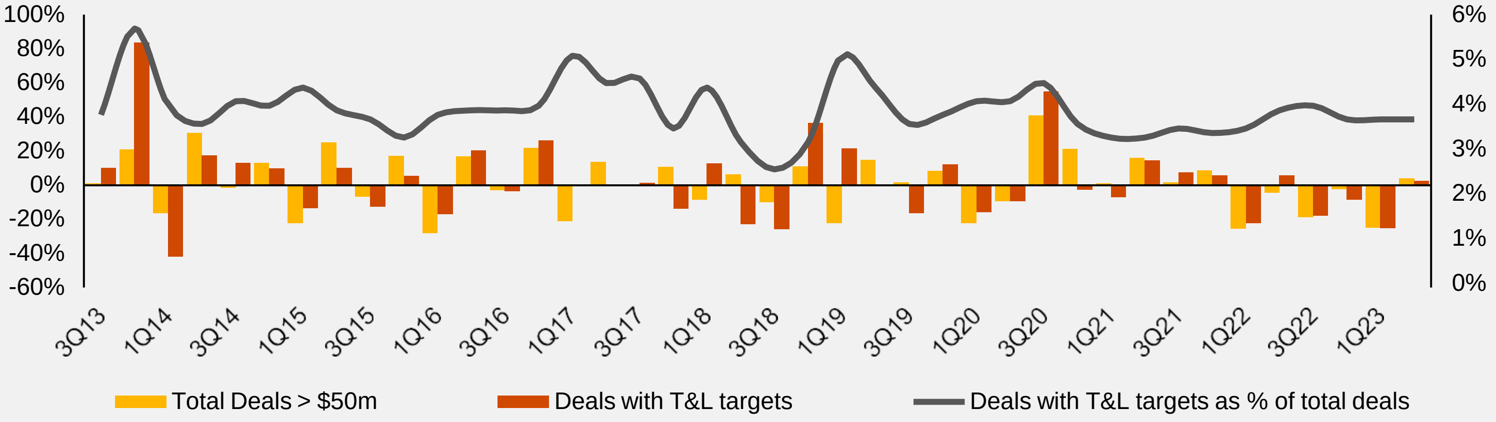
Strategic alliance announcements of listed companies in the first quarter of 2023 were on the contrary above the level of the previous two quarters. However, the second quarter did not continue this upward movement: with only 12 announced alliances, this quarter reached only about 45% below the average quarterly alliance announcements in the previous year. Codeshare agreements among airlines reached a new record low again, with only one such agreement being announced in each of the first two quarters of the current year (2022: 10) .

Comparing the deal activity in T&L (-27% vs H2 2022) with other industries, we see that the slump has been felt to a similar extent across all industries (-24%). Deal announcements in the second quarter of 2023 indicate that the sharp downward trend may have been stopped with M&A activity stabilising at a lower level. The overall share of deals with targets in the T&L industry remains stable at 3.7%, the same level as in the previous two quarters and only slightly below the 10-year average of 3.9%.

T&L M&A deals
(no. of deals and change in real global GDP)



Period-on-period change in global number of deals with a deal value of $50 million or more
(including the share of T&L targets)



Source: PwC analysis, based on Refinitiv and IHS

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Subsectors

T&L industry on the path to recovery

The disrupted demand for consumer goods caused poor container throughput at the beginning of the year, dissipating ship congestion to pre-pandemic levels. This is also supported by the fact that some companies changed transport mode during the crisis for cost reasons and may now maintain alternative routes via road or rail. In March, cargo volumes in the Red Sea returned to expectations for the first time after one year, more precisely exports from Asia to Europe. After April and May showed a slight relief in container shipping, the first data for June point to a continuation of the negative trend in the Red Sea, according to the Kiel Institute for the World Economy.

The Drewry World Container Index (WCI) reveals that the rate per 40-foot container has developed downwards to more stabilised prices since its spike in autumn 2021 (-86%), but it still surpasses the pre-pandemic average by 5%. Despite increased operating costs, these rates and associated margins are still sufficient for most shipping companies. The special effects of the last few years meant that certain projects and investments could be accelerated significantly. Although shipping companies are now experiencing the general increase in costs, they are able to pass some of these on to customers (e.g. bunkers).

The weakening demand for air cargo continued in the first quarter of 2023 with seasonally adjusted cargo tonne kilometres (CTK) -7.5% below the same period in 2019. This means a further stabilisation of demand after some exceptionally strong years among less consumer spending, high inventory levels and the loss of air cargo's relative price advantage over maritime shipping. While maritime shipping rates have decreased notably, air freight yields in March were still 45% above pre-crisis levels, according to IATA.

Sources: Kiel Institute for the World Economy, Drewry (29 June 2023), IATA (June 2023)

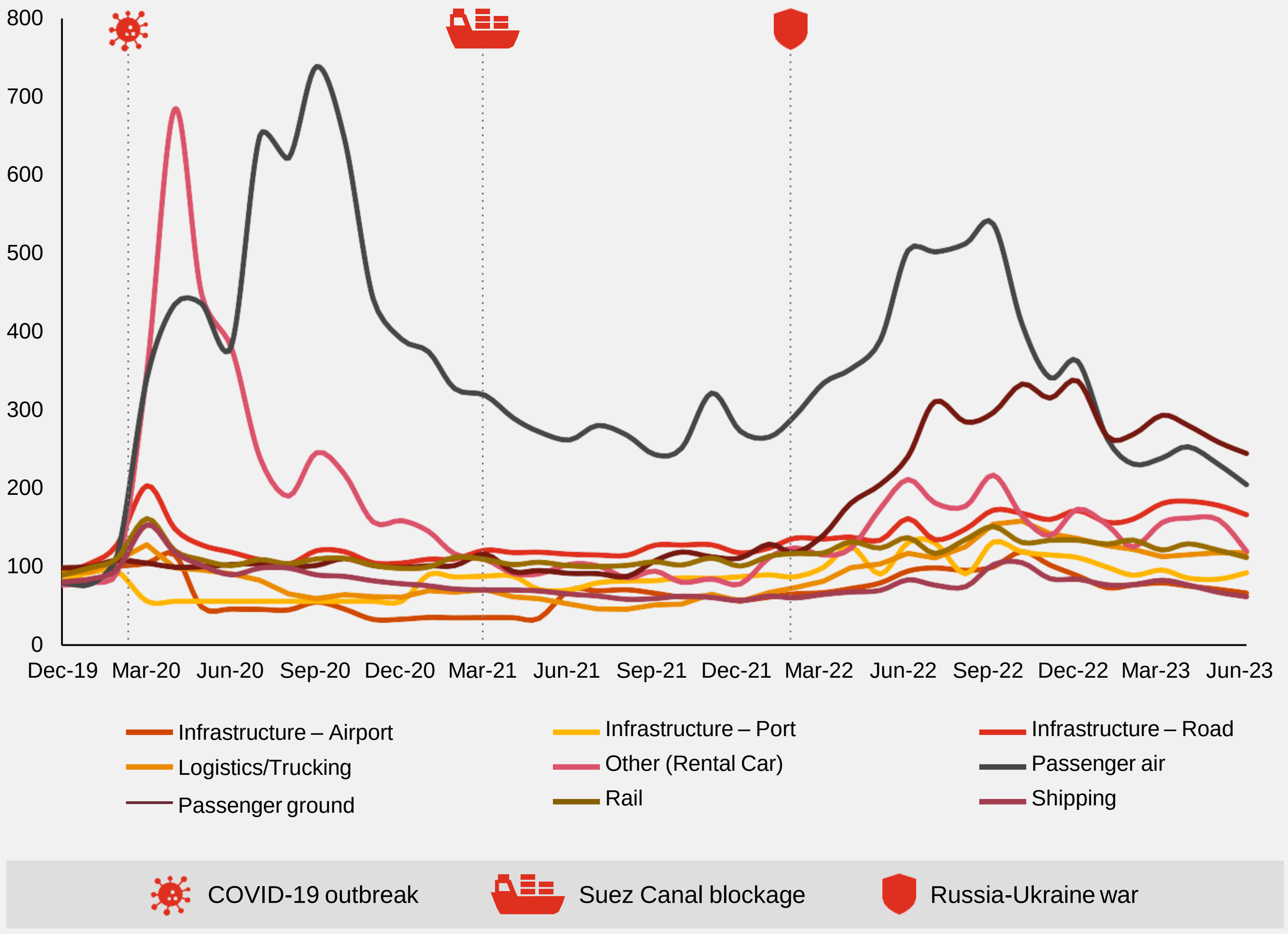
Capacity, in terms of available cargo tonne kilometres (ACTKs), increased in early 2023, driven by the upswing of the passenger business and the accompanying belly capacity in passenger air-craft. With -6.4% seasonally adjusted ACTKs in Q1 2023 (vs Q1 2019), however, capacity has not yet reached its pre-COVID-19 level. In contrast, the passenger segment has continued to improve in all regions, benefiting from the reopening of China's international borders and the cancellation of COVID-19 containment measures in late 2022. Industry-wide revenue passenger kilometres (RPKs) hit 88% of pre-crisis levels by March 2023. International traffic has developed slower than domestic traffic as the travel restrictions in Asia Pacific are still reverberating. On the other hand, routes between America and Europe, for example, are close to or have even exceeded 2019 levels. Overall, these developments contri-bute to the recovery of the airline industry's financial performance.

The European road freight sector has witnessed a steady increase in capacity since mid-2022 as demand-side pressures have eased due to persistent inflation and its negative impact on consumption. As a result, spot rates declined for the second consecutive quarter (-17.4% y-o-y in May 2023), while rates on the contract market remained stable at an elevated level. On the supply-side, the deteriorating driver shortage and an expanded cost base due to elevated fuel costs and increased labour costs are the most pressing challenges for the road freight sector.

Overall, the default risk assessed by the market for the T&L industry, in terms of CDS (credit default swap) spreads, has returned to pre-COVID-19 levels. This is true for most of the subsectors but some, like shipping, are showing a slight upward trend again. Here, with the flattening of shipping rates, investors and capital providers perceive a higher risk again, while during the crisis, with tremendous profits generated, the risk was perceived as low, unlike other subsectors.

Sources: IATA (June 2023), Transport Intelligence

Median 5 Yr CDS Mid Spread
(avg. 2019=100)



Sources: PwC Research, S&P Global Capital IQ, ICE CMA

Deal activity in Logistics and Trucking

Logistics and Trucking was again the most active subsector when it comes to M&A deals and strategic partnerships. 40 deals (> $50 million deal value), including three megadeals, prove the experience of the past years that almost half of all M&A deals are in this subsector. Nevertheless, the level here is also significantly below that of previous years, both in terms of the number of deals and total deal value.

The largest deal – the acquisition of Bolloré by CMA CGM – proves the ongoing trend of large shipping companies expanding their scope of services into logistics. Another billion-dollar deal is the takeover of Austrian Cargo-Partner by Nippon Express, which is increasing its footprint in Europe with the deal. What is striking, however, is the high number of deals made by organisations from outside of the T&L industry. Primarily financial investors acted as acquirers, but also strategic investors from a variety of industries. For example, Scan Global changed hands between two private equity firms, with CVC Capital Partners taking the majority stake in the Danish logistics service provider. Several others were acquired by private equity firms, including Flash Express in Thailand, Pragati Warehousing in India, delivery services providers Kayzon (UK) and Matajer (Saudi Arabia).

Within the industry, consolidation was driven by some medium and small regional deals. In the US, Knight-Swift Transportation acquired US Xpress Enterprises, Covenant Logistics Group acquired Lew Thompson & Son Trucking and Forward Air Corp agreed to acquire Land Air Express Inc, a provider of courier services. In Europe, several deals have not reached the $50 million mark or the transaction value was not disclosed. Danish Scan Global acquired Sand Road Freight in Denmark as well as German freight forwarder ETS Transport & Logistics. Rhenus acquired Nederlandse Transport Maatschappij and Trans Integral in Croatia. Hans Geis of Germany planned to acquire a 66% interest in Quehenberger Logistics.

Major logistics service providers continue to expand their reach outside of their home regions. Examples include Dachser’s acquisition of air and sea freight forwarder ACA International in Australia and DSV, looking to buy two US-based logistics companies (S&M Moving Systems West and Global Diversity Logistics) to expand its semiconductor services. Also, Swiss logistics group Kuehne + Nagel has signed an agreement to acquire Morgan Cargo, a South African logistics company specialising in perishable goods logistics.

Top 10 M&A deals in Logistics and Trucking

Announcement	Target	Target nation	Buyer	Buyer nation	Deal status	Deal value ($bn)
Apr-23	Bolloré Logistics SAS	FR	CMA CGM SA	FR	Completed	5.12
Jun-23	US Warehouse & Distribution Property Portfolio	US	Prologis Inc	US	Pending	3.10
May-23	Cargo-Partner GmbH and 62 related companies & subsidiaries	AT	Nippon Express Europe GmbH	DE/JP	Pending	1.53
May-23	Inpost SA (additional 15% stake)	LU	PPF Group NV	NL	Pending	0.80
Feb-23	Shenzhen China Resources Healthcare Industry Investment Co Ltd	CN	China Resources Hospital Investment (China) Co Ltd	CN	Pending	0.49
Jan-23	Flash Express Co Ltd (divestment of minority stake)	TH	Undisclosed Acquiror	Unknown	Completed	0.44
Jan-23	Storage Solutions Inc	US	Jungheinrich AG	DE	Completed	0.38
Mar-23	Science Applications International Corp (Logistics & Supply Chain Management Business)	US	ASRC Federal Holding Co	US	Completed	0.35
Mar-23	US Xpress Enterprises Inc	US	Knight-Swift Transportation Holdings Inc	US	Pending	0.34
Mar-23	Tres Palacios Holdings LLC	US	Enbridge Inc	CA	Pending	0.34

Sources: PwC analysis, based on Refinitiv

In the parcel segment, some major industry players established joint ventures or strategic alliances to enhance delivery performance and customer service. DHL Group (formerly Deutsche Post DHL) enters into a strategic partnership with Poste Italiane for the Italian and international parcel market. The two postal incumbents will collaborate in worldwide premium express services, parcel transportation in Europe and the Italian parcel locker network. In Poland, DHL Group joins forces with Cainiao. Both partners will make an initial investment to build the largest out-of-home delivery network and merge their existing parcel locker networks. Geopost and CEVA have signed a memorandum of understanding, aiming at increased cooperation in the areas of parcel delivery, transport and storage. In addition, new services are to be developed in the field of circular economy and urban logistics in France and Europe. Another example is the partnership between mail delivery and e-commerce solution provider Asendia and Girteka, the Lithuanian road transport company.

Alliances are also a means of choice when it comes to product and service innovations in logistics. The market launch of ChatGPT has reignited the discussion about the potential of artificial intelligence in all sectors of the economy. In logistics, one of the key objectives is to create visibility over supply chains and ensure that freight forwarders and their customers can track products end-to-end and know exactly when they will arrive at their destination. Several freight forwarders and operators of transport management systems have recently announced partnerships with real-time visibility specialists. Ceva partners with Project44, RSC Logistics and Cargonerds integrate the solutions of FourKites into their platforms and supply chain specialists Setlog joins forces with Shippeo.

Sources: S&P Global Capital IQ

Deal activity in Passenger Air

In the Passenger Air subsector, only eight deals with a deal value of more than $50 million were announced. Four of them relate to airport assets in emerging economies – India, Thailand and Brazil -, and four deals were announced in the airlines segment.

Some airline groups are reviewing their shareholding structures and also pushing ahead with divestments. Air France-KLM plans to sell an undisclosed minority stake in its engineering and maintenance unit to Apollo Global Management of the US. Lufthansa would like to sell up to 20% of its maintenance subsidiary and expects revenues of up to €1.5 billion. While the sales process is still ongoing, Lufthansa closed a deal with SEB and sold its payment service provider Airplus to the Swedish bank for €450 million. Earlier this year, Lufthansa sold its remaining part of the in-house caterer LSG to financial investor Aurelius.

In Europe, another round of airline consolidation seems to begin. Lufthansa's takeover of Italy's flag carrier ITA Airways, announced in 2022 already, but closed in May 2023, was the first notable move. Still, the European market is more fragmented than in other regions, with more than 100 companies that offer regular commercial flights. The medium-sized national airlines, in particular, are seen as takeover candidates, for example, Scandinavia's SAS and Portugal's TAP. Yet, regulatory barriers and governments' stakes in their flag carriers have so far slowed down the process of consolidation.

M&A deals in Passenger Air (incl. Infrastructure – Airports)

Announcement	**Target**	**Target nation**	**Buyer**	**Buyer nation**	**Deal status**	**Deal value** ($bn)
Mar-23	GMR Airports Ltd (additional 49% stake)	IN	GMR Infra Developers Ltd	IN	Pending	1.54
May-23	Air France Industries – KLM Engineering & Maintenance (minority stake)	FR	Apollo Global Management Inc	US	Pending	0.55
May-23	Italia Trasporto Aereo SpA (41% stake)	IT	Deutsche Lufthansa AG	DE	Pending	0.35
May-23	U-Tapao International Aviation Co Ltd (45% stake)	TH	Bangkok Airways PCL	TH	Pending	0.14
Apr-23	Air Premia Co Ltd (additional 56.7% stake)	KR	Bokook Moon	KR	Pending	0.10
May-23	Bangalore International Airport Ltd (3% stake)	IN	Fairfax India Holdings Corp	CA	Completed	0.08
May-23	Inframerica Concessionaria Do Aeroporto De Sao Goncalo Do Amarante Sa	BR	Flughafen Zuerich AG	CH	Pending	0.06
Jun-23	Turbo Megha Airways Pvt Ltd (85% stake)	IN	New State Aviation Holdings	US	Completed	0.05

Sources: PwC analysis, based on Refinitiv

Deal activity in Shipping

During the first six months of 2023, the T&L industry witnessed a relatively low number of deal announcements in the Shipping subsector. The period was marked by a cautious approach from companies, with fewer strategic partnerships and acquisitions taking place compared to previous years. However, Shipping remains the second strongest subsector with 19 announced deals and a combined deal value of $5.9 billion. Seven of these deal announcements targeted port infrastructure.

The largest deal in this subsector is the announcement by listed Taiwanese shipping company Evergreen Marine Corp to acquire the entire share capital of its privately-held subsidiary Evergreen Marine Singapore for $780 million as part of its ongoing consolidation efforts of Evergreen's container shipping assets. The second largest announced deal to date ($685 million) is Danish shipping company Maersk's divestment of Maersk Supply Service A/S, a provider of offshore marine services and integrated solutions for the energy sector.

Between 2017 and 2019, Maersk Tankers, Maersk Oil & Gas, and Maersk Drilling already underwent divestment and these transactions marked a significant step in Maersk's strategic plan to separate from its energy-related business. Upon completion, this deal will represent the final stage of Maersk's separation from the energy sector and concentration on integrated logistics. A.P. Moller Holding, the parent company of the A.P. Moller Group, will assume full ownership.

For the second half of the year, two very large deals appeared on the horizon. First, the CMA CGM Group has officially presented its proposal to acquire the logistics operations of France's Bolloré Group. If successfully concluded, this deal would value Bolloré Logistics at $5.5 billion and position CMA CGM as one of the top five global logistics companies. This deal seems to be the continuation of the shipping liner's strategy to extend their service offering to full-scale logistics.

Top 10 M&A deals in Shipping (incl. Infrastructure – Ports)

Announcement	Target	Target nation	Buyer	Buyer nation	Deal status	Deal value ($bn)
Jun-23	Evergreen Marine (Singapore) Pte Ltd	SG	Evergreen Marine (Asia) Pte Ltd	SG	Pending	0.78
Mar-23	Maersk Supply Service A/S	DK	AP Moller Holding A/S	DK	Pending	0.69
May-23	Shandong Shipping Corp (34.974% stake)	CN	Shanghai Waigaoqiao Shipbuilding Co Ltd	CN	Pending	0.67
Jun-23	Eneti Inc	MC	Cadeler A/S	DK	Pending	0.60
Mar-23	Rizhao Port Container Development Co Ltd	CN	Rizhao Port Co Ltd	CN	Pending	0.40
Apr-23	Exmar NV (additional 50.96% stake)	BE	Saverex NV	BE	Pending	0.40
May-23	Shanghai Guandong International Container Terminal Co Ltd (20% stake)	CN	Zhejiang Province Port Investment Operation Group Co Ltd	CN	Pending	0.38
Mar-23	Anemoesa Marine Inc (floating storage regasification unit Sequoia)	MH	Excelerate Energy LP	US	Pending	0.27
Mar-23	Heidmar Inc	GR	Home Plate Acquisition Corp	US	Pending	0.26
May-23	Ningbo Daxie China Merchants International Terminals Co Ltd (additional 45% stake)	CN	Ningbo Zhoushan Port Co Ltd	CN	Pending	0.26

Sources: PwC analysis, based on Refinitiv, Maersk, Reuters

The second megadeal announced pertains to Triton International Limited and Brookfield Infrastructure Partners L.P, a subsidiary of global asset manager Brookfield Corporation. The two parties have entered into a definitive agreement for Brookfield Infrastructure, an infrastructure company specialising in the ownership and operation of top-tier critical infrastructure assets, to acquire Triton, the world's largest owner and lessor of intermodal containers, in a cash and stock transaction with a total deal value of $4.7 billion. For Brookfield, this deal marks a transformative step away from their typical investments in immovable assets like real estate to moveable assets that support the supply chain.

Another announcement that has moved the Shipping subsector is the break-up of the vessel sharing agreement (2M alliance) between MSC and Maersk in 2025. This, combined with full order books, enhance uncertainty and could increase competitiveness as well as price pressure in the traditionally low-margin industry as liners may try to lift the utilisation of their vessels. It is expected that competing alliances will use the 2M break-up as a case for their own adjustments in the future.

Sources: Refinitiv, Triton, Brookfield, THB

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Outlook

"Normalisation" of the T&L industry

The outlook for the coming months and beyond remains highly uncertain with a range of downside risks like a renewed tightening of financial conditions, persistent high inflation or further geoeconomic fragmentation. In April, the International Monetary Fund (IMF) predicted global growth to decrease from 3.4% in 2022 to 2.8% in 2023 and to 3% in 2024 in a baseline scenario. In advanced economies, growth is even expected to slow from 2.7% in 2022 to 1.3% in 2023. This also corresponds to the OECD forecast launched in June, which is only slightly lower (2023: 2.7%; 2024: 2.9%). The IMF has formed an alternative scenario due to the high fragility and recent financial sector turmoil. According to this, global growth is projected to fall to 2.5% in 2023 and below 1% in advanced economies. Growth is thus projected to be below trend in both 2023 and 2024, although it will slowly pick up by 2024 as inflation moderates and real incomes rise. Global headline inflation is forecast to decline from 8.7% in 2022 to 7% in 2023 due to lower commodity prices, while core inflation will probably decline at a slower pace. In the alternative scenario, global headline inflation is expected to decline by 0.2 percentage points more in 2023. Global merchandise trade volume increased by 2.7% in 2022 and the World Trade Organization similarly projects a rebound to a 3.2% growth rate in 2024 (2023: 1.7%).

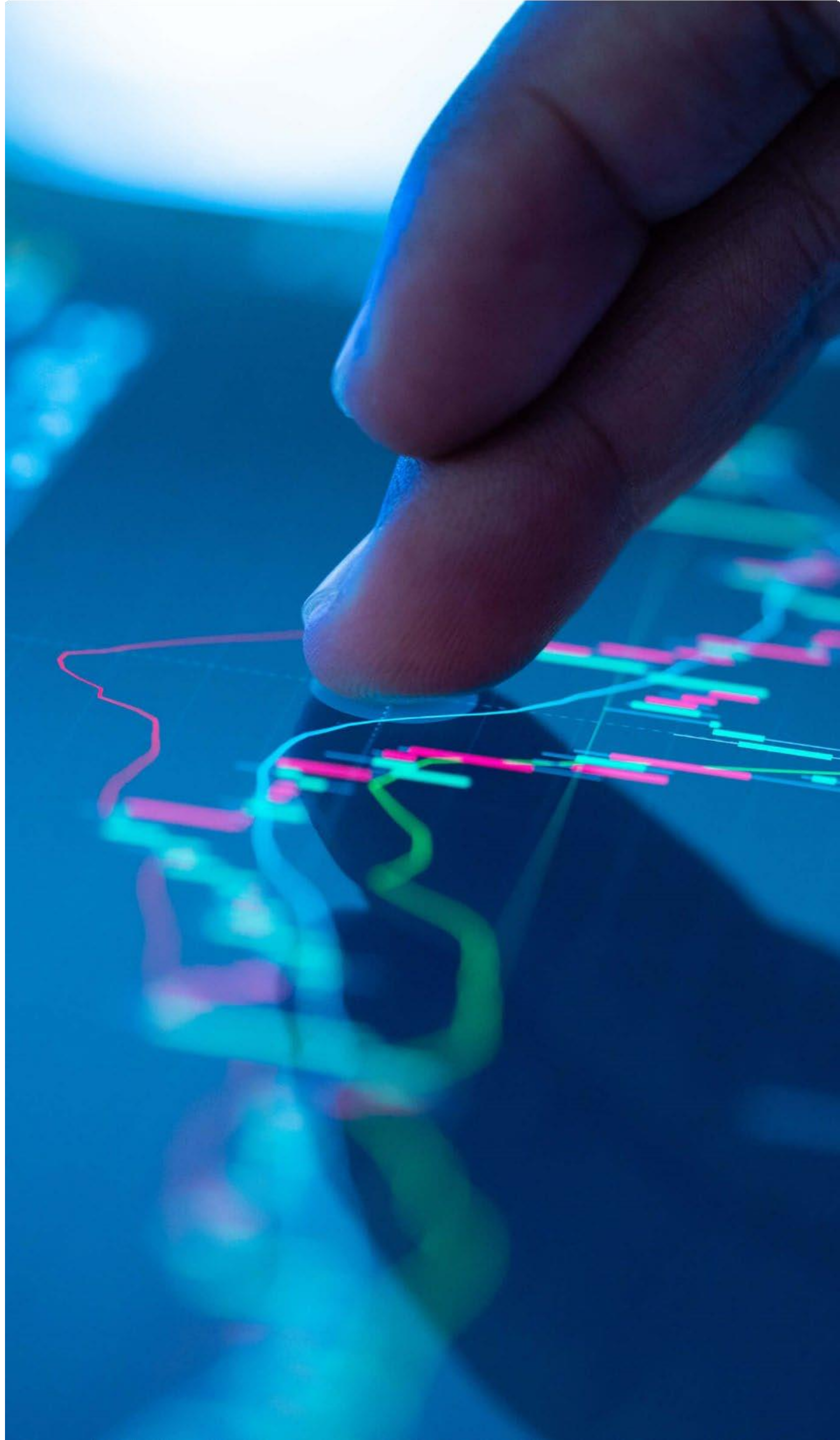
Despite macroeconomic uncertainties including geopolitical tensions, high inflation rates, and tighter monetary policy, the outlook indicates that a momentary slowdown rather than prolonged recessionary developments are to be expected in the T&L industry.

Uncertainties complicate subsector outlooks

As a result of the drop in global trade volume, supply chain pressure eased. In maritime logistics, this normalisation is depicted in a 2.8% stake of idle vessels in 2023 (2022: 0.8%). Whereas a higher order book in the container segment (supply) and a reduced increase in seaborne trade (demand) are partially offset by slow-steaming, scrapping activities, and re-containerization, freight rates are not expected to fully recover before 2024.

In addition to the direct impact of Russia's war against Ukraine on the T&L industry, the reorientation of Russia towards China leads to a shift in trade patterns. The redistribution of oil flows resulted in a spike of spot rates for energy-related shipping, in particular, LNG freight rates. This development is expected to remain due to the imbalance of LNG carriers on order and respective shipyards to cover the increase in demand.

The near and medium future is also difficult to assess in the other T&L subsectors. Air cargo volume, after the recent successful years, is projected to decrease by -3.8% in 2023 (-5.5% vs. 2019) but cargo revenues are likely to remain above pre-pandemic levels. In the passenger business, revenue passenger kilometres are projected to reach 87.8% of 2019 levels with a 28.3% growth rate in 2023 and an expected full recovery in all regions in 2024. On the cost side, moderating fuel prices have led to some relief.



Sources: IMF (April 2023), OECD (June 2023), World Trade Organization (April 2023), Clarksons Research (March 2023), IATA (June 2023)

Overall, IATA anticipates a return to profitability this year with a forecast of $9.8 billion. The economic and geopolitical environment, however, adds risk to these projections. In the long-term, climate change, the net-zero transition and its costs pose major challenges for the aviation subsector.

The European road freight sector is likely to experience a deceleration, growing 1.1% in real terms to €385 billion in 2023, as demand for road freight services is expected to decline. On the supply side, elevated fuel and labour cost and the deteriorating driver shortage, which leads to capacity constraints, remain the major challenges. A recent IRU survey revealed potential 9% unfilled driver positions in 2023 and a significant lack of young drivers.

It also remains to be seen how quickly climate protection goals (e.g. European Green Deal) will ensure that rail transportation will take over more volume from road transportation on longer distances.

M&A activity likely to remain subdued

The macroeconomic headwinds had a significant impact on deal-making in the T&L industry in the first half of 2023. M&A activity is likely to remain subdued in the coming months, considering the economic backdrop and financing conditions.

We anticipate to see a number of small to medium-sized deals, some take-privates and capability-building mergers and acquisitions by large players aiming at accelerating innovation. We expect a limited number of vertical integrations of, in particular, highly specialised logistics service providers. In the case of shipping companies, we do not anticipate any further major takeovers due to a lack of suitable targets, despite the still high level of available capital. However, we assume that regional acquisitions will continue in order to expand existing networks in terms of services or regional offerings.

Besides, large T&L players will continue to focus on the integration of past acquisitions and active cost management to cope with deteriorating profit margins. Generating positive real returns is the most significant challenge for investors in 2023 and beyond.

Sources: IATA (June 2023), Transport Intelligence, Upply, IRU, PwC analysis

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Appendix: Deals in figures, methodology, contacts

Megadeals = deals with a value of $1 billion or more

Megadeals in 1H2023

Announcement	Target	Target nation	Buyer	Buyer nation	Deal status	Deal value ($bn)	Sector
Apr-23	Bolloré Logistics SAS	FR	CMA CGM SA	FR	Completed	5.12	Logistics/ Trucking
Apr-23	Triton International Ltd	BM	Brookfield Infrastructure Corp	US	Pending	4.71	Other
Jun-23	US Warehouse & Distribution Property Portfolio	US	Prologis Inc	US	Pending	3.10	Logistics/ trucking
Mar-23	GMR Airports Ltd (49%-Stake held by Aeroports de Paris)	IN	GMR Infra Developers / GMR Airports Infrastructure Ltd	IN	Pending	1.54	Infrastructure – Airport
May-23	Cargo-Partner GmbH and 62 related companies & subsidiaries	AT	Nippon Express Europe GmbH / Nippon Express Holdings	DE/JP	Pending	1.53	Logistics/ Trucking

For comparison

H1 2023: 5 deals, $16.0bn
H1 2022: 19 deals, $98.7bn
H2 2022: 13 deals, $24.6bn

Sources: PwC analysis, based on Refinitiv

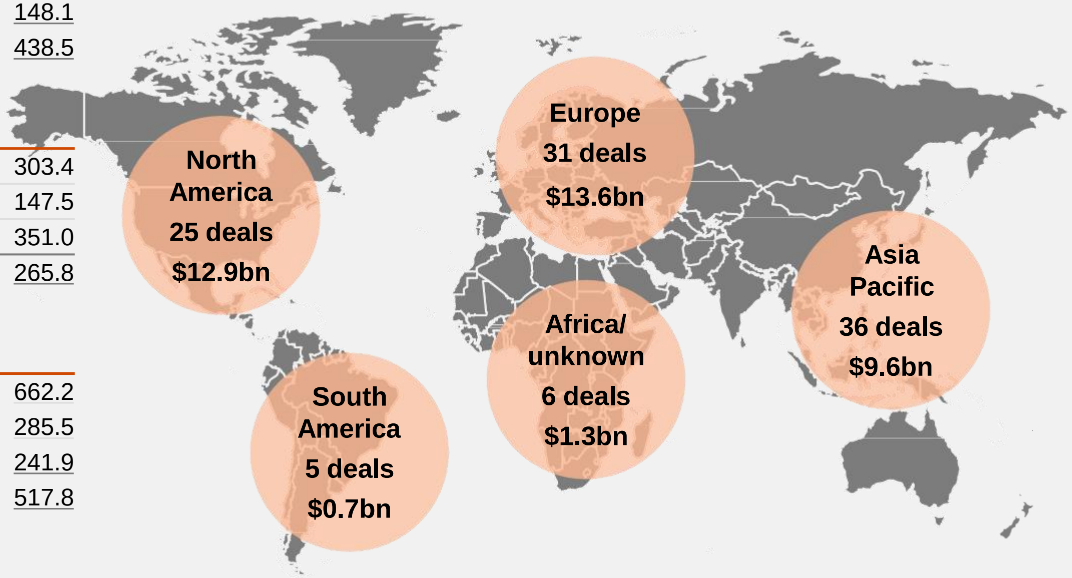
Regional distribution of deals

While Asia Pacific once again dominated in terms of the total number of deals announced, Europe and North America were head to head leading in terms of the total value of the announced deals. Both regions saw fewer but far bigger deals than Asia Pacific, surpassing Asia Pacific in both total deal value and average deal value by more than one third. China accounted for 13 of the deals in Asia Pacific. Notably, those were all local deals and we did not see any cross-border deals related to China including Hong Kong so far.

In South America, M&A activity was limited to local and inbound deals with the lowest average deal value compared to the other regions. The outbound deals listed in Africa/unknown include four deals with undisclosed acquirors as well as two deals where financial investors from Africa acquired warehousing assets in France and India.

The three major regions for M&A activity, Europe, North America and Asia Pacific, were all affected by the overall decline in deal activity with Asia Pacific seeing the steepest decline compared to the previous half-year as 41% fewer deals were announced in the region totally. Meanwhile, total deal announcements in Europe and North America only declined by about 17%

	No. of deals	Value ($bn)	Ø value ($m)
Europe			
Local	22	11.7	534.0
Inbound	3	1.0	318.7
Outbound	6	0.9	148.1
Total	31	13.6	438.5
Asia Pacific			
Local	26	7.9	303.4
Inbound	9	1.3	147.5
Outbound	1	0.4	351.0
Total	36	9.6	265.8
North America			
Local	16	10.6	662.2
Inbound	4	1.1	285.5
Outbound	5	1.2	241.9
Total	25	12.9	517.8
South America			
Local	3	0.4	128.1
Inbound	2	0.3	150.0
Outbound	0	0.0	0.0
Total	5	0.7	136.9
Africa/ unknown			
Local	0	0.0	0.0
Inbound	0	0.0	0.0
Outbound	6	1.3	212.8
Total	6	1.3	212.8



Local = target and buyer in the region
Inbound = target in the region, but buyer outside the region
Outbound = target outside the region, but buyer in the region

An inbound deal in one region is also an outbound deal in another. Inbound and outbound deals are, therefore, recorded twice in the list.

Source: PwC analysis, based on Refinitiv

Subsector analysis

Logistics and Trucking has traditionally been the subsector with the most mergers and acquisitions announced, not least due to its fragmented nature. This trend continues with Logistics and Trucking accounting for approximately half of all transactions announced. Moreover, this subsector is more resilient to the overall downturn in M&A activity as it is the only subsector where we see deal announcements declining by (slightly) less than 10% compared to the second half of 2022.

Shipping was the second most active subsector; the total number of announced deals declined by 21% compared to the second half of the previous year. Almost 40% of these deals were related to port infrastructure, which was the second most active subsector in Infrastructure by number of deals announced.

Apart from the Rail sector, where no deals were announced in this year so far, Passenger Air saw the strongest decline among the subsectors, reaching only eight announced deals, or less than half of the deal number in the second half of 2022.

Compared to the previous half-year, deals with freight-related targets (-15%) declined less than those with passenger-related targets (-46%). As a result, freight related targets make up for around 70% of announced deals, similar to 2021, whereas the ratio of freight-related to passenger-related transactions has been around 2/3 to 1/3 both in 2022 as well as in the longer term historically.

All deals (incl. infrastructure)	1H2021		2H2021		1H2022		2H2022		1H2023	
Total value ($bn)	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value
Passenger Air	19	12.9	16	31.7	16	9.2	18	7.8	8	2.9
Passenger Ground	13	9.0	20	13.8	26	64.5	17	6.9	13	4.2
Rail	4	36.2	4	3.2	2	0.2	6	3.7	0	0.0
Logistics and Trucking	73	25.1	98	53.2	70	38.7	44	15.7	40	16.0
Shipping	27	6.3	32	13.4	21	11.5	24	12.4	19	5.9
Other	12	4.8	5	4.4	9	7.2	8	3.5	5	5.4
Total	148	94.5	175	119.7	144	131.3	117	50.0	85	34.3

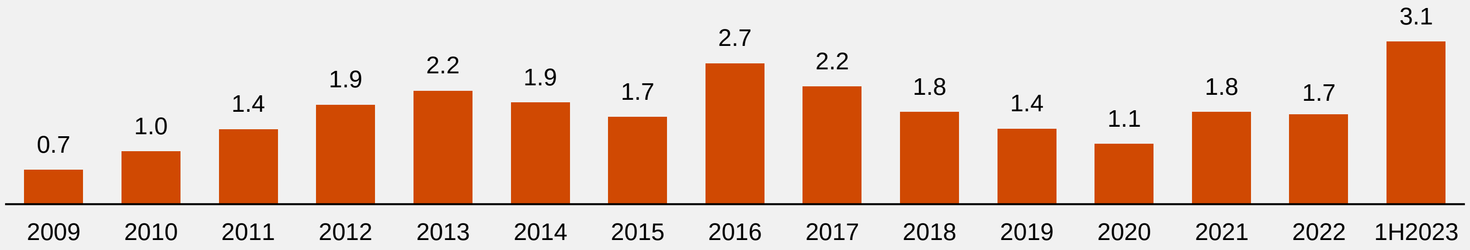
	1H2021		2H2021		1H2022		2H2022		1H2023	
Total value ($bn)	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value
Infrastructure (Airports)	8	8.2	6	27.2	6	1.2	7	2.5	4	1.8
Infrastructure (Road)	10	4.2	8	9.8	15	59.2	14	6.6	8	2.6
Infrastructure (Ports)	11	3.1	13	8.6	8	6.5	12	8.8	7	1.6
Total (infrastructure)	29	15.5	27	45.5	29	66.9	33	17.9	19	6.0

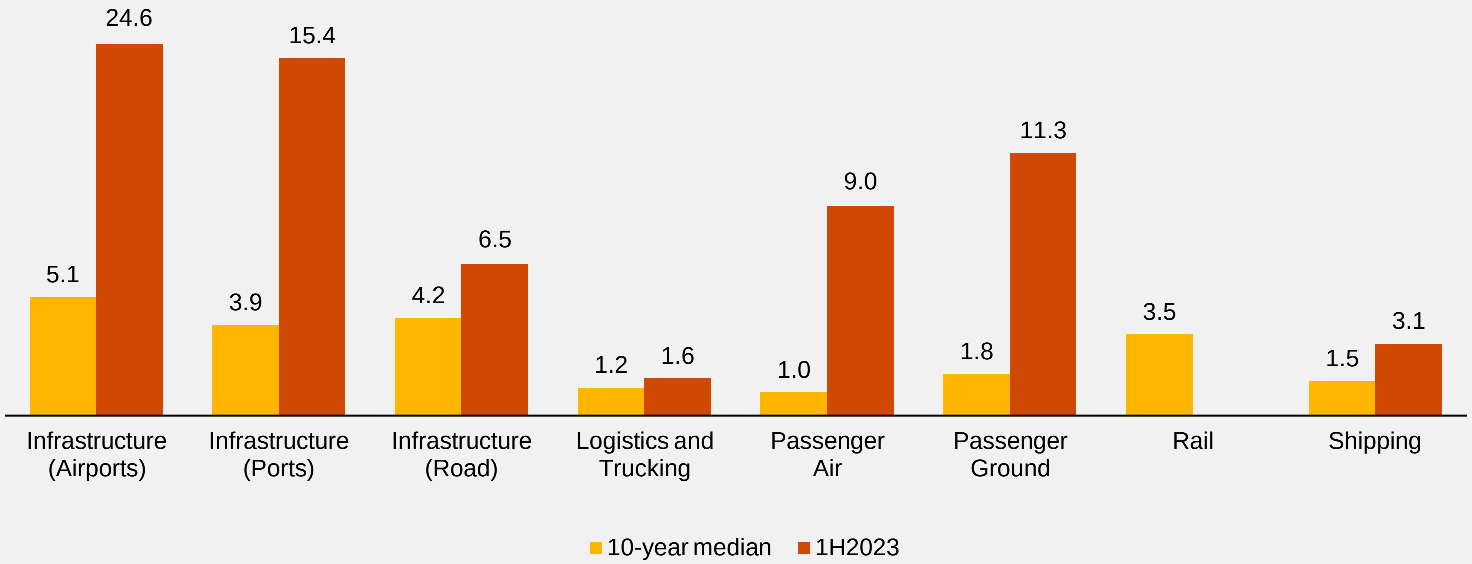
Freight vs. passenger	1H2021		2H2021		1H2022		2H2022		1H2023	
Total value ($bn)	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value
Freight	101	35.5	132	69.0	93	50.3	69	31.9	59	26.5
Passenger	47	59.0	43	50.7	51	81.0	48	18.1	26	7.8
Total	148	94.5	175	119.7	144	131.3	117	50.0	85	34.3

Sources: PwC analysis, based on Refinitiv

Deals with a volume greater than $50 million

Median of value/sales multiples





Multiples reach record high

The median of sales multiples surpasses its all time high from 2016, reaching 3.1x. At the same time the median EBITDA multiple reached an absolute record at 14.4x, more than 1.5 times as high as in the previous year (8.7x) and the ten-year average (8.6x).

While this development is partly driven by extraordinary high multiples in deals with airports, ports and passenger transportation-related targets, we have noted that both the median sales multiples and the EBITDA multiples have reached levels above their long term averages across all sectors and irrespective of whether the buyer was a strategic or financial investor.

Bringing this into perspective with the overall decline in M&A activity we see that fewer deals are announced but those deals that are announced reach higher prices on average. We see this as an indication that investors focus on high-quality targets and are still willing to pay higher prices, even in the current volatile business environment.

Sources: PwC analysis, based on Refinitiv

Financial investors

Financial investors usually rely heavier on debt to finance mergers and acquisitions than strategic investors, thus it comes as no surprise that the current macroeconomic environment with high interest rates in most economies affects the deal activity of these investors. As a result, we saw far fewer megadeals in 2023 so far, and the share of strategic investors in total deal value rose again to more than 60%, even above 2021, where few very large deals with strategic investors drove the total deal value.

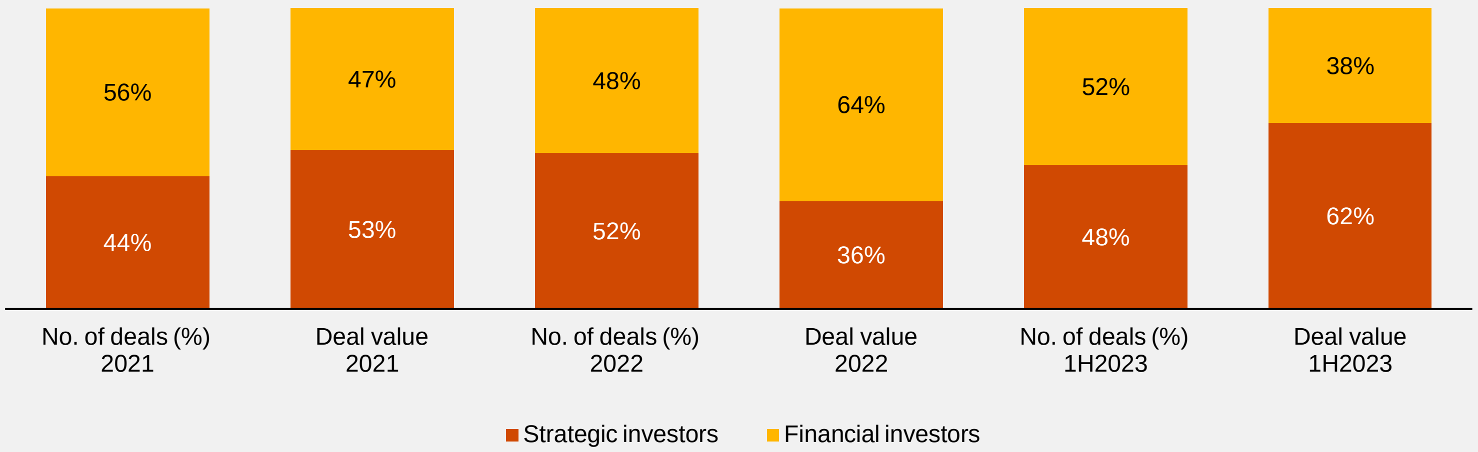
The average deal value for financial investors is below the last two years, due to the absence of megadeals. Financial investors were only involved in two of the five megadeals we have seen in this year so far.

Logistics and Trucking targets were again a clear focus for financial investors in the first half of the year, accounting for half of their transactions, albeit with only 22 deals on a much smaller level than in the previous first half-years (H1 2021: 48 and H1 2022: 40).

The Shipping subsector is the only subsector where financial investors are seemingly on track to reach the number of deal announcements from the previous year.

Deals with a volume greater than $50 million

Number and the total value of deals involving financial investors



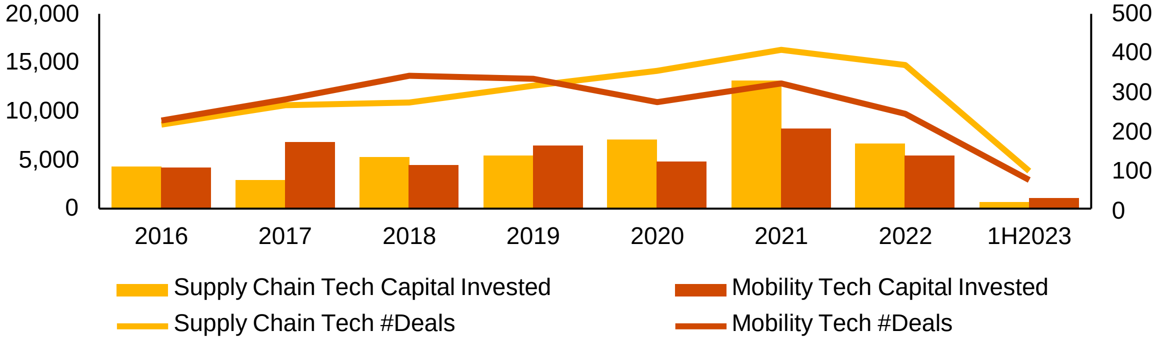
	2021		2022		1H2023	
Total value ($bn)	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value
Passenger Air	22	36.4	19	7.3	5	2.3
Passenger Ground	18	19.0	21	62.1	8	1.6
Rail	5	6.0	1	0.1	0	0.0
Logistics and Trucking	101	27.2	63	32.5	22	6.7
Shipping	20	4.7	12	10.0	5	1.7
Other	14	8.1	10	3.6	4	0.7
Total	180	101.5	126	115.6	44	13.0

Sources: PwC analysis, based on Refinitiv

Venture capital investments in T&L affected by overall slowdown

The overall dramatic decline in venture capital funding across all economic sectors, caused by economic uncertainty, rising interest rates and a re-evaluation of tech-related investments after the spike during the pandemic, affects transport and logistics-related verticals just as well. The most important verticals for T&L-related start-up financing, Supply Chain Tech and Mobility Tech, have seen a massive slowdown in both the number of investments as well as the sum of invested capital. Also, the average investment size for deals associated with any T&L-related vertical shrank by nearly 50% from $13.0 million to $6.9 million, reaching the lowest value in the past years.

VC Investments in T&L related Tech Verticals
(no. of deals and sum of Capital Invested in $mn)



Selected venture capital deals

Deal date	Company	Company nation	(Lead) Investor	Series	Deal value ($mn)
Apr-23	Zipline (Logistics)	US	Anderson Investments	Series E	330.0
May-23	J&T Express	ID/CN	unknown	Series F	200.0
May-23	JOLT Energy	DE	InfraRed Capital Partners;	n/a	165.1
Jun-23	Ruqi Mobility	CN	Guangzhou Automobile	Series F	118.4
Mar-23	Deepway	CN	SB China Venture Capital, Weiqiao Pioneering Group; Qiming Venture Partners	n/a	111.4
Jan-23	BRETON Technology	CN	Hunan Chasing Fund, Inner Mongolia Eerduosi Resources Company	n/a	83.2
Jan-23	Outrider (Road)	US	Abu Dhabi Investment Authority, B37 Ventures, Lineage Ventures, Nvidia, Presidio Ventures, others	Series E	73.0
Jan-23	Leekr Technology	CN	Beijing Automotive Group Industrial Investment, CAS Investment Management, others	Series E	58.2
Mar-23	Pascal Technologies	NO	Ocean Zero (New York)	Series D	56.1
Feb-23	ThayerMahan	US	Compass Partners Capital, Ducenta Squared, Hegemon Capital, I Squared Capital, others	Series D	50.2
Feb-23	Dronamics	UK	Tawazun Strategic Development Fund; Eleven Ventures, Founders Factory, Speedinvest	Series E	43.2
Jun-23	Curri	US	Bessemer Venture Partners; Brick & Mortar Ventures, Initialized Capital Management, Rainfall	Series B	42.0

Sources: PwC analysis, based on Pitchbook, Forbes

Methodology

This report analyses the current industry environment and global transaction and strategic collaboration activities in the T&L industry.

The analysis covers all mergers, acquisitions, sales, leveraged buyouts, privatisations and acquisitions of minority interests with a transaction value greater than $50 million. All transactions announced between 1 January and 30 June 2023 have been included. Project transactions, such as public-private partnerships – which are more common than corporate transactions, especially in the field of infrastructure – do not fall within the scope of the analysis.

The data for the transaction analysis is derived from Refinitiv and includes all deals announced where the target company comes from one of the NAICS industries listed below. Historical data is continuously updated. The analysis included all transactions whose status at the time of analysis was “completed”, “not yet completed because of antitrust approval procedures”, “unconditional” (buyer-side conditions have been met, but the deal has not yet been completed) or “withdrawn”.

The data for the strategic collaboration analysis is based on information from S&P Global Capital IQ, covering key strategic alliance-related developments disclosed by listed companies related to the T&L industry.

The venture deals analysis is based on the Top 100 Transport & Logistics VC-Deals in Pitchbook announced until June 2023, including mobility verticals.

Sectors and assigned NAICS industries

Passenger Air: scheduled passenger air transportation; non-scheduled chartered passenger air transportation; air traffic control; other airport operations; other support activities for air transportation

Passenger Ground: highway, street, and bridge construction; all other specialty trade contractors; commuter rail systems; bus and other motor vehicle transit systems; other urban transit systems; inter-urban and rural bus transportation; taxi service; limousine service; school and employee bus transportation; charter bus industry; special needs transportation; all other transit and ground passenger transportation; other support activities for road transportation

Rail: line-haul railroads; short-line railroads; support activities for rail transportation

Logistics: gas distribution; freight transportation arrangement; packing and crating; all other support activities for transportation; postal service; couriers; local messengers and local delivery; general warehousing and storage; refrigerated warehousing and storage; farm product warehousing and storage; other warehousing and storage; process, physical distribution and logistics consulting services

Trucking: general freight trucking, local; general freight trucking, long-distance, truckload; general freight trucking, long distance, less than truckload; used household and office goods moving; specialised freight (except used goods) trucking, local; specialised freight (except used goods) trucking, long distance

Shipping: deep-sea freight transportation; deep-sea passenger transportation; coastal and great lakes freight transportation; coastal and great lakes passenger transportation; inland water freight transportation; inland water passenger transportation; port and harbour operations; marine cargo handling; navigational services to shipping; other support activities for water transportation; regulation and administration of transportation programmes

Other: scheduled freight air transportation; non-scheduled chartered freight air transportation; other non-scheduled air transportation; mixed-mode transit systems; commercial air, rail and water transportation equipment rental and leasing; passenger car rental; passenger car leasing; truck, utility trailer and RV rental and leasing

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