M&A in the Transport & Logistics Industry

January–December 2019



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Highlights





254

announced deals in 2019, plus 12% compared to prior year

30%

more megadeals (29) than ten-year average

76%

of all megadeals made by financial investors

41%

infrastructure targets among the megadeals

M&A activity 2019: Rebound from 2018

In the first half of 2019, the downturn from the second half of the previous year seemed to have been reversed. In the second half of the year, however, there was a slight slowdown to 119 deals but the number is still above the level of the second half of 2018. As a consequence the full year number of deals (254) is 12% above 2018. The Transport & Logistics (T&L) industry managed to improve its share in the total number of deals across all industries from 3.4% in 2018 (lowest share in the past 10 years) to 4.4% in 2019, which corresponds to the level of 2017. While T&L surpassed last year's level, deal activities across all industries declined (–12%).

More and even bigger megadeals

Deal value was again mainly driven by megadeals and we have seen 29 such deals in 2019 with a total deal value of approx. \$92 billion. By comparison, only 21 megadeals were announced in 2018 and the total deal value was \$69 billion. The largest deal this year, where financial investor Blackstone acquired urban warehouse assets from GLP in the US with a transaction value of \$18.7 billion, illustrates the trend towards more and larger megadeals. Investors continue to have access to large cash pools, while low interest rates point to favourable financing conditions for large transactions.

Financial investors on the rise

Financial investors were active in 22 of the 29 megadeals, with a combined value of \$69.6 billion, which points to their high M&A activity and willingness to invest in large transactions. Financial investors have identified the industry's high level of investment incentives. For them, infrastructure targets in particular offer attractive investment opportunities through secure long-term returns and they therefore pose a lower risk. On the other side, strategic investors are more active in smaller deals. They act more conservatively in dealmaking to preserve a buffer for essential business investments. This is reflected in the relatively low values of their deals this year.

Prices continue to drop – transport infrastructure is the exception

Considering the current market conditions, the valuation of T&L targets was expected to be relatively high in all sectors, but the median value/sales multiple continued to drop to 1.4 in 2019 (2018: 1.7; 2017: 2.0). The economic downturn and the lack of profitable deals have contributed to the low target valuations. Only transport infrastructure is an exception, where prices are still reaching the ten-year average, resulting from intense bidding competition due to the rising demand for stable and less risky investments with more predictable returns. Twelve of the 29 megadeals relate to infrastructure targets, seven more than in 2018. Two thirds of these relate to toll road concessions or road assets, proving a focus on passenger ground deals. The two shipping megadeals in the US and Poland are connected through the same investor and relate to port assets. Another two deals with airport assets complete the list of infrastructure-related megadeals in 2019.



Further results at a glance:

Total deals

- The number of announced transactions (254) is 12% higher than in the previous year
- The total deal value of \$143.3 billion exceeds the level of 2018 by 23% and reaches the highest level since 2015

Megadeals

• 29 megadeals (over \$1 billion deal value)

Regions

- · Asia & Pacific leads by deal volume, North America by deal value
- China slowing, US stable
- Number of deals in Europe rising slightly again

Financial investors

• Share of financial investors over 50% – many megadeals involve financial investors

Prices

• Prices fall to the level of 2011 (value/sales multiple: 1.4)

Subsectors

- With a share of 37%, Logistics & Trucking is again the most active subsector: 94 deals with a value of \$49.3 billion
- Shipping is slightly above the level of 2018 in number of deals but not in value
- With a decline of 23% in the number of deals, passenger air is still weakening
- 26% of all targets are related to infrastructure: 67 deals with a value of \$51.5 billion

Expectations for 2020

Some factors such as high cash values and low interest rates should provide a good basis for positive deal development in 2020. Other developments create a less favourable environment for T&L deals, most of all the continuing US-China trade conflict and subdued economic growth forecasts. In light of the prevailing geopolitical and economic uncertainties and the variety of other factors influencing the T&L industry, we are cautiously optimistic about M&A activity in 2020. At least in Europe, we expect a slight positive development since the slump around Brexit has been overcome and there is now at least a little more certainty for 2020 after the UK election. In contrast, the presidential election in the US in 2020 and the ongoing trade dispute with China bring further market uncertainty as developments are not foreseeable.

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M&A activity 2019:

Rebound from 2018





M&A activity 2019: Weaker second half but overall rebound from prior year

	2015	2016		2017			2018		2019		
	Total	Total	1H	2H	Total	1H	2H	Total	1H	2H	Total
Number of deals	229	239	146	137	283	127	100	227	135	119	254
Total value of deals (\$bn)	89.1	183.8	62.9	71.3	134.2	74.6	41.6	116.2	67.4	75.9	143.3
Ø Transaction value (\$m)	389.0	769.2	430.7	520.4	474.1	587.1	416.5	511.9	499.2	637.6	564.1

M&A activity 2019: Weaker second half but overall rebound from prior year

In the first half of 2019, the downturn from the second half of the previous year seemed to have been reversed. In the second half of the year, however, there was a slight slowdown to this rebound, with only 119 deals being announced. Although this is an increase of deal announcements of about one fifth compared to previous year's second half, it remains slightly below the long term average of 123 deals per half-year during the last five years. As a consequence, the full year deal number is about 12% higher than in 2018. Even more than the number of deals, both the total transaction value (\$143.3bn) and the average value of deals (\$564m) show strong growth indicating a trend towards larger deals.

Several macroeconomic indices like the WTO Goods Trade Barometer or DHL's Global Trade Barometer point to global trade continuing to lose momentum, albeit at reduced pace. While economic growth was unexpectedly strong in the first quarter of 2019, the prolonged period of high trade tensions throughout the year as well as the slowdown in industrial production have led to an intensified cyclical slowdown in global economic activity. For example, GDP data has shown subdued economic growth in the Eurozone and the RWI/ISL Container Throughput Index, which, after a slight but continuous increase in recent months, fell to the annual average of 137.7 in November (2018: 134.7). The decrease indicates that trade conflicts and higher tariffs have an increasingly significant impact on world trade, which is especially evident in the strong declines at ports on the west coast of the US.

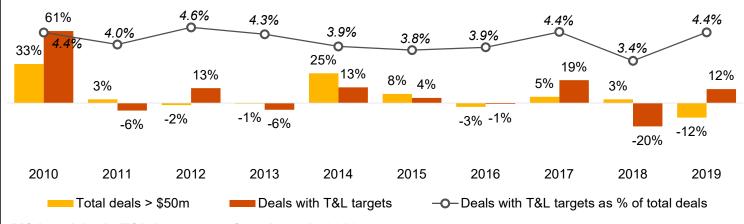
Source for all evaluations: PwC analysis based on Thomson Reuters M&A data; information updated from previous versions; generally deals starting from a volume of \$50 million were evaluated.





M&A activity in T&L increases – other industries drop

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



M&A activity in T&L increases after slump in 2018

After having fallen to the lowest level in recent years with 3.4% in 2018, the share of M&A deals with T&L targets in total global M&A activity across all industries has recovered, rising to 4.4% in 2019. During the past ten years, this share has been 4.1% on average. After the sharp drop of T&L activity in 2018, other industries experienced significant downward trends this year.

For example, the retail & consumer (R&C) industry in the US recorded a decrease in both deal number and value compared to 2018. Growth in the sector has suffered from high valuations, heightened regulatory control, uncertainty due to the effects of pending tariffs and trade disputes. R&C companies are increasingly searching for partnerships or acquisitions of technology targets to become more productive and to enhance customer experience.

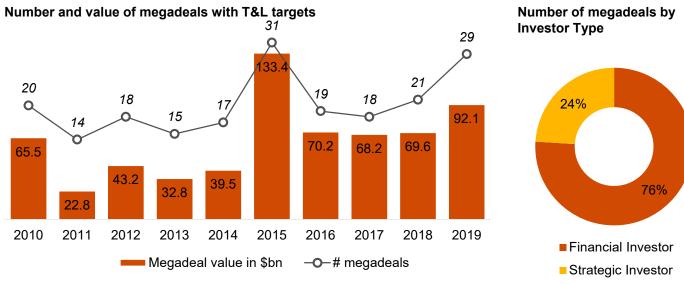
The automotive industry experienced a big decline in number and value of deals. Automotive companies are rather focusing on the development of their previous bets this year as the industry is facing a paradigm shift, with technology placed at the forefront of product experience. However, both strategic and financial investors are still willing to buy, albeit more cautiously, giving reason to believe that M&A may recover as more appealing assets become available.

Source for all evaluations: PwC analysis based on Thomson Reuters M&A data; information updated from previous versions; generally deals starting from a volume of \$50 million were evaluated.





Number of announced megadeals 30% above 10-year average



Number of megadeals rising

Overall, we see a trend towards larger deals with the number of megadeals (29) as well as total megadeal value surpassing the previous year's level for the second consecutive year. Three quarters of these deals see financial investors or investor groups as buyers, while strategic investors appear to limit themselves to smaller transactions. Ten of the 29 megadeals involved participants from the US, while the number of megadeals with Chinese involvement declined from six in the previous year to only three in 2019. In Europe, Spain was quite active this year with involvements in three megadeals.

The biggest deal of the year was Blackstone's acquisition of urban warehouse assets in the US for \$18.7 billion, announced in June 2019. The second biggest is the pending privatisation of PLUS Malaysia, the country's largest highway operator, managing over 1,100 km of highway. The government has received four offers with Widad Business Group currently in the lead, which plans to acquire the entire share capital for \$9.17 billion. With a transaction value of \$9.0 billion, the deal announcement of Roadis USA Holding, a multinational toll road operator, acquiring the E-470 toll road from the state-owned city agency E-470 Public Highway Authority was the third largest transaction in 2019.

Megadeals = deals with a volume starting from \$1 billion







Megadeals in 2019 (1/2)



Megadeals = deals with a volume starting from \$1 billion







Megadeals in 2019 (2/2)

Announce- ment	Target	Target nation	Buyer	Buyer nation	Investor type	Deal status	Deal value (in \$bn)	Sector	Asset type
Jul 19	Virgin Galactic LLC	US	Social Capital Hedosophia Holdings Corp	US	Financial	Completed	1.30	Logistics & Trucking	Operations
Apr 19	Cloverleaf Cold Storage Co Inc	US	Americold Realty Trust	US	Financial	Completed	1.24	Logistics & Trucking	Logistics Real Estate
Jun 19	SIAS SpA	IT	ASTM SpA	IT	Strategic	Pending	1.22	Passenger Ground	Infrastructure - Road
Mar 19	GMR Airports Ltd	India	Investor Group led by Tata Sons Ltd. and GIC Pte. Ltd	India	Financial	Pending	1.16	Passenger Air	Infrastructure - Airport
Oct 19	Red de Carreteras de Occidente (30%)	MX	Investor Group of Abertis Infrastructuras and GIC Pte. Ltd	ES	Financial	Intended	1.12	Passenger Ground	Infrastructure - Road
Nov 19	Air Europa Lineas Aereas SAU	ES	IB OPCO Holdings (Part of International Airlines Group)	ES	Strategic	Pending	1.12	Passenger Air	Operations
Sep 19	Mengxi-Huazhong Railway Co Ltd	CN	Investor Group of Subsidiaries from Agricultural Bank of China, ICBC, BOC and China State Railway Group	CN	Financial	Pending	1.09	Rail	Operations
Jul 19	Topaz Energy & Marine Ltd	UAE	DP World Ltd	UAE	Strategic	Completed	1.08	Shipping	Infrastructure - Road
Apr 19	Gvk Airport Holdings Pvt Ltd	IN	Investor Group of ADIA, PSP and NIIF	UAE	Financial	Pending	1.08	Passenger Air	Infrastructure - Airport
Dec 19	Apollo Maximus- Portfolio	DE	GIC Singapore	SG	Financial	Pending	1.06	Logistics & Trucking	Logistics Real Estate
Apr 19	Advanced Technologies Group	US	Investor Group of Toyota, Denso and Softbank Vision Fund	JP	Financial	Pending	1.00	Other	Operations
Feb 19	Flexport Inc	US	Investor Group of SoftBank Vision Fund, DST Global, Susa Ventures LP, Cherubic Venture Partners Inc, Founders Fund Management LLC, and SF Holding Co Ltd	UK	Financial	Pending	1.00	Logistics & Trucking	Operations

Megadeals = deals with a volume starting from \$1 billion







Regional distribution of deals

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 / outbound deals are, therefore, recorded twice in the list.

Local Inbound Outbound Total	39 15 13 67	15.1 6.1 7.2	388.1 404.8
Outbound Total	13		404.8
Total		7.2	
	67	• •	551.5
Asia O Davida		28.4	423.5
Asia & Pacific			
Local	123	47.0	382.3
Inbound	10	3.2	322.1
Outbound	11	5.7	522.5
Total	144	56.0	388.8
North America			
Local	39	57.9	1,484.8
Inbound	12	7.6	633.5
Outbound	17	6.5	384.1
Total	68	72.0	1,059.4
South America			
Local	9	2.7	303.5
Inbound	7	3.6	511.6
Outbound	1	0.2	194.4
Total	17	6.5	382.8
Africa/unknown			
Local	0	0.0	_
Inbound	0	0.0	-
Outbound	2	0.8	417.3
Total	2	0.8	417.3

In 2019, Asia & Pacific was once again the number one region in terms of number of deals and deal value. China accounted for 58 of these transactions, including three megadeals with Chinese targets and buyers.

North America dominated by total deal value, which was partly due to one extreme megadeal. Despite the trade dispute with China, dealmaking benefited from a relatively strong US economy, simple financing conditions and tax reductions.

Measured in terms of number and value of deals, Europe ranks third. The T&L deal environment has worsened this year. In addition to the global slowdown and the uncertain Brexit specifics, the European governments have tightened regulatory oversight.

South America shows a small number and value of deals, but the region was relatively active compared to the previous year.

In line with previous years, the least deals occurred in Africa.

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Regional highlights:

Europe, Germany, China and North America





Europe – megadeals driven by consolidation efforts

Europe	No. of deals	Value (\$bn)	Ø Deal (\$m)
Local	39	15.1	388.1
Inbound	15	6.1	404.8
Outbound	13	7.2	551.5
Total	67	28.4	423.5

Europe - recovery of deal activity

The 2018 decline in M&A activity was particularly pronounced in Europe (-42%). This development has stopped in line with the global rebound, with 67 deals announced in 2019 (+8% compared to 2018). The average deal value was relatively high, mainly driven by the megadeals with European participation, eg, Panalpina (Switzerland) being acquired by its Danish peer logistics company DSV; the DCT Gdansk transaction, a Polish deepwater container terminal, that was sold by Macquarie Infrastructure to an investor group led by PSA from Singapore, the world's largest port operator; and the sale of Spanish airline Air Europa Lineas Aereas.

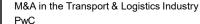
As regards deal activity with China, another noteworthy deal involves the sale of airport concessions for Toulouse-Blagnac: a Chinese investor joined the privatisation process by acquiring a 49.99% stake five years ago, which at that time was considered a "lighthouse" for the Belt & Road Initiative. This year, CASIL sold its stake for \$569 million to French Eiffage SA.

Solid involvement in megadeals

Of the total 29 megadeals, eight transactions were with European participation. Half of them had infrastructure-related targets (3 road, 1 port), three megadeals had targets in Logistics & Trucking and the remaining transaction was related to passenger air. Among the megadeals with European involvement, a share of 75% were interregional, demonstrating the strong outbound orientation of European countries for large transactions. Regarding investor types, financial investors were only marginally more active than strategic investors and concentrated their activities primarily on infrastructure targets. On the other side, strategic investors spread their activities in different target subsectors.

The announced acquisition of a logistics real estate portfolio of Apollo Global Management for \$1.06 billion, which includes 28 logistics properties primarily in Germany and Eastern Europe, reflects the global relevance of warehousing targets that are attractive for investors but limited in number, creating a seller's market.









Europe – Spain particularly strong in European M&A activity

Spain particularly strong in European M&A activity

In Europe, Spain was particularly active with three megadeals this year. This can still be seen as the aftermath of the megadeal in year 2018, when Spanish Abertis Infraestructuras SA was taken over by a consortium of Atlantia, ACS and Hochtief. With a value of more than \$22.5 billion, this deal is the largest T&L transaction ever in Europe. The deal has had a major impact on the Spanish infrastructure sector and has led to further follow-up deals due to Spain's increased efforts to restructure itself, which is also reflected in the high share of infrastructure deals. The majority of deals with Spanish targets were related to Logistics & Trucking and road assets. One example is Meridiam SAS of France acquiring an 85% interest in Autopista del Sol CESA for ~\$659 million from Cintra Infraestructuras SA, ultimately owned by Ferrovial SA and Unicaja Banco SA.

The two cross-border and one local megadeal had a total value of \$4.84 billion. The largest deal with Spanish participation is the pending acquisition of Red de Carreteras de Occidente. An investor group, comprised of Abertis and GIS, agreed to acquire a 70% stake in the Mexican highway operator. The closing of transaction is expected in the first half of 2020 via a public tender offer. The second announced Spanish megadeal involved exactly this public tender offer with a deal value of \$1.12 billion, in which Abertis and GIS bid for the remaining 30%. The third megadeal with Spanish involvement was Iberia of IAG entering a definitive deal agreement to buy passenger airline Air Europa Lineas Aereas for \$1.1 billion, which will be completed in mid-2020.

Brexit breakthrough after UK election – but direction still unclear

For most of the past year the agreement on the further extension of the Brexit deadline until January 31st 2020 has contributed to ongoing uncertainty about future trade relations between the United Kingdom and the EU. Following the parliamentary elections in December, the way is now clear for a Brexit on January 31st 2020. Prime Minister Boris Johnson pleads for an orderly Brexit but the specifics of the deal will be unclear until the end of 2020, resulting in ongoing uncertainty. Future deal activity will also depend on the value development of the British Pound after Brexit, but certainly supply chains will have to be reorganised to secure reliable flows between the UK and mainland Europe.

In 2019, we saw only six deals with UK targets reaching the \$50 million threshold of disclosed deal value, five of which were in the Logistics & Trucking sector. The largest of these deals was Amazon's investment in an undisclosed minority stake in food delivery service Deliveroo. On the other side, UK investors appeared in 14 out of the 67 European deals, investing primarily in the Logistics & Trucking sector. With only one exception, all deals were made by financial investors with the biggest transaction being the announced megadeal of an investor group, led by SoftBank Vision Fund, acquiring an undisclosed minority stake in Flexport, a provider of customs brokerage and freight forwarding services, for \$1 billion.





Germany – six deals with

known deal value over \$50 million

Deals with German participation Deals with German participation by origin of the target by sector ■Logistics & Trucking 13% ■ Germany France ■ Passenger Ground Switzerland Shipping Romania 52% ■ Passenger Air ■ Morocco 12% ■ Sweden Other ■ Turkey ■ Rail 15% Other

Germany – six deals with known deal value over \$50 million

Including one megadeal, there were six announced deals reaching the \$50 million threshold of disclosed deal value in Germany in 2019. The total number of transactions with German participation reached 91, surpassing 2018 by eight deals. Logistics & Trucking was again the focus of investors with 52% of deals concerning targets from this subsector (2018: 61%); the second highest number of M&A announcements (14%) related to targets in the passenger ground subsector.

The two largest deals relate to warehousing assets: In the only megadeal, financial investor Apollo sold its Maximus Portfolio of logistics assets to GIC from Singapore for \$1.06 billion. The second largest deal saw Samsung Securities buying one of the most modern warehouses in Europe, rented to Amazon, which operates an e-commerce fulfilment centre in the asset. The deal was Samsung Securities' third acquisition of Amazon logistics centres in Europe. In general, warehousing assets in which Amazon is the tenant appear to be attractive.

Looking at investor types, we see that financial investors play a less important role in Germany, making up for only 37% of announced deals (2018: 32%) compared to over 50% of announced deals globally. One of the reasons is the relatively low level of privatisation in German transport infrastructure, limiting the opportunities for private-sector investors. Also, a large portion of the capital requirement arises from maintenance, less from the development of new capacities.

In 2019, the share of cross-border deals again exceeded the number of local deals, where both the acquirer and the target company are located in Germany. These local deals accounted for 43% of the total number of deals with German participation. The share of 57% cross-border deals (26 inbound, 26 outbound) shows a pronounced international alignment of the German T&L industry but also the attractiveness for foreign investors.

All deals were counted, regardless of the deal volume (also < \$50 million).

> M&A in the Transport & Logistics Industry PwC

January 2020





China – slowdown after record year 2018

Deals with Chinese involvement from 2009 to 2019 36% 31% (deals with a volume greater than \$50m) 35% 26% 28% 24% 82 19% 16% 12.0 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019



- Value of deals with Chinese involvement (\$bn)
- -O-Share of deals with Chinese involvement (% of all global deals)
- -O-Share of value of deals with Chinese involvement (% of all global deals)

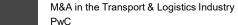
Business climate and deal environment in China

In past years, China has been the leading Asian player in terms of M&A in the T&L industry. In 2019, deal activity with Chinese involvement experienced a significant decline and fell to the levels of 2014 (deal value) and 2016 (number of deals) respectively. After a declining trend last year, total deal value declined further by \$11.4 billion in 2019. The ubiquitous global economic weakening, low liquidity for non-SOEs and the trade dispute with the US are reasons for this downward development. Furthermore, the decline still echoes from developments in 2018, when the Chinese government announced pre-approval regulations for foreign investments and the Producer Price Index (PPI) started to fall consistently, pointing to reduced willingness to expand and invest.

China was involved in three megadeals this year. The biggest transaction was the investment of Alibaba in freight forwarder Cainiao for \$3.3 billion. Another Chinese megadeal concerns the announced acquisition of a 9.9% stake from China Southern Airlines by a Chinese investor group for \$2.8 billion. The third announced megadeal is an investor group investing in Mengxi-Huazhong Railway, a Beijing-based railroad operator for \$1.1 billion.

China – trade disputes impacting deal activity

The share of transactions with Chinese participation compared to all global deals declined from 36% in 2018 to 23% in 2019 and also the number of Chinese megadeals decreased from six in the previous year to only three this year. The ongoing trade conflict with the US plays a major role in the drop in Chinese investments and is responsible for more complicated supply chains and higher tariffs, which lead to fewer exports and subdued investment growth in China.







China – local focus instead of acquiring in the West

China (incl. HK)	No. of deals	Value (\$bn)	Ø Deal (\$m)
Local	50	19.8	396.0
Inbound	3	1.1	366.7
Outbound	5	0.5	100
Total	58	21.4	369.9

Chinese deals are still primarily local

Local deals dominate the picture (this includes smaller deals as well as megadeals), continuing the trend of the previous years. Only companies in Hong Kong were involved in cross-border deals, organised via local market subsidiaries. Even Alibaba, one of the most international players in China, focused on one local deal only. The share of financial and strategic investors was equal but targets were diverging. While financial investors put a focus on Logistics & Trucking (41%), targets of strategic investors were distributed more equally. In China, a mix of financial and strategic investors is becoming increasingly common as a result of the Mixed-Ownership-Reform for large state-owned enterprises (SOE) and as solution for sharing each other's advantages and risks.

Local focus instead of acquiring in the West

Various reports have led to a perception that China is acquiring large parts of the infrastructure in Western countries, however M&A data shows that in recent years China has only acquired a few such targets. It is also evident that some infrastructure targets have even been sold back to local investors, eg, the airport concessions for Toulouse-Blagnac.

In line with the global trend, deals were mainly focused on the Trucking & Logistics subsector and Shipping, driven by the strong growth of e-commerce. China's expansion into the European Logistics & Trucking subsector with the Sinotrans acquisition of KLG, a provider of local freight trucking services for \$420 million, is one example. Sinotrans will initially have a 80% stake and will take full ownership by mid-2020 to cover all KLG's European operations. We also saw a slight increase in local infrastructure deals as result of political action. The Chinese government has taken its first steps to facilitate the implementation of infrastructure projects by lifting the ban on the use of funds raised from local government bonds as equity for infrastructure transactions. Additionally, the minimum equity ratio for certain infrastructure projects was lowered from 25% to 20%.







North America – against all odds

North America	No. of deals	Value (\$bn)	Ø Deal (\$m)
Local	39	57.9	1,484.8
Inbound	12	7.6	633.5
Outbound	17	6.5	384.1
Total	68	72.0	1,059.4

North America – against all odds

North America has developed in line with the global upward trend, showing a slight rise in T&L deal announcements, ending up with 68 deals and a total value of \$72 billion in 2019. The average deal value was by far the highest globally and demonstrates the emergence of ever larger deals. What can be seen is that North America's M&A activities had a strong focus on local markets as the majority of deals took place within the North American region with a share of 56% local deals. In contrast, the region was only active in 17 (26%) outbound deals, primarily with targets in Logistics & Trucking, half of which were attributable to Asian regions, especially India. This year, there was only one transaction between North America (Canada) and China, namely the acquisition of Dream Cruises Holding by Darting Investment Holdings Ltd of Canada for \$489 million.

The high deal value in North America was mainly attributable to the many deals with US involvement, but Canada was also driving the value up with four announced megadeals (of which one was withdrawn) and a total value of \$11.32 billion. The biggest deal with Canadian involvement was the local transaction of Onex Corp, which acquired the entire share capital of WestJet Airlines for \$3.73 billion in a leveraged buyout transaction, leading to a privatisation of the Calgary-based airline. The strong Canadian participation is interesting as the country was not involved in any megadeal in 2018. Most of the Canadian deals were related to infrastructure targets. The reason is that, in recent years, infrastructure projects have been strongly supported by the Canadian government as part of its investment plan, under which the government invests more than \$180 billion in infrastructure.







Focus US – stable deal activity

US	No. of deals	Value (\$bn)	Ø Deal (\$m)
Local	26	36.7	1,411.5
Inbound	9	11.9	1,322.2
Outbound	18	6.7	372.2
Total	53	55.3	1,052.8

Focus US - stable deal activity

Contrary to the development in China, T&L deal activity has remained stable and even increased slightly in the US. In 2019, 53 deals were announced with a share of 49% local deals and a total deal value of \$55 billion. Seven companies from Europe were on the target side, three of them from the United Kingdom. Five European investors, all from the UK, acquired US based targets; however, no deals were made with China.

With 36 out of the total 53 deals, more than two thirds were carried out by financial investors, with one third being financed by strategic investors. With regard to the targets, deal activities of both investor types had a major focus on Logistics & Trucking, as they had last year. This demonstrates the significance of warehousing and storage as well as the arrangement of transportation of freight and cargo. The biggest transaction in the field of warehousing was the Blackstone deal, which at the same time was the largest transaction in 2019.

Despite the trade dispute with China, dealmaking benefited from a relatively strong US economy compared to Europe or Asia, favourable financing conditions and tax reductions. GDP growth has risen to 3.1% in the first quarter of 2019 and then stabilised at a level of about 2% in the following months. In the longer term perspective, IMF forecasts a moderate growth for the US economy in the future. It turns out, however, that the existing uncertainties have had an influence on deal activity as financial investors, for example, concentrate on the expanding the e-commerce field, expecting secure returns. US logistics companies are facing rising costs, as reflected in the increase in United States Business Logistics Costs (USBLC) to 8.0% of GDP (+11.4%) in 2018. Furthermore, the industry is suffering from rising labour costs for warehousing staff and drivers due to the competitive US labour market.



4

Analysis of M&A activity by sector and investor type





T&L sectors — Logistics & Trucking again dominating

1H2017 2H2017 1H2018 2H2018 1H2019 2H2019 All deals Total No. of Total Total No. of Total No. of Total No. of Total No. of No. of Total value (\$bn) deals value deals value deals value deals value deals value deals value Passenger Air 21 9.7 13.6 8.7 9.7 21 9.3 24 15 21 10.1 9 Passenger Ground 34.6 29.1 27.4 20 22 8.6 30 19 5.4 16 17 11.1 Rail 3.8 5 4.4 0.7 3 3 0.9 1.9 8 11.4 Logistics & Trucking 29.7 12.8 17.0 50 14.3 44 14.0 36.5 45 Shipping 10.9 14.3 6.2 12.6 34 29 8.5 18 14 4.0 1.3 Other 1.7 1.6 14 3.8 1.1 2.9 146 62.9 137 71.3 74.6 100 41.6 135 67.4 119 75.9 Total 127

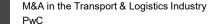
In 2019, M&A activity in T&L again had an emphasis on targets in Logistics & Trucking, which accounted for 37% of all announced deals and 34% of total deal value. Furthermore, within the 29 megadeals announced, eight transactions were related to targets in this subsector. Following the trend of recent years, the fewest deals were in Rail, although deal announcements in the sector more than doubled compared to 2018.

67 of the total 254 transactions were deals with infrastructure-related targets, significantly above 2018 and in line with the previous five years, in which on average every fourth deal was infrastructure-related. The total value of the 67 infrastructure-related deals accounts for nearly 36% of the total deal value in year 2019.

thereof infrastructure Total value (\$bn)	1H20	17	2H20	17	1H20	18	2H20	18	1H20	19	2H20	19
	No. of deals	Total value										
Infrastructure Airports	13	4.7	6	2.4	8	8.7	3	3.9	9	4.2	3	0.6
Infrastructure Road	18	6.1	12	27.4	9	25.6	9	9.1	13	8.0	23	32.7
Infrastructure Ports	16	6.7	19	5.6	6	6.7	6	8.0	11	5.0	8	0.9
Total (infrastructure)	47	17.5	37	35.3	23	41.0	18	13.7	33	17.2	34	34.3

Number and total value of the deals (in \$bn) from a volume of \$50 million. Infrastructure-related deals can come from Passenger Air, Passenger Ground or Shipping.









Sector analysis

Shipping

Considering the whole year, about 40% of transactions in Shipping were driven by infrastructure-port deals, making up 19 of the total 47 shipping-related deals. The second half of 2019 showed a significant drop in the total number of M&A related to this sector from 29 to 19. However, three megadeals are attributable to Shipping. The biggest transaction this year was the transaction of US Macquarie Infrastructure Partners Inc. and Long Beach Container Terminal LLC with a deal value of \$1.78 billion, which was an infrastructure deal as well.

However, the United Nations Conference on Trade and Development (UNCTAD) predicts moderate growth in global maritime trade over the next five years, driven especially by growth in containerised, dry bulk and gas cargoes. In 2018 and 2019, some alliances and joint ventures were formed between terminal operators and between liner companies and terminal operators to ensure the common operation of berths. There are rumours about further M&A among the top shipping companies, but we expect that there won't be any more significant consolidations in future as the changes in the sector are already completed. The four companies Maersk, MSC, COSCO and CMA CGM are the biggest players in the shipping industry, measured by transport capacity in TEU. The next largest competitor, Hapag-Lloyd, is already lacking roughly 1 million TEU. With regard to the alliances, there are only three relevant ones left: M2, The Alliance and ONE. The Western states and China would not agree to another "giant merger" considering their remarks on the last larger mergers in that sector. Criticism had already arisen in the past and all mergers in the maritime sector were mistrustfully scrutinised by regulators afraid of monopolies.

In the coming year, the subsector faces new regulatory limits on sulphur content for marine fuels (IMO 2020), which will greatly affect the fuel markets. The uncertainty correlated to the new IMO 2020 might be the major obstacle for 2020. It places a global limit on the sulphur content of bunker fuel, reducing it from 3.5% to 0.5%, unless ships are equipped with scrubbers. The assumption with regard to shipping companies is that they have a preferred brand or company globally for the supply of fuel in order to avoid compatibility issues. Companies with bunker capacities therefore have the opportunity to win new customers through the IMO 2020, which, however, presupposes a standard fuel at all locations. Additionally we believe that there will be more regulations coming up in the future forcing the subsector to become more environmentally friendly.





Sector analysis

Logistics & Trucking

With 94 deals announced, Logistics & Trucking was again the strongest subsector, albeit with a lower number of mega deals. The DSV-Panalpina takeover, however, may stimulate further consolidation and cross-border activities among large integrated logistics players after a temporary peak in 2015 with five megadeal takeovers in this segment. Although the general economy has weakened, favourable retail sales, the digitalisation of supply chain activities and the strength of e-commerce have remained the main drivers and were responsible for the high number of deals in this sector.

The largest transaction in 2019 remained the Blackstone deal from the first half of the year. Two funds of Blackstone joined to make a major investment into US urban warehousing: a logistics asset portfolio including about 1,300 properties from GLP was acquired for \$18.7 billion, almost doubling Blackstone's warehouse footprint in the US. Besides this notable acquisition, there were another 32 deals with warehousing assets as targets, adding up to more than one third of the total number of deals in Logistics & Trucking. With mainly financial investors on the buyer side, the share of warehousing-related deals picked up on the market situation in 2017, when warehousing-related deals made up for about 38% of announced Logistics & Trucking deals (2018: 22%). This development is due to e-commerce companies striving to satisfy the increasingly demanding customer expectations in terms of convenience and shorter delivery times by seeking solutions to make the last mile delivery more efficient, thus raising demand for logistics properties in favourable regions.

E-commerce giants such as Amazon are driving demand for such targets even higher as they strive to expand their own logistics services to become competitive third-party logistics providers in the face of rising e-commerce demands. Another example is Alibaba, which has further expanded its stakes in the leading Chinese CEP players. Alibaba raised its interest from 51% to 63% by acquiring a 12% stake in Cainiao Smart Logistics Network Ltd, a local freight trucking service provider, for \$3.34 billion. The acquisition points to Alibaba's aspirations to become independent, build an efficient logistics network and offer a smooth customer service. After prior investments in express companies, Alibaba now has participations in all major CEP companies in China and is increasingly strengthening its market position.





Sector analysis

Aviation

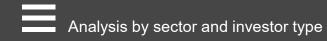
The Aviation subsector counted 30 transactions in 2019 and thus remained below the levels of the past two years. We saw a strong concentration on Asia and the Americas, but only three deals with European participation. Among the announced deals, twelve transactions, which accounted for 40%, were related to airport targets, primarily in India. The largest of these deals is the pending acquisition of a 45% stake in Indian GMR Airports by Tata Group. Concerning the 16 deals in the airline business, one deal (Air Europa) is attributable to Europe, while the rest was spread across North and South America and Asian countries.

There were seven megadeals with Passenger Air targets. The announced transaction between WestJet Airlines and Onex, which agreed to acquire the entire share capital of the airline for \$3.7 billion, was the largest aviation deal this year. In the European market, initial rumours about strategic consolidation were confirmed, for example, through the pending acquisition of Air Europa Lineas Aereas by Iberia, a wholly owned subsidiary of International Consolidated Airlines Group (IAG), which agreed to acquire the entire issued share capital of the Spanish airline for \$1.1 billion. The deal has various impacts on the aviation sector as it will transform IAG's Madrid hub into a serious competitor for the four existing leading hubs in Europe – Amsterdam, London Heathrow, Frankfurt and Paris Charles de Gaulle. Furthermore, the transaction will develop further network growth opportunities and will recreate IAG's leadership role in the South Atlantic region. The estimated closing is in the second half of 2020 following receipt of relevant approvals.

Rail

Following consistent decline since 2016, the number of deals in rail increased to 15 in 2019 and thus more than doubled compared to the previous year. However, the high share of state-owned companies within the rail sector and its asset-rich character lead to limited options compared to other subsectors. In 2019, though, two megadeals were made: a US investor group, comprising Brookfield Infrastructure Partners LP and GIC Pte Ltd, acquired railroad operator Genesee & Wyoming Inc. With a transaction value of \$8.4 billion, this is at the same time the fourth largest deal of the year. The other megadeal was a Chinese investor group acquiring a 13.342% stake of the railroad operator Mengxi-Huazhong Railway Co Ltd with a transaction value of \$1.01 billion.

One explanation for the slight increase in rail transactions might be political support. The EU, for example, has supported the rail subsector in recent years by making investments in rail infrastructure, the improvement of rail interoperability and by establishing of a common rail market with the goal of facilitating cross-border rail transport.





Sector analysis: Infrastructure deep dive

Infrastructure - increasingly popular targets

With a total number of 67 and a share of 26% of all deals, the year 2019 showed that infrastructure-related transactions are of increasing importance. However, the total deal value declined from \$54.8 billion in the previous year to \$51.5 billion (–6%) in 2019. As in recent years, road deals stood out, with a share of 54% of all infrastructure-related transactions. Ports were second with a total number of 19 deals (28%), followed by airports (12). Among the megadeals, twelve related to infrastructure targets, making up 41%. Due to the lack of profitable deal targets combined with a lot of money in the market, it is not surprising that financial investors focus increasingly on infrastructure investments that often offer stable returns with lower risk.

Strategic investors and financial investors were almost equally involved in these types of deals, though strategic investors were more focused on smaller deals. This is reflected in the average transaction value, which is only half as high as that of financial investors. In 2019, infrastructure deals were mainly driven by investors from China (20, incl. HK) and India (6), which at the same time were the most frequent target regions with China accounting for 18 and India for eight deals. In general, two thirds of the infrastructure-related deals had targets in emerging and developing countries, pointing to the potential that these regions offer for the T&L industry.

With a value of \$9.17 billion, the pending transaction of Widad Business Group, which planned to acquire the entire share capital of Malaysian state-owned toll road operator PLUS, was the largest deal related to road assets in 2019. The biggest port related deals were the Australian infrastructure investor Macquarie acquiring Long Beach Container Terminal for \$1.78 billion and the acquisition of the Polish container terminal DCT Gdansk, which was sold from Macquarie to an investor group for \$1.32 billion. Macquarie helped to build and expand the port in the past and was now searching for a more experienced port operator to get a return on investment and strategically shift its harbour activities. Regarding airport targets, the biggest deal was the announced transaction of an investor group, compromised of Tata Sons Ltd, GIS Pte Ltd and SSG Capital Management Ltd, acquiring a 45% stake in GMR Airports in India for \$1.16 billion. Initially, there were rumours of GMR seeking a buyer for an undisclosed minority stake in its GMR airport units in August 2018. Mitsubishi Corp, GIC Ltd and Aion Capital Ltd were rumoured to be potential bidders.

Infrastructure-related deals can come from Passenger Air, Passenger Ground or Shipping.







Sector analysis: Infrastructure deep dive

Focus: South America - Infrastructure leads the way

In South America, 17 deals with a total deal value three times higher than 2018 (\$6.5 billion from \$1.6 billion) were announced – nine more than in 2018. 16 of these deals had targets within South America, while the only outbound transaction was SAAM SA acquiring all joint tugboat operations in North and South America from joint venture partner Boskalis (Netherlands).

Half of the total 17 deals announced in South America were infrastructure-related. With a total of ten deals, most South American transactions were announced in Brazil, of which five had infrastructure targets. In addition to one port and two road deals, the remaining two infrastructure deals related to airport concessions. This can be attributed to political activity, since the Brazilian government has introduced an airport concession programme, which has strengthened the development in the subsector and has improved legal certainty for aviation companies. Additionally, the government has already announced further rounds of concessions, which will include 41 airports in total, leading to higher attractiveness for foreign investors.

After Brazil, Chile is the country with the second highest number of deals (7) in South America in 2019 and it participated in five announced infrastructure-related deals. Two of these transactions had the port operator Puertos y Logistics SA as their target. DP World first acquired the entire share capital of the port operator and later sold a 45% stake to the pension fund manager Caisse de dépôt et placement du Québec. Of the remaining infrastructure deals, two were related to road asset concessions. Finally, Zurich Airport won concessions for two airports in the Southeast of Chile via its Chilean subsidiary Zurich Airport Latin America SA in an auction.

We observe that, in South America, M&A activity in the T&L industry was focused on infrastructure targets and on two main territories, since all deals in South America involved targets or investors from Brazil or Chile. The high share of inbound deals shows that, despite the mixed macroeconomic prospects for both countries, international investors seem to be confident about seeking business opportunities in their transport infrastructure. This development is likely to continue as large infrastructure concessions will expire soon.

Infrastructure-related deals can come from Passenger Air, Passenger Ground or Shipping.

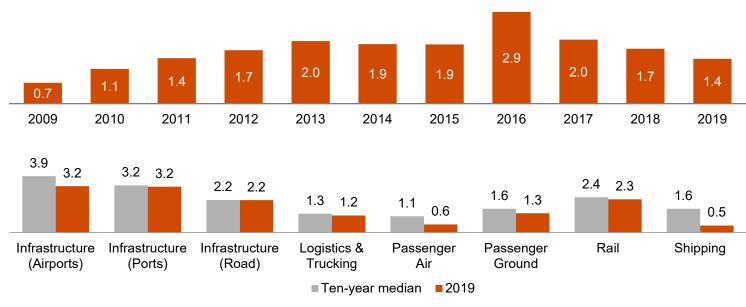




Prices for T&L targets

dropped further

Median of the deal value/sales multiples* (deals with a volume greater than \$50 million)



Prices decline

In 2019, we have seen prices for T&L targets drop to the level of 2011 (median value/sales multiple 1.4). Prices for infrastructure assets (ports, airports and toll roads) and railway companies, however, are still reaching the tenyear average: owing to intense bidding competition, as well as a lot of funds being available on the market, company valuations in these markets are withstanding the overall drop in prices. Moreover, the stable prices for infrastructure targets result from rising demand as more investors are seeking stable and less risky investments with more predictable returns.

On the buyside, financial investors tend to pay higher multiples than strategic investors when acquiring T&L targets: in 2019 the median value/sales multiple paid by financial investors was 1.7 (2018: 1.3) while that of strategic investors was 1.2 (2018: 1.7).

^{*} The transaction multiple represents the ratio between the company valuation (purchase price) and the annual turnover.



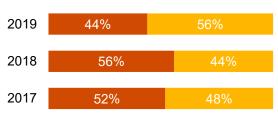


Financial investors

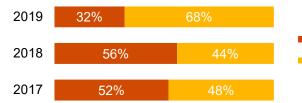
Investor Groups are counted as Financial Investors, as Financial

Investors normally play a leading role in these groups.





Value of deals by type of investor



Strategic investorsFinancial investors

Financial investors are stepping up their involvement in T&L

In 2019, financial investors had a share of 56% of the total number of M&A deals, which is above the levels of the previous years, and reached a total deal value of about \$97.5 billion (strategic investors: \$45.7 billion). Participating in 22 megadeals with a combined deal value of about \$69.5 billion, financial investors were leading the market when it came to large transactions. They focused primarily on Logistics & Trucking and infrastructure targets. The largest of these transactions was Blackstone's acquisition of GLP-owned warehouses in the US, followed by the privatisation bids for the US toll road operator E-470 Public Highway Authority.

In the face of a slowing economy, there are increasing incentives for financial investors to invest in bigger targets with more resources and they are in a better position to cope with the deteriorating economic situation. However, strategic investors have also searched for opportunities with a solid customer base, scalability and innovative technologies that complement their current business and have the potential to increase profits.

Number and total value of deals with participation of financial investors

	20	17	20	18	2019	
Total value (\$bn)	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value
Passenger Air	20	10.2	15	12.9	12	12.7
Passenger Ground	20	8.9	15	10.1	28	17.6
Rail	3	1.5	3	2.9	6	10.9
Logistics & Trucking	56	30.0	48	19.3	69	38.2
Shipping	28	9.8	14	6.4	18	16.0
Other	10	3.6	4	1.4	10	2.1
Total	137	64.0	99	53.0	143	97.5

M&A in the Transport & Logistics Industry
PwC

January 2020

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Outlook

for 2020





Outlook for 2020

Favourable conditions for dealmaking

Low interest rates and high cash levels are generating favourable conditions for dealmaking. Central banks want to keep the rates at a low level and are even discussing further reductions. This means that large T&L takeovers, eg, with infrastructure targets, can be leveraged and investors can expect secure returns in the long term due to smaller risk. Historically high cash levels and private equity firms with lots of dry powder will support dealmaking in the short-term. In the mid-term, some companies may hold their liquid assets instead of investing in M&A due to a possible downturn and shortages.

Macroeconomic headwinds

The trade dispute between China and the US continues to simmer, leading to an overall subdued trading sentiment. For that, the trade prospects especially for China are the most negative. Increasing trade tensions and a slowdown in the global economy have led WTO experts to a revision of growth forecasts from 3.3% to 3.0% for 2019 (2018: 3.6%), which is the weakest pace since the financial crisis ten years ago. For 2020, growth is expected to rise moderately to 3.4% (–0.2% from April projections) driven by emerging markets and developing countries, but this will depend on future developments in global trade relations. By contrast, according to OECD experts, global GDP growth fell to 2.9% this year (2018: 3.7%) and they predict a growth rate of 3% for the next two years. The recent downward revisions in GDP growth forecasts and overall uncertainty surrounding growth rates could be the first signs of a possible economic crisis. Hence, the biggest challenge for T&L companies in 2020 will be to overcome uncertainty. However, an unstable global market may provide opportunities, especially for private equity investors, to unleash some of their dry powder.

Digitalisation a big topic

Digitalisation has arrived in the T&L industry and poses great challenges for logistics companies. Small and medium-sized T&L companies are currently only average in terms of digitalisation and thus have a high development potential, but they often do not have the means and in-house manpower for the digital change. Some logistics companies may consider acquiring digital boutiques. But most will rather invest larger amounts in new IT systems, hiring of digital talent and engaging advisors to help drive the digitalisation of processes and services. Taking into account the development towards supply chain ecosystems and the changing capabilities required to take a leading position, opportunities are arising for digital leaders, but the T&L industry may also witness market exits in the future due to a lack of digitalisation.





Outlook for 2020



Our expectations

Some factors, such as high cash values and low interest rates, should provide good basis for a positive deal development in 2020. Others create a less favourable environment for T&L deals, most of all the continuing USChina trade conflict and subdued economic growth forecasts. In light of the prevailing geopolitical and economic uncertainties and the variety of other factors influencing the T&L industry, we are cautiously optimistic about M&A activity in 2020. At least in Europe, we expect a slight positive development, since the slump around Brexit can be overcome and there is now at least some more certainty for 2020 after the UK election. By contrast, the presidential election in the US in 2020 and the ongoing trade dispute with China bring further market uncertainty as developments are not foreseeable.

We assume that in 2020, due to the ongoing growth of e-commerce, deals with targets like warehousing assets and CEP providers will remain appealing to investors, as will infrastructure-related deals, which provide secure long-term returns. Moreover, we expect that investors' already high cash levels will continue to rise in 2020 as especially strategic investors strive to fill up their savings for crisis situations and future shortages. However, these assumptions depend on trade disputes not intensifying further.

How resilient are T&L companies in a downturn?

The T&L sector forms the backbone of world trade but is highly dependent on industrial production and macroeconomic trends. Logistics KPIs usually develop consistently during an upturn; growth is slightly above other industries due to more complex and international supply chains and smaller scale shipments. The CEP market is growing most dynamically with double digit growth rates. Europe, and especially Germany, with its nine neighbouring countries, is a logistics hotspot; the LPI (Logistic Performance Index) is the highest for Germany, followed by Sweden and Belgium. The low margins and the high share of small and medium sized companies in the T&L industry lead to limited resilience in a downturn of industrial production or global economy as a whole. Additionally, during an economic downturn, a traditionally higher insolvency rate compared to other industries exerts a pressure to change on the logistics industry as well as five mega trends – digitalisation, demographic change, globalisation (with a tendency to protectionism), sustainability and volatility.

In order to continue to exist and be ready for the future, logistics companies need to change and pure transport operators need to reposition themselves. There are four business models which will survive in the medium to long run: platforms, carriers and terminals, supply chain specialists and logistics service providers. Thus, the limited resilience in a downturn and the need for change offer additional opportunities for M&A activities.

Methodology





Methodology

This report is an analysis of the global transaction activities in the T&L industry.

The analysis covers all mergers, acquisitions, sales, leveraged buyouts, privatisations and the acquisition of minority interests with a transaction volume greater than \$50 million. All announcements between January 1st 2019 and December 31st 2019 were taken into consideration. Project transactions, such as public-private partnerships – which are more common than corporate transactions, especially in the field of infrastructure – are outside its scope.

The data for the analysis are derived from Thomson Reuters and include all announced deals where the target company comes from one of the NAICS industries listed below. Historical data is continuously updated.

All transactions whose status at the time of the 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' were included.

Subsectors 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 for 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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Acknowledgements:

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Daniel Antonik, PwC Poland

Gabriele d'Achille, PwC Switzerland

Charles Johnson-Ferguson, Coolin Desai, Adam Sloan, PwC UK

Alan Ng, Elizabeth Wong, Hongbin Jiang, PwC China and Hong Kong

