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M&A in the transport and logistics industry

January – June 2018

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Highlights

34 US$ billion — Total value of transactions with European participants

20 — Deals in the Passenger Air sector

17 — Chinese targets in Logistics/Trucking

23 — Deals with targets in the shipping sector

Europe with record transaction value in H1 2018: With the joint bid of a consortium of Atlantia, ACS and Hochtief to take over Abertis for US$22.5 billion, one of the largest deals ever announced within T&L takes place in Europe. Our data shows an overall trend towards fewer but larger deals being announced with no less than six mega deals being announced in Europe, covering targets from diverse subsectors.

Aviation: With a total of 20 deals, Passenger Air is the third most active segment behind Logistics/Trucking and Shipping. Most of these deals relate to airports or services to air transport such as ground handling or MRO. In Europe, the aviation market is still impacted by the repercussions of the Air Berlin bankruptcy. Austrian aviation entrepreneur Niki Lauda acquired Niki in January and later struck a deal with Ryanair with the latter buying an initial stake of 24.9% of the newly founded airline Laudamotion.

Logistics/Trucking: A lot of the M&A activity is taking place in China: of the total 46 deals in this sector 17 involve Chinese targets (likewise 6 out of the top 8 deals). The two most notable, yet not surprising deals, are Alibaba's investment in ZTO Logistics, one of China's biggest logistics companies and JD.com's move to raise US$2.5 billion in new funding for its logistics unit Beijing Jingbangda Trade Co. (aka JD Logistics). In addition, JD.com and Google announced a strategic partnership in June, along with a $550 million investment of Google in JD, which amounts to roughly a 1% stake.

Shipping: 2017 was characterised by merger activities in the liner segment. This year consolidation continues in the charter and tramp segment as well as a significant number of asset and portfolio deals. Zeaborn, part of the Zech Group, acquired E.R. Schiffahrt, 3i sold 65% of ferry company Scandlines and DFDS bought the Turkish ferry company U.N. Ro-Ro. These and some smaller deals including acquisitions of non-core companies like smaller IT firms are characteristic for the industry preparing to be successful in a competitive and digitised world – strengthening core competencies and adapting new technologies and processes.

Highlights

12%

Share of technology-driven acquisitions by T&L buyers

Digitisation with a lesser impact on M&A activity: Since 2014, we have observed a strong increase in technology-driven acquisitions of high-tech targets undertaken by transport and logistics companies. These acquisitions accounted for approximately 15% of all industry-external acquisitions in 2016 and 2017. In 2018, this share fell to 12%. T&L companies seem to restrain takeovers of digital technology firms.

Further results at a glance:

- Total deals:
  - The number of announced transactions, namely 111, is at the low end as compared to the number of deals in past years.
  - The total deal value of US$71.7 billion, however, reaches the level of H2 2017 and surpasses any other half year since the record high in H2 2015.
- Mega deals:
  - 13 mega deals (over US$1 billion) – six targets in Europe, five in China, four infrastructure targets.
- Regions:
  - Europe surpasses Asia and North America by deal volume (US$34.3 billion / 27.0 / 16.3).
  - Asia continues to be the most active region measured by number of deals (67) before Europe (29).
- Financial investors:
  - Share of financial investors recedes by number but increases by volume of deals compared to previous years.
- Prices:
  - Prices remain on the level of 2017; median value/sales multiples: 2.0.
  - High prices especially for infrastructure assets (ports, airports and toll roads)

Global M&A deals since 2013

	2013	2014	2015	2016			2017			2018
	Total	Total	Total	H1	H2	Total	H1	H2	Total	H1
Number of deals	202	229	239	107	130	237	146	137	283	111
Total value of deals (US$ billion)	75.0	89.1	183.8	68.7	51.3	120.0	62.9	71.3	134.2	71.7
Ø Transaction value (US$ million)	371.3	389.0	769.2	642.0	394.3	506.1	430.7	520.4	474.1	646.1

M&A activity with mixed start into 2018: fewer deals announced but high transaction values

After the record year 2017 with 283 deals, M&A activity in 2018 was off to a somewhat slower start, with the number of deals declining to only 111 in the first half of 2018. The total value of announced deals (US$71.7 billion), however, reaches the record level of H2 2017 and surpasses any other half year since the record high in H2 2015, mainly driven by the US$22 billion joint bid made by a consortium consisting of Atlantia, ACS and Hochtief to take over the Spanish toll road operator Abertis, which was one of the largest deal announcements ever in the transport and logistics industry. In this context, the competing offers that Atlantia and Hochtief made in 2017, each offering around US$20 billion to acquire Abertis, were withdrawn early this year.

Overall, we see a trend towards fewer but larger deals being announced, with the number of mega deals (13) already exceeding three quarters of previous year's level of 18 such deals. As a consequence, the average transaction value in the first half of 2018 also exceeds the value of the previous two years.

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 US$50 million were evaluated.

Mega deals in H1 2018 (1/2)

Announce-ment	Target	Target nation	Buyer	Buyer nation	Deal status	Deal vol. (US$ bn)	Sector
March	Abertis Infraestructuras SA	Spain	Abertis Infraestructuras SA SPV (50% Atlantia SpA, 30% ACS, 20% Hochtief)	Spain	Pending	22.53	Passenger ground
April	DCT Industrial Trust Inc	US	Prologis Inc	US	Pending	6.38	Logistics/ Trucking
June	China Merchants Port Holding	HK	Shenzhen Chiwan Wharf Holding	China	Pending	4.28	Shipping
March	4 Philippine regional airport concessions	PHL	Aboitiz InfraCapital Inc	PHL	Intended	2.85	Passenger air
February	Beijing Jingbangda Trade Co	China	Group of Financial Investors	China	Pending	2.50	Logistics/ Trucking
February	Italo SpA	Italy	Global Infrastructure Partners	US	Completed	2.45	Rail
April	Man Bang Group	China	Investor Group (Financial Investors and subsidiaries of Softbank and Google)	China	Completed	1.90	Logistics/ Trucking
February	Shenzhen Chiwan Wharf Holding	China	Investor Group (subsidiaries of state-owned China Merchants Group)	China	Completed	1.59	Shipping
June	Worldwide Flight Services	France	Cerberus Capital Management	US	Pending	1.39	Passenger air
May	ZTO Express (10% stake)	China	Alibaba Group / Cianiao (Alibaba logistics unit)	China	Pending	1.38	Logistics/ Trucking

Mega deals = deals with a volume starting from US$ 1 billion

Mega deals in H1 2018 (2/2)

Announce-ment	Target	Target nation	Buyer	Buyer nation	Deal status	Deal vol. (US$ bn)	Sector
March	Scandlines GmbH	DE	Group of Financial Investors	UK	Pending	1.37	Shipping
March	Aero 1 Global & Intl Sarl*	Lux	Atlantia SpA	Italy	Pending	1.30	Rail
April	UN Ro-Ro Isletmeleri AS	Turkey	DFDS A/S	DK	Completed	1.17	Shipping

* Aero 1 is a Luxembourg-based investment vehicle that holds Goldman Sachs Infrastructure Partners' 15.49% stake in Getlink SE which controls the two Channel Tunnel Concessionaires and Europorte SAS, a French rail freight transport company.

Many mega deals, institutional investors dominating

During the first six month of 2018, 13 so-called mega deals were announced, thus already exceeding three quarters of previous year's level of 18 such deals. 10 of these deals see financial investors or investor groups as buyers, while strategic investors seem to restrain themselves to smaller transactions. The proportion of European targets is remarkably high with six of the 13 deals involving European targets (including Turkey). Four of the mega deals involved infrastructure targets: Toll road operator Abertis, four airport concessions in Philippines and the Chinese port operators China Merchants Port Holding and Shenzhen Chiwan Wharf Holding. These two Chinese deals are closely connected, as both targets are subsidiaries of the state owned China Merchants Group and the deals are part of the efforts of China Merchants Group to integrate its port-related assets into its listed subsidiary Shenzhen Chiwan Wharf Holdings to create synergies for the port business of the Group.

Mega deals = deals with a volume starting from US$ 1 billion

Regional distribution of deals

H1 2018

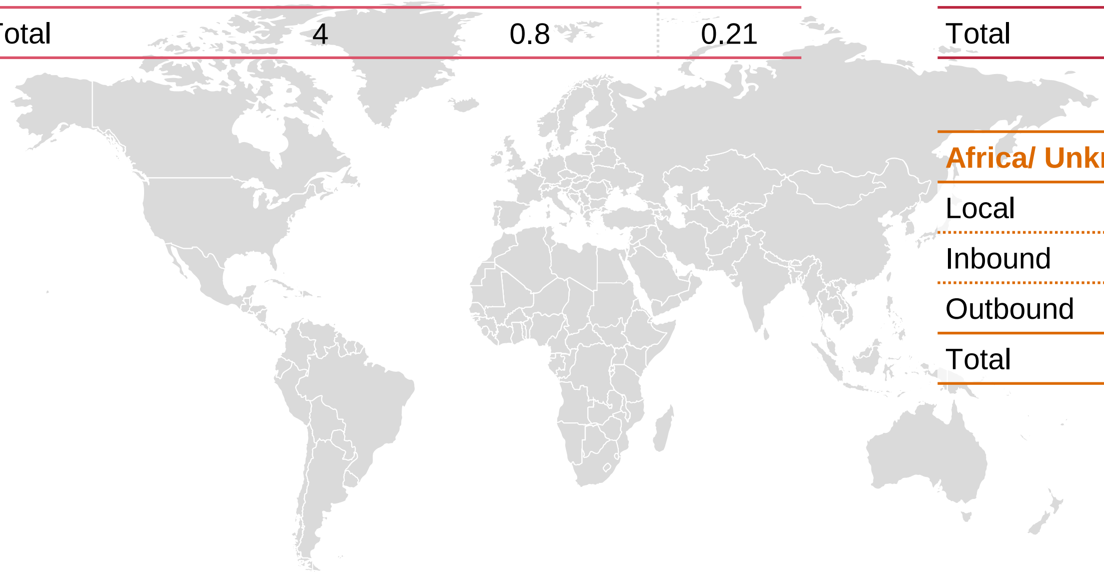
North America	No. of deals	Vol. (US$ billion)	Ø Deal
Local	12	9.4	0.79
Inbound	5	1.9	0.38
Outbound	10	5.0	0.50
Total	27	16.3	0.60

Europe	No. of deals	Vol. (US$ billion)	Ø Deal
Local	20	29.5	1.47
Inbound	6	4.5	0.74
Outbound	3	0.4	0.14
Total	29	34.3	1.18

South America	No. of deals	Vol. (US$ billion)	Ø Deal
Local	2	0.5	0.23
Inbound	2	0.4	0.19
Outbound	0	0.0	-
Total	4	0.8	0.21

Asia & Pacific	No. of deals	Vol. (US$ billion)	Ø Deal
Local	54	24.3	0.45
Inbound	9	1.2	0.14
Outbound	4	1.5	0.37
Total	67	27.0	0.40

Africa/ Unknown	No. of deals	Vol. (US$ billion)	Ø Deal
Local	1	0.1	0.10
Inbound	0	0.0	-
Outbound	5	1.1	0.22
Total	6	1.2	0.20



Explanation:

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

Deals with European participants

H1 2018

Europe	No. of deals	Vol. (US$ billion)	Ø Deal
Local	20	29.5	1.47
Inbound	6	4.5	0.74
Outbound	3	0.4	0.14
Total	29	34.3	1.18

Greatest transaction volume albeit fewer deals announced

Although Europe is second only to Asia measured by the number of deals, it has the highest transaction volume reaching a total volume of US$34.3 billion. This is largely due to the high proportion of mega deals with European participants. These mega deals also ensure that the average transaction value of deals with European participants is by far higher than in any other region. The trend towards fewer but larger deals resembles the situation in the European M&A market across all industries, where a rebound in mega deals combined with a slowdown of the number of deals announced indicates that companies attempt fewer but bigger takeovers. One of the reasons for this development may be that decision makers face the end of the loose monetary policy with the ECB signalling to end its quantitative easing programme this year which may lead to an interest rate hike potentially making it harder to secure financing for larger transactions in the coming years.

Bidding contest for Abertis resolved?

After Atlantia SpA from Italy and the German Hochtief AG faced each other as bidders for Abertis in 2017 with offers between US$18.3 billion and US$20.5 billion, these deals have been withdrawn in 2018. The involved companies Atlantia, ACS and Hochtief decided to form a consortium, now jointly bidding more than US$22 billion in the largest deal announced this year.

Large acquisitions in Germany, Italy, Luxembourg and Turkey

Although more than 20% (6 out of 29) of announced transactions with European participants concern acquisitions involving companies in the United Kingdom, the largest acquisitions second to the bid for Abertis, are taking place in Germany, Italy, Luxembourg and Turkey, concerning companies from the railways and shipping sectors, including the Italian railway company Italo SpA, and Aero 1 Global & International, the operator of the Eurotunnel based in Luxembourg as well as the German ferry operator Scandlines and the Turkish shipping company UN Ro-Ro.

Distribution of deals by sector

All deals Total value in US$ billion	H1 2016		H2 2016		H1 2017		H2 2017		H1 2018	
	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value
Passenger air	12	6.4	24	8.1	21	9.3	21	9.7	20	9.2
Passenger ground	22	5.1	18	7.1	19	5.4	16	29.1	14	26.4
Rail	3	0.4	10	2.1	5	4.4	4	0.7	3	3.8
Logistics/Trucking	36	38.9	43	12.9	55	29.7	48	17.0	46	19.4
Shipping	28	16.4	27	18.6	44	12.6	34	10.9	23	12.6
Other	6	1.5	8	2.4	2	1.6	14	3.8	5	0.3
Total	107	68.7	130	51.3	146	62.9	137	71.3	111	71.7

During the first six months of 2018, transactions with targets in Logistics/Trucking dominated T&L M&A activity, making up for 41% of all announced transactions in the industry and 27% of total deal value. Also, 4 of the 13 mega deals announced involve targets from this sector. In line with previous years, Rail has been the sector with the lowest number of transactions, although the sector had a fair share of total deal value in the first half of 2018, due to the fact that two of the three deals in the sector were mega deals.

Only 18 of the total 111 transactions were deals with infrastructure related targets, significantly below previous 5 years, when in average every fourth deal was infrastructure-related. Total value of the 18 deals, however, accounts for nearly half of the total deal value in H1 2018.

… thereof Infrastructure Total value in US$ billion	H1 2016		H2 2016		H1 2017		H2 2017		H1 2018	
	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value
Infrastructure - Airport	4	0.8	9	3.2	13	4.7	6	2.4	6	4.3
Infrastructure - Road	17	4.5	13	6.0	18	6.1	12	27.4	7	24.5
Infrastructure - Port	11	11.5	10	9.3	16	6.7	19	5.6	5	6.0
Total Infrastructure related	32	16.8	32	18.5	47	17.5	37	35.3	18	34.8

Number and total value of the deals (in US$ billion) from a volume of US$50 million.

Infrastructure related deals can be part of Passenger air, Passenger ground or Shipping.

Sector analysis

Passenger Air

With a total of 20 deals, Passenger Air is the third most active segment behind Logistics/Trucking and Shipping. Two thirds of these deals relate to airports or services to air transport such as ground handling or MRO while seven transactions had airlines as targets. The majority of these targets were located in Asia.

In Europe, the aviation market is still impacted by the repercussions of the Air Berlin bankruptcy. Austrian aviation entrepreneur Niki Lauda acquired Niki in January and later struck a deal with Ryanair with the latter buying an initial stake of 24.9% of the newly founded airline Laudamotion.

The Laudamotion – Ryanair deal is typical for the currently ongoing market consolidation of airlines in Europe. In the current market environment, airlines are facing significant market competition resulting in low-margin flight fares. As a consequence, European markets have seen two major airline bankruptcies in the last twelve months (Air Berlin, Monarch) and airlines are striving to strengthen their market position to operate more profitably. Thus, since the aviation industry is characterised by the limited number of attractive flight slots, we assume that M&A deals will remain in focus for major airline companies for the next 2-3 years as they try to reposition themselves on their markets. Recent news coverage indicates that talks about possible transactions are happening time and again between the major European airlines and possible targets.

In addition, this deal also highlights the increased importance of European antitrust and regulatory authorities, since without their disapproval, Lufthansa would have completed the purchase of NIKI already late last year. For the future, antitrust and regulatory authorities will face a steep challenge in establishing the ‘right’ balance between customer and corporate demands.

For Ryanair, this deal opens up the Austrian and German market in an unprecedented way for the company, since their subsidiary Laudamotion owns a number of valuable flight slots in Germany and Austria. In the past, Ryanair also has not been operating from the airport in Vienna but only from the neighbouring Slovakian airport in Bratislava. Given one of the company’s objectives to become the largest low-cost carrier in Germany and Austria, this move ideally fits the company’s strategy.

Sector analysis

Logistics/Trucking (1/2)

Logistics/Trucking shows the highest number of deals (46) compared to other sectors. This follows the trend from previous years and doesn't come as a surprise given the huge number of companies in this sector. Average deal value, however, is relatively low in Logistics/Trucking (US$ 422.8).

Industry consolidation continues in freight forwarding and parcel delivery. A number of x-border deals underpin the ongoing development of larger players increasing their global footprint or broadening their scope of services. Some examples: CMA CGM's 24,99% stake in Ceva, DPD's investment in Ninja Vans (Singapore), Nippon Express Europe's take-over of Traconf (Italy) and the strategic partnership of Kerry Express with VGI (Thailand).

A lot of the M&A activity is taking place in China: 6 out of the top 10 deals involve Chinese T&L targets. Of the 46 deals in Logistics/Trucking with a deal value of more than US$ 50m, 17 involve Chinese targets. Most of these are local deals, reflecting the growth and need for innovation in the Chinese logistics market. Indeed, innovation may be enhanced by recent M&A activity. The two most notable, yet not surprising deals, are

- Alibaba's investment in ZTO Logistics, one of China's biggest logistics companies. Alibaba will invest US$ 1.38bn for a 10% stake in ZTO.
- JD.com's move to raise US$2.5 billion in new funding for its logistics unit Beijing Jingbangda Trade Co. (aka JD Logistics) by selling a 18.6% stake to a group of mostly state backed financial investors.

In addition, JD.com and Google announced a strategic partnership in June, along with a US$550 million investment of Google in JD, which amounts to roughly a 1% stake.

The purpose of Alibaba's move appears to be to complement the capacity of Cainiao, Alibaba's logistics subsidiary, and support their 'New Retail' concept that promotes seamless integration between online and offline commerce. Earlier in the year, Alibaba had already acquired Ele.me, a last-mile food delivery service. Unlike JD, Alibaba started its own logistics activities only in 2013. Alibaba acquired a controlling stake in Cainiao in September 2017 and holds a number of minority stakes in logistics players, such as YTO Express, Singapore Post and now ZTO Express. In South-East-Asia, Alibaba can refer to Lazada's logistics solution. Alibaba's goal is to ensure single-day domestic delivery in China and three-day delivery to the rest of the world.

Sector analysis

Logistics/Trucking (2/2)

Alibaba seems to catch up on logistics as compared to JD.com which has had its own logistics facilities and operations from the beginning. In light of this development, JD.com raises capital and tries to gain access to Google's data solutions in order to strengthen and further scale up its delivery capabilities. With Google, Tencent and Walmart JD.com now has financial backing from 3 global players in technology and retail. The race in Chinese e-commerce enters the next round; Alibaba and JD.com have both recognised that logistics will be a key to success.

Trucking is another area of growth and innovation in China. In April, the Manbang Group, the Chinese truck-hailing company often referred to as the "Uber of trucks" in China, raised $1.9 billion in funding in a round led by the SoftBank Vision Fund and the China Reform Fund; also, Google is among the group of investors. In June, Manbang made it to Forbes' list of 'China's 50 Most Innovative Companies'. Manbang's platform covers 5.2 million of the 7 million trucks driving on China's major roadways and 1.2 million of the country's 1.5 million logistics firms are using the platform. Manbang is planning to use the money raised to expand R&D into new energy and autonomous driving solutions, as well expansion into markets beyond China.

Singapore might become another hotspot for logistics innovation: Temasek, a Singapore headquartered investment company, and Kuehne + Nagel, a leading global logistics group, signed a Memorandum of Understanding to establish a joint venture to invest globally in early stage companies developing cutting-edge technology for logistics and supply chains.

Slowdown in logistics real estate activity? In the first half of 2018, the share of warehousing-related deals declined to just 19% of all deals in the Logistics/Trucking sector (was ~30% in 2017), although the second largest deal in 2018 so far concerns the takeover of DCT Industrial Trust's portfolio of logistics assets in the US by Prologis, one of the largest global logistics real estate companies. Indeed, 2017 was a record year for logistics property deals. A trend that can be observed is a move away from asset deals towards deals of real estate portfolios or even investment companies. Some large PE firms have divested their logistics portfolios.

Sector analysis

Shipping

2017 was characterised by mergers and new alliances in the liner segment. Due to freight rates remaining low liners are looking for optimizing their internal operations. During the first half of this year all significant segments (container, bulker, tanker) have shown deals activities.

Due to the European banks reducing their shipping portfolios a significant number of asset deals took place. Especially the sale of German HSH Nordbank seemed to have accelerated that development. It will be interesting to see how the new owners will deal with the shipping activities of the bank. Several asset deals were conducted mostly by Greek and Turkish owners which might now benefit from the portfolio wipe-out.

Changing market conditions might generate opportunities for companies which are looking for strengthening their market position. After the acquisition of parts of Rickmers Group last year Zeaborn acquired E.R. Schiffahrt in February 2018. Thereby Zeaborn became one of the largest non-operating owners in the container market and is still looking for acquisition opportunities in the German market.

Instead of just focusing on growth in their core business other companies are looking for opportunities to expand their service offerings like Schulte Group, which acquired the LNG ship management company Pronav in February 2018. In March 2018, 3i sold the ferry operator Scandlines to First State Investments and Hermes Investment Management and rebought a stake of 35%. Scandlines sold several routes in the past to focus on only two routes in the future. DFDS bought the Turkish Ro-Ro company U.N. Ro-Ro to strengthen its position in the ferry services between Turkey and other countries.

As every other industry shipping will be influenced by new technologies like Internet of Things, cloud computing, blockchain. More and more parts of the logistics chain will be digitized. In prior years most of the shipping companies have not invested in a more powerful IT, ERP systems. Today more and more companies realize the necessity of on-time reporting, optimized ship operations due to fleet management systems collecting and utilizing data. These lead to smaller acquisitions of smaller IT-companies mainly bought by liners and further cooperations like Maersk and IBM with regard to blockchain. Considering that digital excellence will become a must in the future further investments from other shipping segments can be expected.

Additionally, ocean liners expand operations by investing in land-based services like CMA CGM investing in CEVA Logistics.

Sector analysis

Rail

Two European mega deals dominate the rail sector, the largest being the takeover of high-speed railway group Italo SpA - Nuovo Trasporto Viaggiatori (NTV) through infrastructure funds manager GIP just days before a planned IPO for US$2.45 billion. The deal comes at a time where the market for long distance quality transport services is expanding across Europe, especially if supported by continuous investments in rolling stock and effective commercial policy and backed by efficient regulation. The NTV Deal may be a role model for future investments in the European railway sector as other private owners of railway businesses may be poised to sell stakes in their companies in light of the high valuation of the Italo deal and EU rules mandating liberalisation of passenger rail operation in EU member states are to come into force by 2020.

Through the deal, Italo itself seems to be in a good position to benefit from further extensions in the Italian high speed rail infrastructure and may even seek growth opportunities in other European markets. On the other hand, experienced disruption in the most mature market in terms of privatisation in Europe, the United Kingdom, may generate concerns on the capability of the EU’s "open access" regulatory framework for rail to ensure business quality and sustainability. The intense controversy with long-running strikes about plans to reform the state rail company SNCF in France this spring shows that liberalisation of the railway sector is still open to debate and may be difficult to put into practice across various countries in Europe.

Sector analysis

Transport infrastructure (1/2)

Historically, transport infrastructure is one of the key segments within the transportation and logistics M&A market with an average annual deal count of 58 deals within last five years representing 24% of total number of deals for the same period. In the first half of 2018, M&A deal activity in transport infrastructure was very limited with 18 deals including ports, airports and roads, representing 16% of total deals in T&L sector. On the other hand, this sector kept its leading position with US$34.8 billion deal value (49% of total T&L M&A deal value in H1 2018)

The acquisition of Abertis Infraestructuras SA is the main driver of transport infrastructure's high deal value, stressing the attractiveness of road infrastructure for both of strategic and financial investors as the assets in this sector are mainly operated by private companies within concession schemes with a stable cash flow structure for long terms. We see further M&A opportunities in this sector in the future, as distressed developers and operators as well as greenfield road infrastructure investors may intend to liquidate their existing investments to undertake and develop additional projects.

Based on the transactions seen in 2016 and 2017, more cross border deals may be expected in the future for road infrastructure. Following the Abertis transaction and considering the availability of existing projects, M&A activity may increase in Europe, especially in Turkey as the country has been focusing on road infrastructure concessions for the past decade. Total investment size of projects, which are operational or under construction, has already reached US$16 billion and the involvement of international strategic investors and developers as equity investors in the Turkish road infrastructure market is very limited. Considering the limited local investor base and further road infrastructure projects planned across country, more cross border deals may be seen in the future in Turkish road infrastructure market.

Within airport infrastructure, privatisations were the main driver for deal activity during the first six months of 2018 with the two largest airport related deals having a privatisation background: Abotiz Capital announced having acquired 35 years of concession rights of 4 Philippines state owned airport for US$2.9 billion while Vinci Airports acquired a 25 years concession to operate the state-owned Belgrade Nikola Tesla Airport via an auction of the Serbian government. With some smaller and a few larger airport privatisations on the horizon worldwide, this trend is likely to persist, although we also see some private to private transactions in this area. The recent sale of its 49% stake in Fraport IC Ictas Antalya Airport from Turkish infrastructure investor and developer IC Holding to TAV Airports Holding for US$400 million being the largest of these transactions in 2018 so far.

Sector analysis

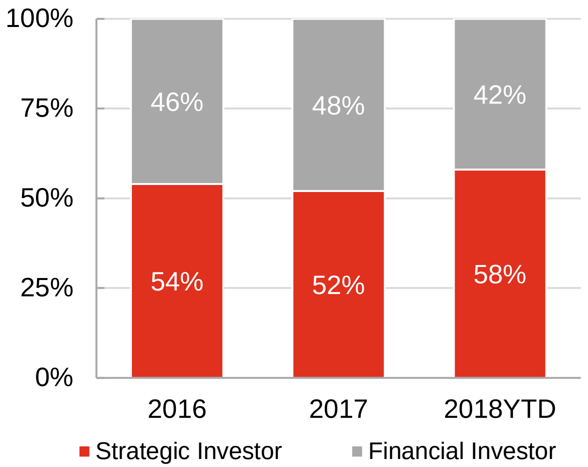
Transport infrastructure (2/2)

M&A activity in port infrastructure seems limited compared to the previous years with only 4 transactions (11 in H1 2016 and 16 in H1 2017). Total deal value, on the contrary, increased slightly compared to H2 2017 but did not reach the levels of H1 2016 to H1 2017. The slowdown in port infrastructure deal activity becomes even clearer when considering that the two Chinese infrastructure-related mega deals in this area are closely connected to the efforts of the ultimate owner of both targets, the state-owned China Merchants Group, to integrate its port-related assets into its listed subsidiary Shenzhen Chiwan Wharf Holdings in order to create synergies for the port business of the group. These two deals are responsible for more than 95% of the total deal value for port related transactions in H1 2018.

Nonetheless, additional new investments and a wave of port acquisitions by China based investors may be expected in line with the "Belt and Road" initiative. Currently the Belt and Road initiative spans 65 countries across Asia, Africa and Europe, including maritime and land routes between China and Europe. Starting from the beginning of the initiative in 2013, Chinese investors are expected to invest in various industries within the regions covered. Transport infrastructure, with special focus on ports, roads and railways, is a key element of this investment strategy for Chinese investors.

Deals with participation of financial investors

Distribution of the number of deals by type of investor



Number and total value (US$ billion) of deals with participation of financial investors

Total value in US$ billion	2016 No. of deals	2016 Total value	2017 No. of deals	2017 Total value	2018YTD No. of deals	2018YTD Total value
Passenger air	15	6.5	20	10.2	9	5.5
Passenger ground	19	5.1	20	8.9	4	23.5
Rail	8	2.1	3	1.5	2	2.5
Logistics/Trucking	47	13.9	56	30.0	23	15.5
Shipping	19	22.3	28	9.8	6	3.8
Other	3	1.5	10	3.6	3	0.2
Total	111	51.4	137	64.0	47	51.0

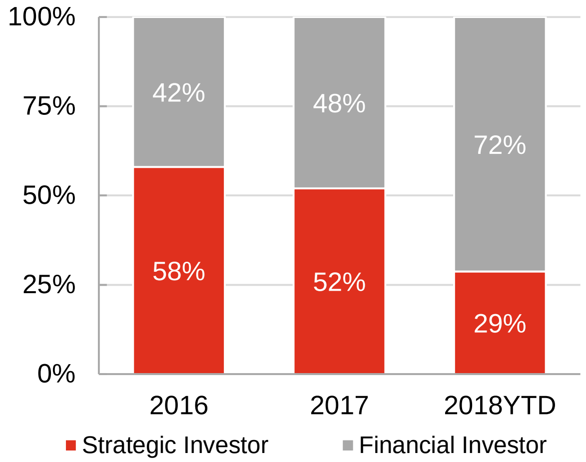
Activity of financial investors is further growing

In the first six months of 2018, financial investors had a share of 43% in the total number of M&A deals which is slightly below the levels of the precedent years. The total volume of these deals is around US$51 billion (strategic investors: US$12.2 billion).

In 10 out of 13 mega deals, financial investors are situated on the bidding side. The special purpose vehicle formed by Atlantia, ACS and Hochtief to submit a joint tender for Abertis of more than US$22 billion has had the largest impact here and is also the main reason behind the record-high share of total deal value for these investors in 2018 so far.

Financial investors are particularly involved in deals within the logistics/trucking sector, mainly investing into logistics properties (7) and trucking companies (9).

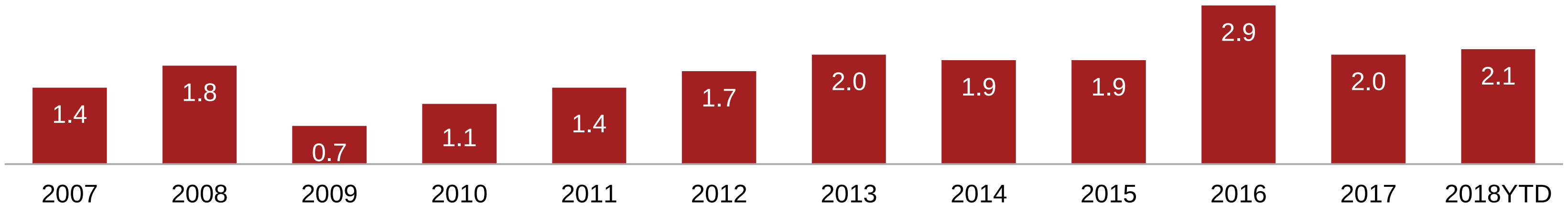
Distribution of the value of deals by type of investor

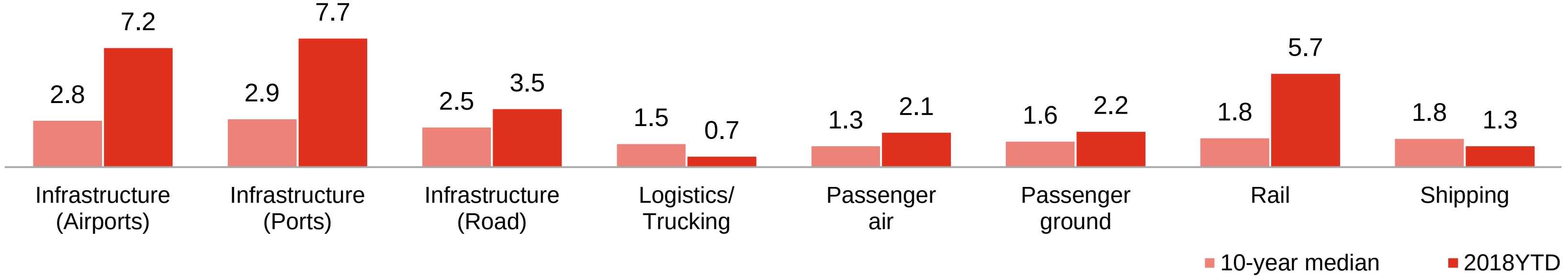


Investor Groups are counted as Financial Investors, as Financial Investors normally play a leading role in these groups

Prices for T&L – targets in the last ten years in total and by sector

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





Prices still on a high level

After median prices reached a record high in 2016 with 2.9 times the revenues, the situation seemed to normalise again in 2017 and the first six months of 2018. Currently, industry targets are valued with 2.1 times the revenues.

On average, infrastructure related deals tend to have a significantly higher sales multiple than deals with operating companies as targets. On the buyside, financial investors tend to pay higher multiples than strategic investors when acquiring T&L targets. In the first six months of 2018 the median value/sales multiple paid by financial investors was 2.8 (2017: 3.2) while that of strategic investors was only 1.7 (2017: 1.8).

The very high multiples in the sectors 'Airports', 'Ports' and 'Rail' currently are caused by the small number of deals with published multiples and should be considered as outliers.

*The transactions multiple specifies the relation of the company valuation (purchase price) to the annual turnover.

Deals with Chinese involvement

China	H1 2016		H2 2016		H1 2017		H2 2017		H1 2018	
Total value in US$ billion	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value	No. of deals	Total value
Passenger air	2	0.3	9	2.5	4	1.8	4	1.6	8	2.3
Passenger ground	4	0.7	5	1.1	7	2.3	4	1.1	5	1.3
Rail	1	0.3	3	0.7	0	0.0	1	0.1	0	0.0
Logistics/Trucking	7	26.5	11	5.0	13	17.2	15	10.9	17	8.8
Shipping	5	1.3	6	2.6	9	4.6	14	4.0	9	7.3
Other	2	0.7	2	0.2	0	0.0	3	1.0	1	0.1
Total	21	29.8	36	12.1	33	25.9	41	18.8	40	19.7

Quantity and total value of the deals (in US$ billion) with a volume greater than US$50 million.

Chinese M&A dynamics driven by local Logistics/Trucking deals

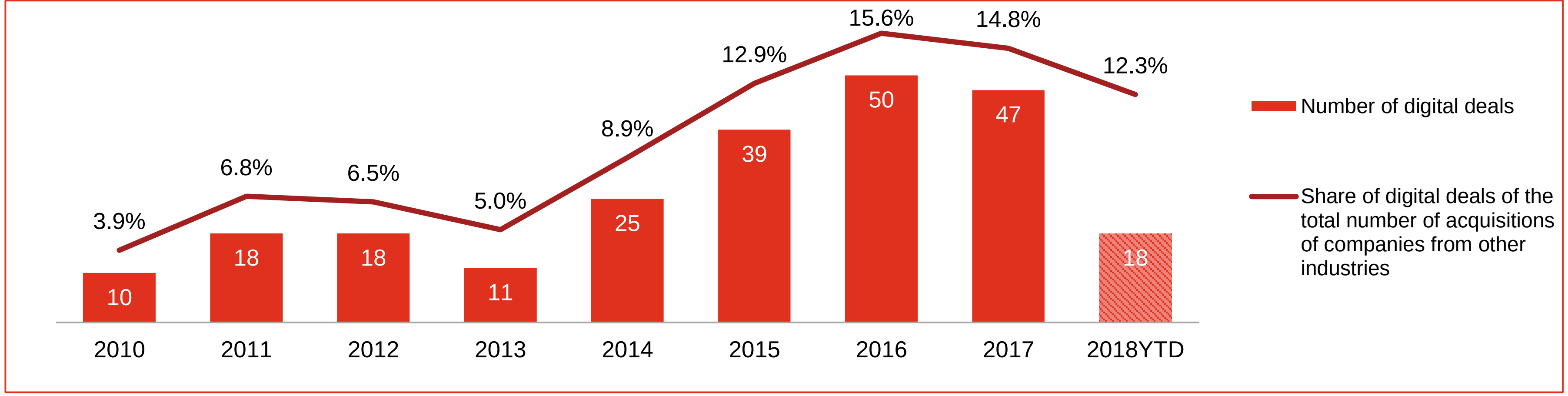
In China we saw mostly local Chinese deals with Logistics/Trucking targets (17 of 40). The dominance of Logistics/Trucking related deals is due to two factors: First, the Chinese trucking sector is highly fragmented and thus we see a lot of small to mid range deals happening here. The fragmentation of this market also explains why investors see such a huge potential in platform providers like Man Bang Group (so-called “Chinese Uber for Trucks”), which was the target of one of the four megadeals within China that were announced this year.

The second supporting factor for local Logistics/Trucking related M&A activity is the high need for investment into logistics networks due to the dynamic growth in e-commerce business. The other two megadeals that happened in the Chinese Logistics/Trucking sector this year are exemplary: First, e-tailer JD.com has raised US$2.5 billion in new funding for its logistics unit Beijing Jingbangda Trade Co (aka JD Logistics) by selling a 18.6% stake to a group of mostly state backed financial investors and second, the e-commerce giant Alibaba, via its logistics unit Cainiao, invested nearly US$1.4 billion to buy a 10% stake in CEP provider ZTO Express.

The two Chinese infrastructure-related mega deals in Shipping are closely connected, as both targets (China Merchants Port Holding and Shenzhen Chiwan Wharf Holding) are subsidiaries of the state owned China Merchants Group and the deals are part of the efforts of the group to integrate its port-related assets into its listed subsidiary Shenzhen Chiwan Wharf Holdings to create synergies for the port business of the Group.

Focus: digital deals

Acquisitions of digital technology firms* by T&L-Buyers
(all acquisitions by T&L buyers of companies from other industries)



*All transactions, in which the target assigned SIC-Code matches with the High-Tech SIC-Code of the sample of the study 'Using Industry Classification Codes to Sample High-Technology Firms: Analysis and Recommendations' by Kile and Phillips (2009) are identified as an acquisition of digital technology firms – without taking into account medical technology or pharmaceutical companies.

Besides, the deals had to comply with the Thomson ONE Banker 'High Tech Industry classification', but without consideration of the industries pharmaceutical and biotechnology.

M&A as an option for the digital transformation

To prepare their business model for digital transformation, T&L companies basically have three strategic options: build up a digital business division, acquire a tech company or invest in digital start-ups or enter into a cooperation.

In light of the above, we have seen a strong growth in technology-driven acquisitions of high-tech targets by transport and logistics companies between 2013 and 2017. However, in the first half of 2018, deal activity in this market has slowed down as T&L companies seem to restrain takeovers of digital technology firms.

In the past year, we saw some transactions in the freight platform area, and 2018 follows this trend with the US-railroad company Genesee & Wyoming buying a minority stake in Cargomatic, a technology platform that connects shippers and truckers through web based and mobile applications. The recent investment of Softbank and Google's venture capital fund CapitalG among other investors into the Chinese truck hailing service platform Manbang also highlights the potential that investors see in freight platforms as a central pillar for the digitisation of the road freight industry.

Methodology

This report is an analysis of the global transaction activities in the 'transport and logistics' industry.

The analysis covers all mergers, acquisitions and sales, leveraged buyouts, privatisations and the acquisition of minority interests with a transaction volume greater than US$50 million. All announcements between 1 January 2017 and 31 December 2017 are considered. Project transactions, such as public-private partnership – which are more common than corporate transactions especially in the field of infrastructure – are out of scope.

The data for the analysis derives from Thomson Reuters comprising all announced deals where the target company stems from one of the following listed NAICS-Industries. Historical data is continuously updated.

All transactions, whose status has been completed at the time of the analysis, or not yet completed because of antitrust approval procedures, 'unconditional' (conditions of the buyer are fulfilled, but the deal has not yet 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

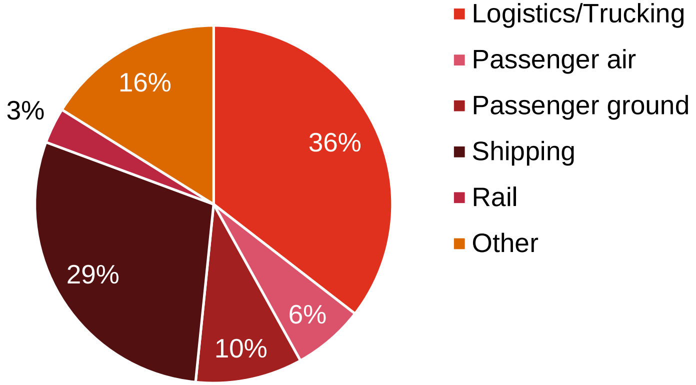
Other: Scheduled Freight Air Transportation; Non-scheduled Chartered Freight Air Transportation; Other Non-scheduled Air Transportation; Mixed Mode Transit Systems; Commercial Air, Rail and Water Transportation Equipment Rental and Leasing; Passenger Car Rental; Passenger Car Leasing; Truck, Utility Trailer and RV Rental and Leasing

Appendix

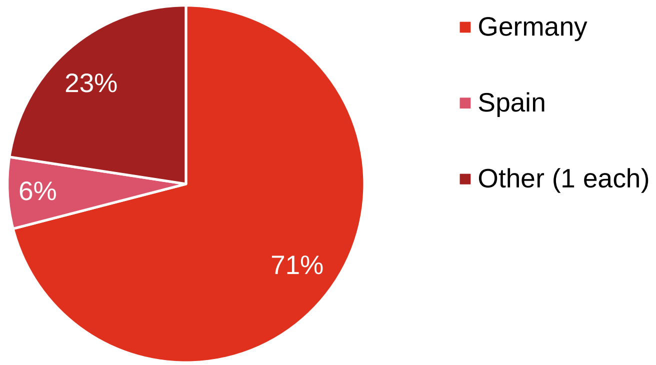
Deals with German participants

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

Distribution of deals with German participation by sector



Distribution of deals with German participation by origin of the target



Two mega deals with German participants

In 2018, the upturn in the M&A business in Germany, which was perceived in the previous year, does not seem to continue. A total of 31 deals were announced in the first six months of 2018 in which German companies were or are involved – less than a third of the total of 2017 (97 deals, 2016: 91). Transaction values were specified for only 9 deals, of which 3 had a transaction value over US$50 million.

The largest transaction in the year so far was the acquisition of a 65% stake in Scandlines GmbH by two financial investors from 3i Group for US$1.37 billion. Scandlines operates ferry lines between Germany and Denmark, transporting around 15 million passengers per year.

International deals outweigh local deals, where both the buyer and the target come from Germany: 15 of the 31 deals with German participants are so-called 'local' deals. For 7 inbound deals, the sale of German companies or individual assets in Germany to foreign investors was announced. Conversely, German investors announced 9 acquisitions of targets abroad.

The logistics and trucking sector was the focus of investors. 11 of the 31 announced deals with German participation had a target from this sector; the second highest M&A announcements (9) were related to targets from the shipping sector.

Focus: Logistics real estate

An analysis of logistics real estate deals in Germany mirrors the trend observed at the global level. Total deal value of the top 10 deals in logistics property increased more than tenfold 2017 vs. 2010. At the same time, returns reached an all-time low of approx. 5%, due to the high price levels. A longer term trend that can be observed is a move away from asset deals towards deals of real estate portfolios or even investment companies. Some large PE firms have divested their logistics portfolios. In the first half of 2018, though, deal values dropped notably below 2017 levels. Generally, both demand and prices are still high. Some PE firms are now looking into opportunities at city hubs. Still an opaque and fragmented market, difficult to assess with a view to standards, sustainability and profitability. We will continue to monitor developments in the second half of the year.

H1 2018

#	Name	Price (in €m)
1	Alpha Portfolio	483
2	Geneba Portfolio	450
3	Gewerbepark Visio	150
4	Southwind-Portfolio	80
5	6 DHL-Logistikzentren	72
6	Logistikpark Hoppegarten	70
7	Robin-Portfolio	56
8	Multicube Rheinhessen	50
9	Logistikimmob. Biebesheim	36
10	Decathlon Logistikzentrum	33
Total		**1.480**

2017

#	Name	Price (in €m)
1	Logicor-Portfolio	2.200
2	Hansteen-Portfolio	975
3	IDI-Gazeley-Portfolio	800
4	Gramercy Portfolio	465
5	Frasers Geneba	430
6	Frasers Bluefield-Portfolio	257
7	Azurite-Portfolio	250
8	10 DHL-Zustellbasen	128
9	Amazon Logistikzentrum	121
10	Palmira	100
Total		**5.726**

2010

#	Name	Price (in €m)
1	Bavaria-Portfolio	150
2	Esprit Distribution Center	65
3	Rösrather Möbelzentrum	55
4	OD Distributionscenter	34
5	PCC Daimler Plant Center	34
6	Garbe Logistikobjekt	30
7	Air Cargo Center	20
8	WEG Logistikcenter	11
9	DHL-Gelände	8
10	Areal Köln Ehrenfeld	6
Total		**413**

Note: Some transactions also include other types of use
Source: Thomas Daily

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