

M&A in the Transport & Logistics Industry

January – June 2019



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Highlights





23% more T&L deals in 1H2019 than the half year before

5 megadeals relate to infrastructure targets

40% more deal announcements in North and South America than half year before



M&A activity 2019 - revitalisation after slowdown: The first half year of 2019 started with 123 deals and a total deal value of \$63.4 billion. Thus the slowdown in M&A activity that began in the second half of 2018, when only 100 deals were announced, has been overcome. Deal value is again mainly driven by megadeals and we have seen 12 such deals so far. By comparison, 13 megadeals were announced in 1H2018. It is interesting to see that T&L managed to improve its share of total deals from 3.1% (lowest share in the time frame since 2014) to 4.8% (highest share since 2014). At the same time, the deal activities across all industries declined sharply (-21%).

Logistics & Trucking again most active sector: In total 45 deals were announced. One special one - the DSV-Panalpina takeover - may stimulate further consolidation among large integrated logistics players, after a temporary peak in 2015 with five megadeal takeovers in this segment. Again, Alibaba was busy expanding its stakes in CEP players in China, but also in the US there were deals motivated by the growing e-commerce demand.

Shipping and infrastructure dominates the megadeals: As of the first half of 2019, 3 out of 12 current megadeals are in the shipping sector, motivated by broader reshuffling of portfolios, and harbour assets or the need to rationalise investments in times of declining demand. The two biggest shipping megadeals in the US and Poland are connected through the same investor and affect port assets. Another three deals with toll road and airport assets complete the five infrastructure-related megadeals.

China – trade disputes impacting deal activity: The share of deals with Chinese involvement dropped from 36% in 2018 to about just 26% in the first half of 2019 (lowest share of Chinese M&A deals since 1H2017). Also, China was party to only one of the twelve megadeals in 2019 after being part of 6 out of 21 in 2018. Consequently, China's share in global deal value also dropped from 28% in 2018 to only 14% in 1H2019. We see this decline in Chinese T&L-related M&A activity in line with the ongoing trade tensions between China and the US and the Chinese investment regulations tightened in 2018.

Europe – continued weak activity: In Europe, the decline in M&A activity was particularly strong in 2018. This development continues in 2019, with only 23 deals announced so far, three of them being megadeals. UK investors participated in 5 European deals, while Brexit details still remain uncertain.

Americas on the go: South America already reached the same level as in full year 2018 with ten deals of a total deal value twice as high as 2018 (\$3 billion to \$1.6 billion). Activity in the region was mainly driven by infrastructure concession deals with targets in Brazil. But also North America is slightly above last half year's performance, which is remarkable considering the trade disputes and mixed signals from its logistics market.



Further results at a glance:

Total deals

- The number of announced transactions (123) is way above 2H2018 and in line with 1H2018.
- The total deal value of \$63.4 billion reaches the average value of the past five years.

Megadeals

- 12 megadeals (over \$1 billion) – most important are six targets in North America, three in Europe, one in China/HK.
- Five megadeals had infrastructure targets.

Regions

- Asia & Pacific surpasses North America and Europe in terms of number of deals (77/31/23).
- But in comparison to former years, China and Europe are slowing down, while North and South America are more active again.

Subsectors

- With a share of 37%, Logistics & Trucking is again the most active sector: 45 deals with a total value of \$29.8 billion.

Financial investors

- Share of financial investors in deal announcements has risen slightly to more than 50%.

Prices

- Prices fall to the level of 2010; median value/sales multiple is 1.1.
- Only prices for infrastructure assets (ports, airports and toll roads) and Logistics & Trucking still on level with ten-year average.

Cautious optimism despite mixed signals for 2019

Looking at the reacceleration of deal announcements in the first half of 2019 after the slowdown in the second half of 2018, it is likely that the full year will surpass 2018 but may not reach the record of 2017, given the limiting condition that the trade tensions do not escalate any further.

We see mixed signals for the mid-term development. On the one hand, the WTO Trade Outlook Indicator or DHL's Global Trade Barometer point to global trade volume losing momentum. On the other hand, positive economic indicators like the surprisingly positive GDP data for Q1/2019 reported by major economies and the upturn in container throughput as reported by ISL/RWI Essen give positive signals. Thus the speed and direction of M&A activities in the second half of 2019 will depend on improvements of global trade relations and global stability. If we do not see a bettering of trade relations during the second half of 2019, higher risk sensitivity of dealmakers could lead to a decline in M&A activities again.



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M&A activity 1H19:

Revitalisation after slowdown





M&A activity 2019: revitalisation after slowdown

| | 2014 | 2015 | 2016 | | 2017 | | | 2018 | | 2019 | | |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Total | Total | 1H | 2H | Total | 1H | 2H | Total | 1H | 2H | | |
| Number of deals | 229 | 239 | 107 | 130 | 237 | 146 | 137 | 283 | 127 | 100 | 227 | 123 |
| Total value of deals (\$bn) | 89.1 | 183.8 | 68.7 | 51.3 | 120.0 | 62.9 | 71.3 | 134.2 | 74.6 | 41.6 | 116.2 | 63.4 |
| Ø Transaction value (\$m) | 389.0 | 769.2 | 642.0 | 394.3 | 506.1 | 430.7 | 520.4 | 474.1 | 587.1 | 416.5 | 511.9 | 515.8 |

Rebound into 2019: deal activity reaccelerates

The slowdown of M&A activity in 2018 is overcome in the first half of 2019, with the number of announced deals rising to 123. The total value of announced deals in 1H2019 reaches a moderate level of about \$63 billion, mainly driven by Blackstone's announced acquisition of urban warehouse assets in the USA for \$18.7 billion, by far the largest deal in 2019 so far. Thus the average transaction value reaches a level comparable to 2018, rising to \$516 million.

The quick reacceleration in T&L deal announcements is remarkable as it comes at a time of rising global uncertainties connected to the trade conflicts between China and the USA as well as uncertainties about Iran, Turkey, Brexit and mixed global economic prospects and rising tariffs. While the trade dispute may explain why China, the main deal driver in the last decade, shows a slowdown in deal activities, the same cannot be said for the USA, which remains solid against all odds. Also, the rest of Asia & Pacific and South America show a more robust development of M&A activity in contrast to Europe and China.

Several macroeconomic indices like the WTO Trade Outlook Indicator or DHL's Global Trade Barometer point to global trade volume losing momentum, reflected in declining export orders. However, at the same time, there are also signals that indicate a surprisingly robust economic development in 2019 so far. For example, GDP data for the first quarter of 2019 shows stronger than expected economic growth in the Eurozone, among other important countries like Japan, China and the US, and the RWI/ISL Container Throughput Index increased to a surprisingly high level of 138.5 in May. Thus, we remain slightly optimistic keeping in mind that the rise in global political uncertainty is a larger risk for the T&L sector, as it may affect exports and international trade overall and thus M&A activity may react more sensitively to deteriorating global conditions.

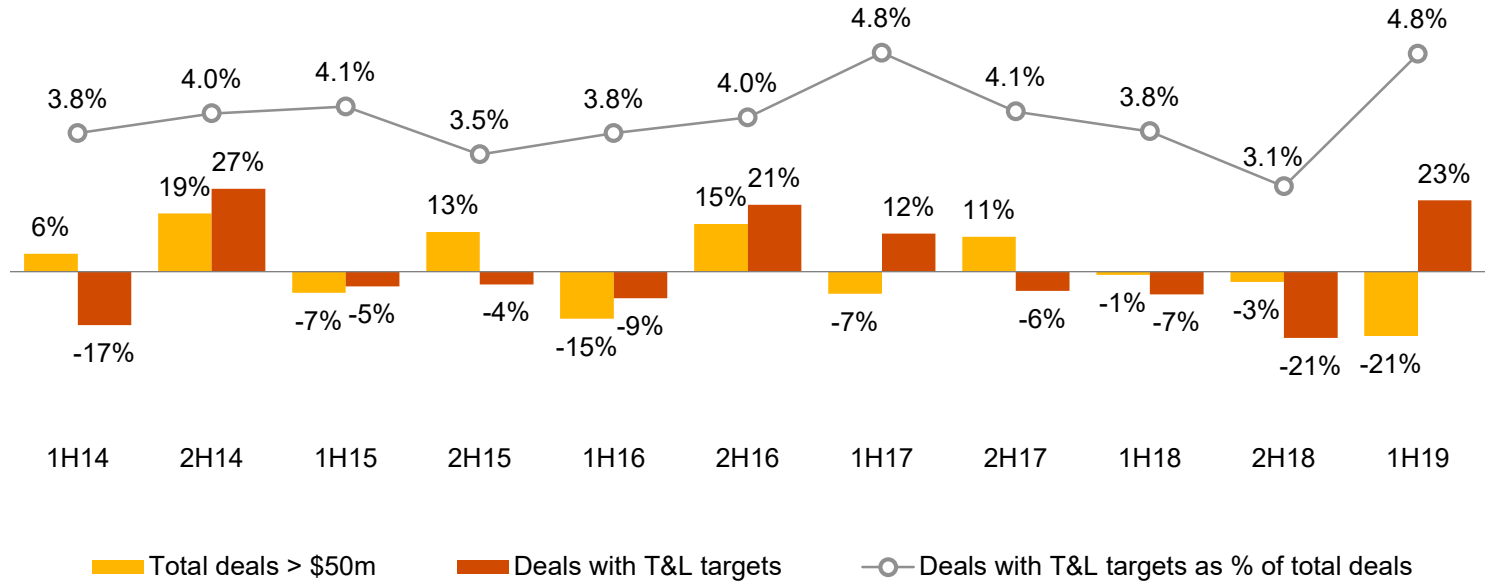
Source for all evaluations: PwC analysis based on Thomson Reuters M&A data; information updated from previous versions; generally deals starting from a volume of \$50 million were evaluated





M&A activity in T&L recovers, but break down in other industries

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)



M&A activity in T&L may have bottomed out in 2018

In 2H2018, we saw a steep decline of M&A activity in T&L with the number of announced deals with T&L targets dropping 21% compared with 2017. However, semi-annual data indicates that the worst is already over: the strongest period-on-period decline happened in the second half of 2018 and now the number of announced deals is reaccelerating, rising by 23%. Concurrently, M&A activity across all industries receded at a record pace during the first six months of 2019 after only declining slightly in 2018.

The share of M&A deals with T&L targets in total global M&A activity across all industries made a strong rebound, rising to 4.8% after having dropped to the lowest level of the last ten years in the second half of 2018 (3.1%). In the long term, during the past ten years, announced M&A deals with T&L targets have had an average share of 4% of all announced deals with a deal value of \$50 million or more globally.

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





Megadeals in 2019

| Announcement | Target | Target nation | Buyer | Buyer nation | Deal status | Deal vol. (in \$bn) | Sector |
|--------------|--|---------------|--|--------------|-------------|---------------------|----------------------|
| Jun 19 | US Logistics Assets owned by GLP Pte Ltd | US | Investor Group of Blackstone Subsidiaries | US | Pending | 18.70 | Logistics & Trucking |
| Jan 19 | Panalpina Welttransport | CH | DSV A/S | DK | Pending | 4.66 | Logistics & Trucking |
| May 19 | WestJet Airlines Ltd | CA | Onex Corp. | CA | Pending | 3.73 | Passenger Air |
| Apr 19 | 407 Express Toll Road International Inc. | CA | OMERS (planned); CPPIB exercised ROFR | CA | Withdrawn | 2.43 | Passenger Ground |
| Apr 19 | Long Beach Container Terminal | US | Macquarie Infrastructure Partners Inc. | US | Pending | 1.78 | Shipping |
| Apr 19 | Geo-Young Corp. | KR | Blackstone | US | Completed | 1.40 | Logistics & Trucking |
| Mar 19 | DCT Gdansk SA | PL | Investor Group: PSA International, the Polish Development Fund and IFM Investors | SG | Completed | 1.32 | Shipping |
| Apr 19 | Cloverleaf Cold Storage Co., Inc. | US | Americold Realty Trust | US | Completed | 1.24 | Logistics & Trucking |
| Jun 19 | SIAS SpA | IT | ASTM SpA | IT | Pending | 1.22 | Passenger Ground |
| Apr 19 | CSSC Huangpu Wenchong | CN | China CSSC Holdings Ltd | CN | Pending | 1.17 | Shipping |
| Mar 19 | GMR Airports Ltd | IN | Investor Group including Tata Group | IN | Pending | 1.16 | Passenger Air |
| Apr 19 | Advanced Technologies Group (Part of UBER) | US | Investor Group: Toyota, Denso, Softbank | JP | Pending | 1.00 | Other |

T&L megadeals – on par with 1H2018

Overall, we have seen a stable flow of megadeals announcements. The first half of 2019 saw 12 such deals being announced after 8 in the second half of 2018 and 13 in the first six months of 2018. New megadeals came up in all subsectors with a slight focus on Logistics & Trucking as well as Shipping-related targets. In comparison to the last half year, the US became more active again and China less active among the megadeals.

The biggest deal in 2019 so far was the acquisition of a portfolio of urban warehouses in the United States by financial investor Blackstone to keep up in last mile delivery for renter Amazon. The second biggest deal was the acquisition of Panalpina by its Danish peer DSV. Financial investor Macquarie was involved in both of the largest shipping deals in 2019 so far, selling Deepwater Container Terminal Gdansk to an investor group led by PSA while buying Long Beach Container Terminal from COSCO's Orient Overseas (International) Limited.

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.



| North America | No. of deals | Vol. (\$bn) | Ø Deal (\$m) |
|---------------|--------------|-------------|----------------|
| Local | 16 | 29.9 | 1,866.3 |
| Inbound | 6 | 2.2 | 368.6 |
| Outbound | 9 | 2.7 | 296.2 |
| Total | 31 | 34.7 | 1,120.6 |

| South America | No. of deals | Vol. (\$bn) | Ø Deal (\$m) |
|---------------|--------------|-------------|--------------|
| Local | 5 | 1.8 | 366.4 |
| Inbound | 4 | 1.3 | 315.7 |
| Outbound | 1 | 0.2 | 201.3 |
| Total | 10 | 3.3 | 329.6 |

| Africa/unknown | No. of deals | Vol. (\$bn) | Ø Deal (\$m) |
|----------------|--------------|-------------|--------------|
| Local | 0 | 0.0 | – |
| Inbound | 0 | 0.0 | – |
| Outbound | 2 | 0.8 | 417.3 |
| Total | 2 | 0.8 | 417.3 |

| Europe | No. of deals | Vol. (\$bn) | Ø Deal (\$m) |
|--------------|--------------|-------------|--------------|
| Local | 15 | 8.6 | 572.8 |
| Inbound | 3 | 2.0 | 651.3 |
| Outbound | 5 | 0.9 | 180.3 |
| Total | 23 | 11.4 | 497.7 |

| Asia & Pacific | No. of deals | Vol. (\$bn) | Ø Deal (\$m) |
|----------------|--------------|-------------|--------------|
| Local | 67 | 15.7 | 234.8 |
| Inbound | 7 | 2.0 | 284.8 |
| Outbound | 3 | 2.8 | 939.8 |
| Total | 77 | 20.5 | 266.8 |

Americas on the GO – Europe still pausing

Once again, the majority of announced deals is in the Asia & Pacific region even though China as the main deal driver was rather passive. North America dominates by total deal value, which was caused by one extreme megadeal.

While deal announcements in Europe remain at the low level, other regions are leading the reacceleration of deal activity in 1H2019: South America has already surpassed its level of M&A activity in full year 2018: ten deals with a deal value twice as high as 2018: \$3.3 billion from \$1.6 billion at eight announced deals in the previous year. M&A activity in this region was mainly driven by infrastructure concession deals with targets in Brazil. But also North America is more active than in the second half of 2018 with plus six deals (24%). Asia & Pacific even saw a plus of 20 deals compared to 2H2018 (35%).

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Regional highlights:

Europe, Germany, China, US, South America





Europe – megadeals driven by consolidation efforts

| Europe | Number of deals | Value of deals (in \$bn) | Ø Deal (in \$m) |
|--------------|-----------------|--------------------------|-----------------|
| Local | 15 | 8.6 | 572.8 |
| Inbound | 3 | 2.0 | 651.3 |
| Outbound | 5 | 0.9 | 180.3 |
| Total | 23 | 11.4 | 497.7 |

Europe – continued weak activity

In Europe, the decline in M&A activity was particularly strong in 2018 (–42% compared to 2017). This development continues in 2019, with only 23 deals announced so far in the current year after 38 deals in the first six months of 2018 and 24 deals in the second half of 2018. However, average deal value is relatively high, mainly driven by the megadeal of Panalpina (Switzerland) being acquired by its Danish peer, logistics company DSV, and 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.

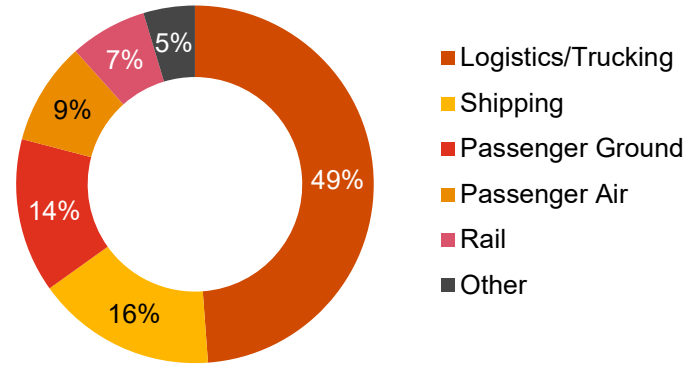
The decision to extend Brexit negotiations to October 2019 has led to continued uncertainty over future trade relations between the UK and the European Union. Manufacturing companies, e.g. from the automotive industry, have been preparing for the post-Brexit period for some time, assuming a no-deal Brexit on October 31st. Whether and to what extent production capacities will be shifted is still an open question. It depends on the value development of the British pound after Brexit, but above all on logistics: new logistics chains must be established which, with sufficient capacities and efficient customs procedures, enable secure JiT and JiS deliveries.

The uncertainty still lingers, but the panic from March temporarily ended and stockpilings from these months are now reduced. As a result of this prolonged uncertainty, we saw only two deals with UK targets so far, both in the Logistics & Trucking subsector and both involving investors from the US. The bigger of these two deals is the investment of Amazon in the food delivery service Deliveroo. The other deal involved the sale of two smaller warehouse assets to an American property investor. On the other hand, UK investors participated in 5 out of the 23 European deals. Four of these deals were realised by financial investors, with the largest transaction being the sale of 3 storage terminals in Hamburg, Amsterdam and Algeciras (Spain) currently owned by Vopak to First State Investments UK, the London-based investment arm of global asset management firm Colonial First State Investments headquartered in Australia. In the remaining deal with a strategic investor from the UK, public transport company National Express Group has expanded into the US shuttle market by acquiring a 60% stake in WeDriveU, Inc., which specialises in corporate and university shuttles mainly serving the San Francisco Bay Area, Los Angeles, Seattle, Portland, Austin and Boston.

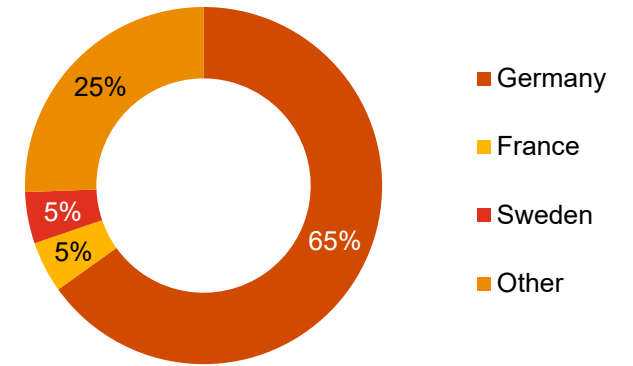


Germany – no deals with known deal value over \$50 million

Distribution of deals with German participation by sector



Distribution of deals with German participation by origin of the target



Germany – no deals with known deal value over \$50 million

Although there has been no announced deal reaching the \$50 million threshold of disclosed deal value in Germany so far, we see M&A activity by number of announced deals on track to at least reach the level of 2018: during the first 6 months of 2019, 43 deals with German participants were announced, while we saw 83 deals in the previous year and 97 in 2017. One explanation for this might be that the mood among German logistics companies and their expectations for the future are not as good as the actual market situation, according to the “BVL Logistik-Indikator”.

Logistics & Trucking was again the focus of investors with 49% of deals concerning targets from this sector (2018: 61%); the second highest number of M&A announcements (7) related to targets in the shipping sector. The largest deal with a known deal value of nearly \$14 million was the takeover of a 50% stake in United Wind Logistics, a company specialising in transport solutions for offshore wind farm components by Fred Olsen.

In 2019, cross-border deals have outweighed local deals (28 vs 15) even more than in 2018 (43 vs 40), pointing to the strong international connectedness of German T&L businesses. By comparison, if we look at the overall picture of globally announced deals with a value of \$50 million or more, the share of cross-border deals is only about 36% in the first half of 2019 and thus corresponds to the long-term average of about 33% during the past ten years. German investors announced 15 acquisitions of targets abroad, half of them within Europe. On the other hand, 8 of the 13 inbound deals were announced by buyers from European countries.

Looking at investor types, we see that financial investors play a less important role in Germany, making up for only 25% of announced deals (2018: 32%) compared to over 50% of announced deals on a global level.

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

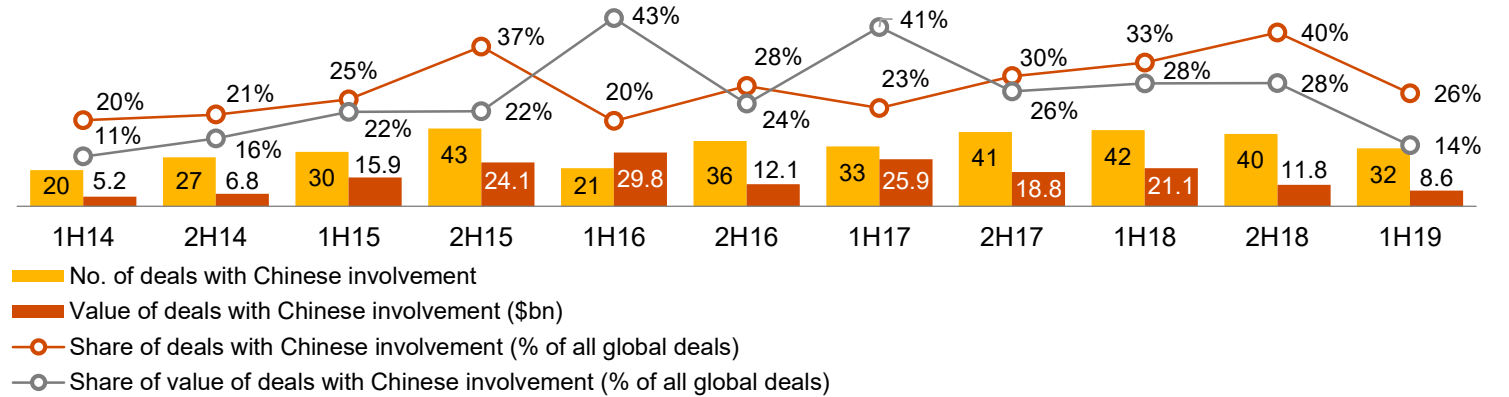




China – a giant slowing down

Deals with Chinese involvement from 2009 to 2018

(deals with a volume greater than \$50m)



Business climate and deal environment in China

In recent years China has been the major Asian player when it comes to deals in the T&L industry. In the first six months of 2019, however, the share of deals with Chinese involvement has dropped to the levels of 2014 (measured by the value of deals) or 2016 respectively (number of deals). The reasons are economic uncertainty due to high volatility in export values in the first months of 2019, the ongoing slowdown of Chinese economic growth as well as trade tensions with the US. Furthermore, developments in 2019 are largely responses to and effects of those from 2018, especially from a political perspective concerning investment regulations.

The tightening of financial controls to deleverage Chinese companies from 2018 is still having a great influence on consumers and businesses alike, contributing to the current situation. In order to counteract this, in 2019, policy stimulus has passed to loosen financial conditions. This includes a lift of government deficit by 0.2 percentage points, issuing approx. \$320 billion of special local government bonds (compared to \$116 billion in 2018) and easing its monetary policy to mitigate difficulties faced by the private economy. Furthermore the state plans to intensively invest again in transport infrastructure as a counter-cyclical tool and to mitigate the impact of US tariffs and economic slow down: approximately \$125 billion in rail (highest amount ever) and \$262 billion in road transportation and shipping infrastructure. Additionally, the VAT reform will implement a tax relief from 10% to 9% in the transportation industry.

China is moving towards liberalisation, opening up the domestic market to foreign players reacting to pressures from trading partners. A more consistent and transparent system for foreign investors is underway and more stimulus measures, such as the tax cuts and infrastructure spending announced earlier this year, can be expected.





China – a giant slowing down

| China (incl. HK) | Number of deals | Value of deals (in \$bn) | Ø Deal (in \$m) |
|------------------|-----------------|--------------------------|-----------------|
| Local | 29 | 7.8 | 269.0 |
| Inbound | 2 | 0.7 | 326.1 |
| Outbound | 1 | 0.1 | 0.1 |
| Total | 32 | 8.6 | 269.0 |

Chinese deals even more local

As usual, the rate of local deals in China is very high, but becomes even higher considering that all of the inbound and outbound deals were related to Hong Kong based companies. The share amongst financial and strategic investors is equal in all deals, but not in target sectors. More than half of the financial investors acquired companies in the Logistics & Trucking sector, while half of the strategic investors invested in shipping and harbour assets.

The only megadeal with Chinese involvement was motivated by internal restructuring of a state-owned giant within the shipping sector. The China State Shipbuilding Corporation (CSSC) plans to reorganise its marine propulsion business in the form of a debt-to-equity programme for its three subsidiaries by issuing new shares to investors and fundraising. After the deal and restructuring, CSSC Holding will control five shipyards. The move will solve the problem of horizontal competition of the CSSC Group regarding assembly plants and helps to meet the asset securitisation rate of the CSSC Group for 2020. Furthermore, the company can be organised in a more operational way by disentangling its shipbuilding and marine propulsion businesses.

Looking at the deal number, the infrastructure sector was the most active one with deals connected to the Belt and Road initiative. One example is the capital injection of \$504.54 million from China Merchants Port Group Co., Ltd to acquire a 31.55% stake in Zhanjiang Port (Group) Co., Ltd. China Merchants was already an active player in the second half of 2018 and has now acquired the specialist in port operations in order to build a sea and land dual channel in southwestern China, which strengthens the acquirer's layout in the Southwest and increases the number of company-controlled ports and improves customer service efficiency.

Besides that, Chinese companies were also active in the logistics sector, which will be described in more detail later. The rail and aviation sector were less active. One example is Hainan Airlines Holding Co., Ltd, which has agreed to acquire a 60.78% stake for \$496.85 million in Hainan Aircraft Technic Co., Ltd from HNA Aviation Group Co., Ltd, who is engaged in offering aircraft carrier and transportation management services.



USA— solid against all odds

| USA | Number of deals | Value of deals (in \$bn) | Ø Deal (in \$m) |
|--------------|-----------------|--------------------------|-----------------|
| Local | 13 | 23.6 | 1,817.5 |
| Inbound | 4 | 1.9 | 472.7 |
| Outbound | 7 | 2.4 | 338.9 |
| Total | 24 | 27.9 | 1,162.1 |

USA – solid against all odds

In contrast to China and Europe, M&A activity has remained solid in the US. During the first six months of this year, 24 deals were announced, which is four deals more than last half year. More than half of these deals were local. This is also following the tendency of the first and second half of 2018. This year two companies from the United Kingdom were on the target side, two on the acquirer side.

Financial investors were three times more active than strategic investors. In total, they participated in 18 of the 24 deals, with the majority being related to Logistics & Trucking as well as infrastructure targets, which were also dominant last year. In particular (refrigerated) warehousing and storage targets were acquired. The three biggest deals fall into this category, including the \$18.7 billion megadeal of Blackstone acquiring urban warehouse assets in the US. Strategic investors participated in only six deals, more or less evenly spread among the subsectors. This low activity level is a major difference in comparison to the first half year of 2018, when strategic investors participated in more deals (12) than financial ones (9). In the last half year of 2018, both investors were evenly active with very strong focus on Logistics & Trucking.

This solid M&A development is occurring while the US economy is sending mixed signals. GDP growth has been above 2% during the past eight quarters and has risen to 3.1% in the first quarter of 2019. Longer-term forecasts from the IMF, however, predict lower US growth for the future. In an environment of uncertainty, financial investors are focusing on infrastructure assets and the one boom area, e-commerce, expecting moderate but stable long-term returns on their investments. Strategists are holding back, because of uncertainty and cost problems. Logistics companies are struggling with increased labour costs. The United States Business Logistics Costs (USBLC) rose 11.4% last year to 8.0% of GDP, mainly driven by warehousing staff and driver costs. To reduce these costs, shippers are investing in innovations and carriers in collaboration, among others, with start-ups.



South America – Brazil leads the way

| South America | Number of deals | Value of deals (in \$bn) | Ø Deal (in \$m) |
|---------------|-----------------|--------------------------|-----------------|
| Local | 5 | 1.8 | 366.4 |
| Inbound | 4 | 1.3 | 315.7 |
| Outbound | 1 | 0.2 | 201.3 |
| Total | 10 | 3.3 | 329.6 |

South America has already surpassed the level of full year 2018

In the first six months of 2019, ten deals with a total deal value twice as high as 2018 (\$3.3 billion from \$1.6 billion) were announced in South America – two more than in the complete year of 2018. Nine of these deals affected targets within South America with the only remaining outbound deal being the acquisition of all joint tugboat operations in North and South America from joint venture partner Boskalis by Chile-based SAAM SA.

Five deals were in Brazil, with the majority targeting assets in the air transport sector, which is attributable to the changed political situation: the new Brazilian government has completed a round of airport concession sales as part of its business model to attract more investment in aviation infrastructure. The more friendly rules for concessions attracted many foreign investors and generated a turnover of \$630 million, almost ten times more than expected. Furthermore, the government has already revealed plans for further auctions of concessions for 22 airports. According to recent information, the airports will be divided into three blocks with each block mixing less profitable airports with more profitable ones and the auctions are expected to be held in 2020.

Apart from Brazil, Chile is the second country in focus in South America this year, with three announced deals having targets located here. All three of these deals are infrastructure-related with two transactions having port operator Puertos y Logística SA (“Pulogsa”) as target when DP World first acquired the entire share capital and later passed on a 49% stake to the Canadian financial investor Caisse de dépôt et placement du Québec.

In conclusion, we see that the uptake in South American M&A activity is highly concentrated by sector, as six of the ten deals announced have infrastructure-related targets, and by location, as nine of the ten deals involve parties from two of South America’s largest economies, namely Brazil and Chile. The high proportion of inbound deals indicates that in spite of the mixed macroeconomic outlook for both countries, international investors seem to be confident about seeking business opportunities in their transport infrastructure. This development is expected to continue, since major infrastructure concessions will expire soon.



5

Analysis of M&A activity

by sector and investor type





T&L sectors – Logistics & Trucking again dominating

| All deals | 2H2016 | | 1H2017 | | 2H2017 | | 1H2018 | | 2H2018 | | 1H2019 | |
|-----------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| | 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 | No. of deals | Total value |
| Total value (in \$bn) | | | | | | | | | | | | |
| Passenger Air | 24 | 8.1 | 21 | 9.3 | 21 | 9.7 | 24 | 13.6 | 15 | 8.7 | 19 | 8.4 |
| Passenger Ground | 18 | 7.1 | 19 | 5.4 | 16 | 29.1 | 17 | 27.4 | 20 | 11.1 | 23 | 9.1 |
| Rail | 10 | 2.1 | 5 | 4.4 | 4 | 0.7 | 3 | 3.8 | 3 | 0.9 | 5 | 1.3 |
| Logistics & Trucking | 43 | 12.9 | 55 | 29.7 | 48 | 17.0 | 50 | 14.3 | 44 | 14.0 | 45 | 29.8 |
| Shipping | 27 | 18.6 | 44 | 12.6 | 34 | 10.9 | 29 | 14.3 | 14 | 4.0 | 24 | 8.4 |
| Other | 8 | 2.4 | 2 | 1.6 | 14 | 3.8 | 4 | 1.1 | 4 | 2.9 | 7 | 6.3 |
| Total | 130 | 51.3 | 146 | 62.9 | 137 | 71.3 | 127 | 74.6 | 100 | 41.6 | 123 | 63.4 |

During the first months of 2019, transactions with targets in Logistics & Trucking dominated T&L M&A activity, making up 37% of all announced transactions in the industry and 47% of total deal value. Also, the largest of the megadeals announced involved targets in this sector. In line with previous years, Rail has been the sector with the lowest number of transactions, although the sector has already surpassed deal announcements by number from both the first and the second half of 2018.

30 of the total 123 transactions were deals with infrastructure-related targets, in line with the previous five years in which, on average, every fourth deal was infrastructure-related. The total value of these deals, however, accounted for around 25% of the total deal value after making up nearly half of the total deal value in full year 2018.

| ... thereof infrastructure | 2H2016 | | 1H2017 | | 2H2017 | | 1H2018 | | 2H2018 | | 1H2019 | |
|-------------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| | 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 | No. of deals | Total value |
| Total value (in \$bn) | | | | | | | | | | | | |
| Infrastructure Airports | 9 | 3.2 | 13 | 4.7 | 6 | 2.4 | 8 | 8.7 | 3 | 3.9 | 7 | 2.5 |
| Infrastructure Road | 13 | 6.0 | 18 | 6.1 | 12 | 27.4 | 9 | 25.6 | 9 | 9.1 | 13 | 8.1 |
| Infrastructure Ports | 10 | 9.3 | 16 | 6.7 | 19 | 5.6 | 6 | 6.7 | 6 | 0.8 | 11 | 5.5 |
| Total (infrastructure) | 32 | 18.5 | 47 | 17.5 | 37 | 35.3 | 23 | 41.0 | 18 | 13.7 | 30 | 16.0 |

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

Logistics & Trucking

Following the tendencies of the last few years, this is the most active sector with 45 deals so far, driven by increasing e-commerce demands leading to consolidations and cross-border moves. The biggest deal in the first half of 2019 was a major move of financial investor Blackstone into urban warehousing in the US, where two funds of Blackstone joined to buy a logistics asset portfolio of about 1,300 properties from GLP of Singapore, thus nearly doubling Blackstone's US warehouse footprint. The megadeal valued at \$18.7 billion comes at a time when e-commerce companies are seeking to cut delivery times and increase efficiency in their last mile delivery strategy to match growing customer demand for convenient and fast delivery, thus creating high demand for logistics real estate assets especially in large metropolitan areas. Aside from this remarkable deal, we see another 15 deals with warehousing assets as targets, with mostly financial investors on the buy side, together making up for about one third of all announced deals in Logistics & Trucking in the first six months of 2019. This echoes the situation in the market in 2017, when we saw warehousing-related deals making up for about 38% of announced deals in Logistics & Trucking (2018: 22%). The largest transaction at that time saw Blackstone on the sell side when it sold its pan-European logistics portfolio Logikor to China Investment Corp. for \$13.7 billion.

Another megadeal also highlights the importance of trends in e-commerce for M&A activities in Logistics & Trucking: Blackstone's announcement that its private equity funds have completed the sale of Cloverleaf Cold Storage to the Americold Realty Trust for \$1.24 billion. Americold Realty Trust is the world's largest publicly traded REIT focused on operation and development as well as ownership of temperature-controlled warehouses. This transaction, as well as similar but smaller ones in the US, can be seen as a result of increasing demand for cold storage and online grocery delivery services in the light of increasing e-commerce in the US.

The most important consolidation deal among logistics service providers happened within the European Logistics & Trucking market, namely the DSV and Panalpina merger via a public exchange offer to all shareholders of Panalpina. With a transaction value of \$4.66 billion, this may become one of the biggest and most important deals in the European Logistics & Trucking sector in the coming years, reshaping not only DSV's business mix towards more air freight forwarding, but also creating the second largest air freight forwarder globally behind DHL.

Within China, Alibaba continues to deepen its ties with the leading CEP providers as it made an investment of \$666 million in the Chinese courier STO Express for a 49% stake in a new subsidiary – a total stake in STO Express of 14%. Alibaba's strategic motivation for this fourth investment in an express company after YTO, Best and ZTO is to expand its logistics network, to be able to offer 24-hour-delivery anywhere in China and 72 hours globally. As a consequence, Alibaba is now involved in all major CEP companies in China, except SF.





Sector analysis

Shipping

M&A activities in the shipping sector during the first six months of 2019 were increasingly driven by Infrastructure–Port deals, which make up 11 of the total 24 shipping-related deals. In the two largest deals in this sector so far, the Australian infrastructure investor Macquarie plays a role, although the rationale behind both deals is different. First, Macquarie announced that it would sell DCT Gdansk container terminal in Poland for approximately \$1.32 billion to a joint consortium of investors (IFM Investors, the state-owned Polish Development Bank (PFR) and Singapore’s PSA International). Macquarie helped to expand and build the port in the past, and is now selling the port to a more experienced port operator to get a return on investment and strategically shift its harbour activities. IFM and PFR will each hold 30% of the largest container terminal in Poland, while PSA International holds the remaining 40%. The harbour is located at the intersection of the Baltic deep-sea trade routes and has a strategic gateway position to Poland and the Central Eastern European markets. Furthermore, it is the fastest growing container port in Europe and one of the 15 largest container ports on the continent. For PSA, already one of the world’s largest port operators, this is the first engagement in Eastern Europe.

The other and even bigger deal – where Macquarie is involved on the buy side – shows illustratively how another M&A deal can have consequences on certain assets of the involved companies: Macquarie Infrastructure Partners had the opportunity to acquire Long Beach Container Terminal (LBCT) from Orient Overseas (International) Limited (OOIL) in Hong Kong for \$1.78 billion because the sale was considered crucial for the US government to give the go-ahead for COSCO’s \$6.3 billion acquisition of OOIL. Under the terms of the agreement, OOIL will enter into a 20-year container loading and terminal service agreement, which will allow its container vessels to continue to call at LBCT and continue to provide stevedoring and terminal services, while Macquarie will control the operating company that holds the lease of LBCT.

Basically, port terminals are still very attractive assets for infrastructure funds or private equity and other institutional investors, due to their size and the stability in investment returns. However, the ongoing trade dispute between China and the US may lead to a slowdown of seaborne trade in the medium term, as already indicated by indices that track container trade volumes and shipping rates, which will affect shipping companies first but may also spill over to terminal operators, making their business more volatile.





Sector analysis

Passenger Air (Airlines & Airports)

All Airlines & Airports deals that we have observed during 2019 so far are in Asia and the Americas. Among the 19 deals announced in this subsector, seven deals concerned Infrastructure-Airport targets, mainly located in India (3 transactions) and Brazil (2 transactions). The biggest among these deals has been announced by Tata Group, which invests in the airport business of Indian GMR Infrastructure Ltd.

Within the airline business, half of the 12 announced deals are in North and South America, with the remaining 6 concerning targets among different Asian countries. Certainly the deal with the largest effect on its local market is the announced takeover of the second largest Canadian airline, WestJet, by financial Investor Onex. WestJet started as a domestic low cost carrier, but began to transform into a full service global airline during recent years. How Onex will alter WestJet's current strategy remains to be seen. So far, it is only clear that WestJet's shares will be delisted. Just weeks after this deal was announced, Air Canada and, shortly afterwards, Groupe Mach both announced bids to take over Transat A.T., the tour operator that owns Canada's third largest airline, Air Transat. While the outcome of this bidding competition is still unclear, it looks like Canada's domestic airline business will see major changes during 2019.

With regard to the European market, there are some rumours about several strategic consolidation moves among airlines that indicate a pipeline of some deals to be expected in the near future, however no deals with a disclosed value of more than \$50 million have been announced so far.

Rail

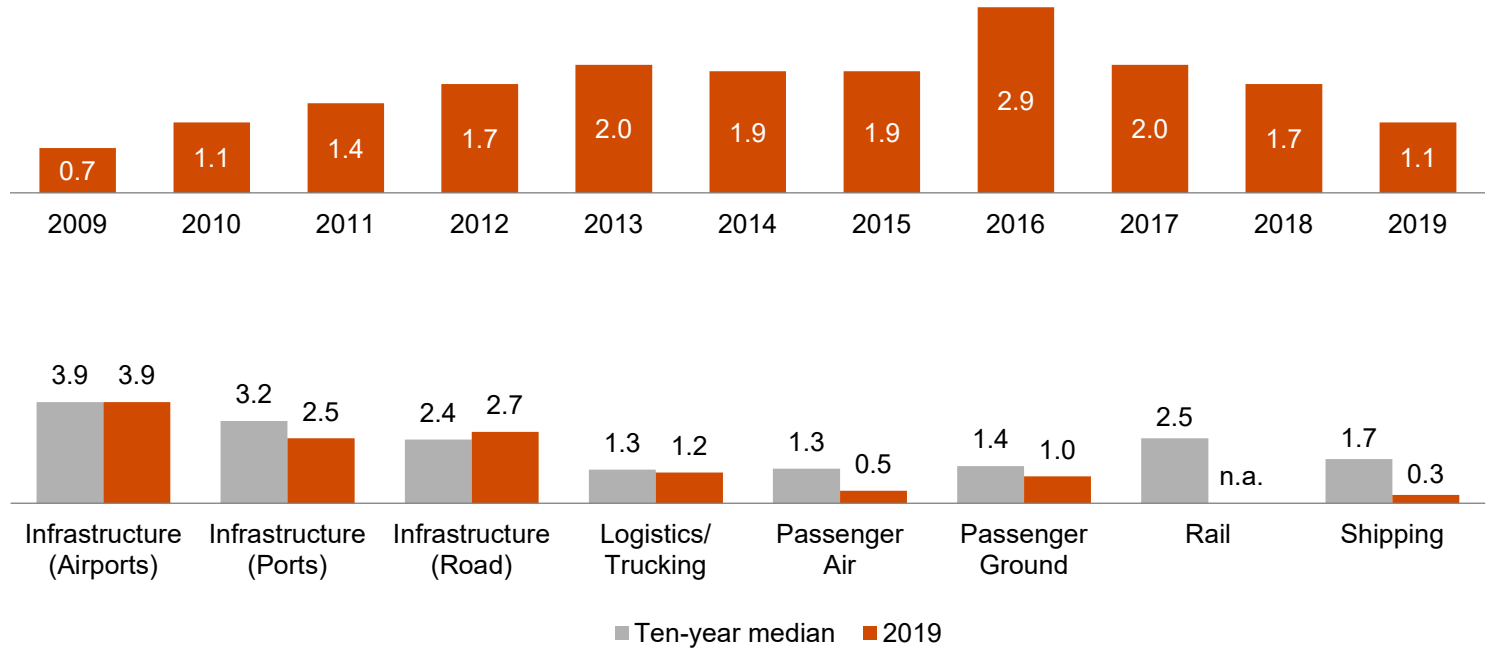
The number of transactions in Rail has been in consistent decline since 2016. However, considering the high proportion of state-owned companies within the rail sector and the asset-heavy nature of the industry, higher volatility in the number of deals and deal values comes as no surprise. Although we have seen five deals in the rail sector in 2019 so far, which is more than in the first and second half of 2018 (each had 3 announced deals), their total deal value amounts to only \$1.3 billion, way below the average of \$2.1 billion during the past three years. This is due to the unusually high share of smaller deals below \$100 million that were announced in 2019 in this subsector and the fact that there has been no megadeal in the subsector so far. In the past years, at least 2 railway deals per year had a disclosed value of more than \$1 billion.





Prices for T&L targets drop

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



Prices drop to low of 1.1x sales

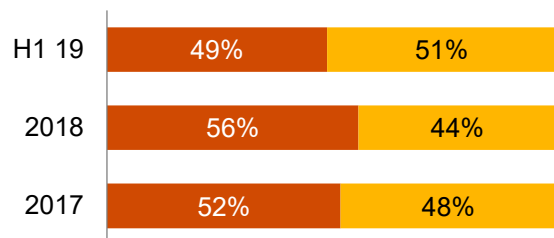
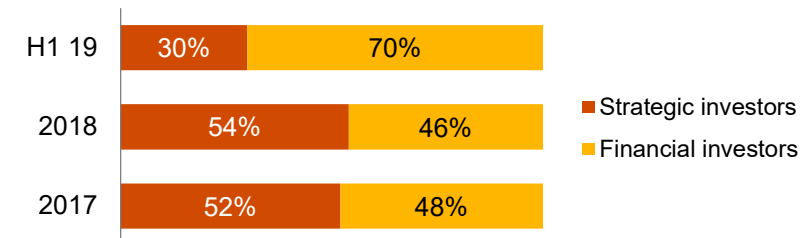
During 2017 and 2018, we saw prices for T&L targets returning to the level of 2012–2015 (after a remarkable high in 2016), with the median value/sales multiple declining to 1.7 in 2018. In the first six months of 2019, prices have dropped further to a level last seen in 2010, reaching only a median value/sales multiple of 1.1x. Only prices for infrastructure assets (ports, airports and toll roads) and Logistics & Trucking targets are still reaching the ten-year median. While this is a significant setback, we are cautious to read too much into the results when looking at the surrounding data. First, the corresponding median value/EBITDA multiple has declined, too, but to a lesser extent: from 8.1x in 2018 to 6.6x currently, with the ten-year median being about 8.2x. Second, data availability for calculating valuation multiples was rather low in the first six months of 2019, especially in subsectors like Shipping and Passenger Ground, such that these results should be treated as outliers.

* The transactions multiple specifies the relationship between the company valuation (purchase price) and the annual turnover.





Financial investors

Distribution of the number of deals by type of investor**Distribution of the value of deals by type of investor****Activity of financial investors in line with previous years**

In the first half of 2019, financial investors had a share of 48% of the total number of M&A deals, which is slightly above the levels of the preceding years. The total value of these deals is around \$44.3 billion (strategic investors: \$19.1 billion). This value was largely driven by Blackstone's acquisition of GLP-owned warehouses in the US.

In nine out of ten megadeals with a combined deal value of about \$32.8 billion, financial investors are situated on the bidding side. Financial investors are particularly involved in deals within Logistics & Trucking, mainly investing in warehousing-related targets (15) and trucking companies (7).

Number and total value of deals with participation of financial investors

| | 2017 | | 2018 | | 1H2019 | |
|-----------------------|--------------|-------------|--------------|-------------|--------------|-------------|
| | No. of deals | Total value | No. of deals | Total value | No. of deals | Total value |
| Total value (in \$bn) | | | | | | |
| Passenger Air | 20 | 10.2 | 15 | 12.9 | 5 | 5.1 |
| Passenger Ground | 20 | 8.9 | 15 | 10.1 | 12 | 5.3 |
| Rail | 3 | 1.5 | 3 | 2.9 | 2 | 0.5 |
| Logistics & Trucking | 56 | 30.0 | 48 | 19.3 | 32 | 27.7 |
| Shipping | 28 | 9.8 | 14 | 6.4 | 8 | 4.6 |
| Other | 10 | 3.6 | 4 | 1.4 | 4 | 1.2 |
| Total | 137 | 64.0 | 99 | 53.0 | 63 | 44.3 |

Investor groups are counted as financial investors, as financial investors normally play a leading role in these groups.



6

Outlook

for 2019





Outlook for second half of 2019



Cautious optimism despite mixed signals for 2019

Looking at the reacceleration of deal announcements in the first half of 2019 after the slowdown in the second half of 2018, it is likely that the full year will surpass 2018. We expect ongoing activities in selected areas: South America will continue on a relatively active level, due to the favourable political conditions for further infrastructure privatisations, mainly in Brazil, but also in Chile, where infrastructure concessions will expire. Furthermore, we assume that e-commerce-related targets like warehousing assets or CEP companies will stay attractive as well as infrastructure-related targets that promise stable cash flows to investors.

However, these assumptions are subject to the condition that the trade dispute does not escalate any further. We do not believe that 2019 can reach the record of 2017, because we see mixed signals for mid-term development. On the one hand, global GDP predictions by the IMF and the World Bank were recently reduced and trade indicators like the WTO Trade Outlook Indicator or the DHL Global Trade Barometer point to continuing weakness in world trade.

On the other hand, positive economic indicators like the surprisingly positive GDP data for Q1/2019 reported by major economies and the upturn in container throughput as reported by ISL/RWI Essen give positive signals. Thus the speed and direction of M&A activities in the second half of 2019 will depend on improvements in global trade relations and global stability. If we do not see a bettering of trade relations during the second half of 2019, higher risk sensitivity of dealmakers could lead to a decline in M&A activities again.

China – upturn possible when economic growth reaccelerates

For the Chinese market, the value and number of deals may heavily depend on the outcome of the trade dispute with the US and the development of the Chinese economy. Driven by lowering of expected economic growth, policymakers are starting to stimulate the economy by encouraging private business, easing deleveraging and lowering tax in the transportation industry. International trade tensions, on the other hand, might lead investors to behave cautiously and thus delay or lower M&A projects. Furthermore, the Belt and Road Initiative may reshape international logistics in Eurasia, driven by new trade agreements and better transportation infrastructure, leaving room for T&L to develop and expand. Changes in domestic commerce, e-commerce and the sharing economy are already leading to some deals and we expect this trend to accelerate in the future.

Europe – Brexit still lingering

With Brexit still lingering and an unclear political outlook in the UK, future trade relations in Europe are still uncertain. While this weighs on the outlook for future M&A activities, we still see sectors where consolidation continues, for example in Passenger Air, where rumours in the market point to increased activity in the near term or in Logistics & Trucking, where the DSV-Panalpina takeover may spark consolidation among large integrated logistics players after a temporary peak in 2015 and trends in e-commerce may lead to increased warehousing-related transactions.

7

Methodology



Methodology

This report is an analysis of the global transaction activities in the Transport & Logistics 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 2017 and June 30th 2019 have been considered. 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 stems 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' have been included.

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 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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Contacts



Ingo Bauer

Tel: +49 201 438-1107
ingo.bauer@pwc.com

Dr. Peter Kauschke

Tel: +49 211 981-2167
peter.kauschke@pwc.com

Philip Wöbse

Tel: +49 69 9585-6945
philip.woebse@pwc.com

Dr. André Wortmann

Tel: +49 40 6378-1414
andre.wortmann@pwc.com

Hanna Peiseler

Tel: +49 211 981-5291
hanna.peiseler@pwc.com

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