



Multiples Heatmap Analysis | 2017 Annual Review



Multiples Heatmap

Introduction



The Unquote research team, alongside Clearwater International's sector groups and European offices, has collected data on 2,348 private equity deals across Europe between 1 January 2014 and 31 December 2017

The analysis identifies where EV/EBITDA multiples are highest across regions and sectors, and the direction of those multiples over time





The objective is to assist private equity investors in assessing which regions and sectors present good investment opportunities

Since the initial launch of the Heatmap in November 2015, data collected has seen continuous improvement in comprehensiveness and quality





As we move forward, we hope to continue to build the community of private equity investors who are happy to share data confidentially so we can continue to improve the quality of the data and analysis

Any feedback on additional ideas of useful analysis is welcomed!



Multiples Heatmap

Introduction



Private equity deal volume in Europe increased to its highest level in four years during 2017, with average EBITDA multiples increasing to **10.4x** in 2017 vs. **10.2x** in 2016

TMT saw the highest average prices paid in 2017 at **10.9x**, slightly down on 2016 (**11.1x**). TMT PE deal volumes continue to represent a significant proportion of deal volume, 18% in 2017, replacing Consumer as second most active sector





Financial Services was second hottest sector during 2017 with average multiples of **10.7x**, jointly with Healthcare, but experienced steady price deflation through the year from **11.9x** in Q1 2017 to only **9.4x** in Q4 2017

Industrials and Chemicals saw the highest volume of deals in 2017 (26%), with sub €50m EV deals increasing by 50%, and was the only sector in Europe to see multiples increasing between Q2 2017 and Q4 2017





The Nordic region continues to be the hottest region with an average 2017 multiple of **11.0x**, despite Q4 2017 multiple for the region dropping to **10.4x** from a peak of **11.8x** in Q2 2017

Excluding outliers, best value opportunities in 2017 were in the Automotive and Real Estate sectors, where average prices were **9.0x** and **8.5x** respectively





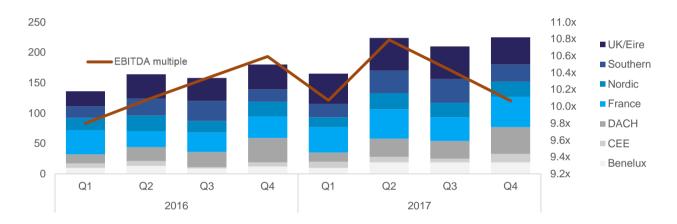
The €1bn+ deal range group valuation was the hottest in 2017 at **12.4x**, with best value being seen in the €50m to €100m range both during 2017 (**9.8x**) and in Q4 2017 (**9.3x**)

Private equity activity surges in 2017

Private Equity deal volume increases by almost 30% on 2016

- Private Equity deal volume across Europe has continued to grow, reaching its highest level in four years. The
 number of platform investments made by financial sponsors has seen an annual increase of 29%. A total of 824
 businesses were backed by PE funds in 2017 compared with 638 in the previous year.
- Volume is not the only metric that grew in 2017 multiples paid by PE also saw an increase during the year, with an average acquisition multiple in 2017 of 10.4x compared to 10.2x in 2016. This rise was predominantly driven by prices paid in Q2 and Q3 of 2017. The average multiple in Q4 2017 coincided with the first quarter of the year and the average multiple across the last four years.

PE deal volume and average multiple across Europe from Q1 2016 to Q4 2017



- Key regions contributing to high deal volume in 2017 were UK/Eire, representing 25% of total deal volume, and France, accounting for 22% of total number of deals. The regions with the lowest PE activity in the year were Benelux, with 8% of total volume, and CEE, where only 4% of European PE deals were completed. The mix of volumes between geographies has remained relatively stable since 2016.
- The Industrials and Chemicals sector saw the highest volume of deals in 2017, accounting for 26% of European deals. This trend was particularly noticeable in France where 62 businesses in the sector were backed by PE.
- The other two most active sectors were TMT and Consumer, each representing 18% of total PE deal volume.

Regional average annual multiples

- The growth in prices across Europe was mainly driven by the DACH and Nordic regions, where average multiples increased by 0.8 to 10.5x, and by 0.4 to 11.0x respectively.
- The CEE region has seen the highest annual growth in average multiple, a difference of 1.6 to 12.1x. However due to the region's low deal volume this had limited impact on overall average price across Europe.
- Multiples in the UK/Eire and France regions were stable between 2016 and 2017. UK/Eire average dropped by only 0.1 to 10.3x, while French businesses were acquired by PE at the same average price as in 2016.

Region	2016	2017	2-year average		
Benelux	10.1x	10.4x	10.3x		
CEE	10.5x	12.1x	11.1x		
DACH	9.7x	10.5x	10.1x		
France	10.1x	10.1x	10.1x		
Nordic	10.6x	11.0x	10.9x		
Southern	10.1x	9.6x	9.8x		
UK/Eire	10.4x	10.3x	10.3x		
Europe	10.2x	10.4x	10.3x		

Average multiples by region and sector

2017 annual review

	Automotive	Business Services	Consumer	Financial Services	Food and Beverage	Healthcare	Industrials and Chemicals	Real Estate	тмт	Region averages	2016 average
Benelux	-	11.6	9.1	9.3	9.0	10.9	10.5	15.1 ²	10.3	10.4	10.1
CEE	-	6.3	10.0	-	9.4	11.8	22.8 ¹	-	-	12.1	10.5
DACH	9.9	10.2	11.6	10.3	10.3	10.0	9.5	8.3	12.1	10.5	9.7
France	-	10.6	9.4	12.0	10.7	11.9	9.8	7.6	10.2	10.1	10.1
Nordic	10.0	11.1	10.7	11.4	11.8	11.2	10.5	-	11.5	11.0	10.6
Southern	6.7	9.8	9.6	12.8	10.3	9.7	9.7	7.0	8.6	9.6	10.1
UK/Eire	7.6	10.3	9.9	10.1	9.7	10.5	10.7	9.4	10.5	10.3	10.4
Sector averages	9.0	10.5	10.1	10.7	10.1	10.7	10.2	9.5	10.9	10.4	
2016 average	9.2	10.4	10.5	10.1	9.9	10.5	9.4	10.4	11.1		

¹ Outlier multiple driven by a single Industrials and Chemicals multiple in CEE region

- This chart analyses the average multiples by sector and region for the year ended 31st December 2017.
- Overall multiple growth in 2017 was largely driven by the Industrials and Chemicals sector. The combination of high proportion of total European deals (26%) and significant growth in average price (9.4x in 2016 to 10.2x in 2017) raised the European average.
- The most expensive sector in 2017 was TMT, where innovation and the rapid growth profiles of businesses attracted high prices from institutional investors. This was also the case in 2016 when the sector's average multiple was 11.1x. The highest TMT multiples were paid in the DACH region at an average of 12.1x.
- Financial Services and Healthcare also saw high and increasing multiples during 2017. Businesses in both sectors were backed by PE funds at an average of 10.7x.
- Sponsors acquired Automotive businesses at an average valuation of 9.0x during the year, which represented the
 best value among sectors. This did little to depress the overall average, however, with Automotive deals
 accounting for only 2.7% of deals in the year.
- France, Nordic and Southern regions all witnessed high acquisition multiples in the Financial Services sector. Approximately 50% of European Financial Services transactions were closed in the UK/Eire region.
- CEE was the most expensive region in 2017, however this was driven by an outlying multiple in the Industrials and Chemicals sector and significantly fewer disclosed deal multiples.
- Excluding the outlier CEE, the most expensive region for PE investors was the Nordic, where average multiples in 2017 grew to 11.0x compared to 10.6x in 2016.
- Multiples in the Benelux, DACH and UK/Eire regions clustered around the overall annual average. Average prices
 paid in France remained at the same level as in 2016.
- Lowest priced businesses in 2017 were in the Southern region with an average multiple of 9.6x.

² Outlier multiple driven by €3bn Q-Park transaction in Q2 2017

Quarterly analysis - regions

2017 annual review

Q2 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	2017 average	2016 average	St. Dev
Benelux	11.8	11.0	10.3	9.7	10.4	10.1	1.7
CEE	10.0	11.8	-	12.8	12.1	10.5	6.3
DACH	11.2	11.1	11.3	9.7	10.5	9.7	2.7
France	9.8	10.5	9.8	10.3	10.1	10.1	2.2
Nordic	10.5	11.8	11.0	10.4	11.0	10.6	2.4
Southern	10.9	9.9	9.3	9.5	9.6	10.1	2.7
UK/Eire	9.5	10.5	10.8	10.0	10.3	10.4	3.0
Europe	10.1	10.8	10.4	10.1	10.4	10.2	2.7

- These charts analyse the quarterly multiples by region for the year ending 31st December 2017.
- The CEE region has seen its highest priced quarter yet in Q4 2017. This was mainly driven by a high multiple deal in the Industrials and Chemicals sector.
- The second highest average multiple in the final quarter of 2017 was in the Nordic region, though the region has seen a decline in multiples through 2017 since its Q2 peak.
- UK/Eire saw fluctuating multiples through the year with the biggest variance in multiples outside of CEE. However, the average over the year showed stability and multiples over the period in line with the prior year.
- Benelux saw steady price deflation through the year with multiples decreasing from 11.8x in Q1 2017 to 9.2x in Q4 2017.
- Q4 2017 average multiple in France increased slightly above the yearly average. However, the annual average multiple remained stable at 2016 levels.
- Average price paid by PE in the DACH region fell below 10x for the first time since Q2 2016. However, high prices
 during the first three quarters of 2017 caused the annual average multiple to increase significantly to 10.5x.
- Price deflation in the Southern region ended in Q4 2017 following four consecutive quarters of decreasing prices.

Quarterly average multiples - by region



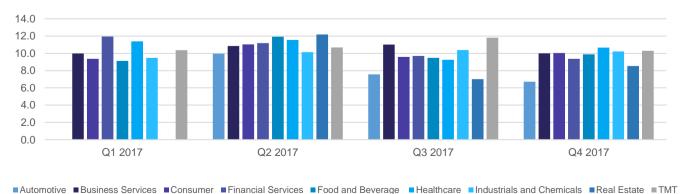
Quarterly analysis - sectors

2017 annual review

	Q1 2017	Q2 2017	Q3 2017	Q4 2017	2017 average	2016 average	St. Dev
Automotive	-	10.0	7.6	6.7	9.0	9.2	2.5
Business Services	10.0	10.8	11.0	10.0	10.5	10.4	2.8
Consumer	9.4	11.0	9.6	10.0	10.1	10.5	2.4
Financial Services	11.9	11.2	9.7	9.4	10.7	10.1	2.1
Food and Beverage	9.1	11.9	9.5	9.9	10.1	9.9	1.6
Healthcare	11.4	11.5	9.2	10.7	10.7	10.5	2.4
Industrials and Chemicals	9.5	10.1	10.4	10.2	10.2	9.4	2.9
Real Estate	-	12.2	7.0	8.5	9.5	10.4	2.9
ТМТ	10.4	10.7	11.8	10.3	10.9	11.1	2.9
Europe	10.1	10.8	10.4	10.1	10.4	10.2	2.7

- These charts analyse the quarterly multiples by sector for the year ending 31st December 2017.
- TMT sector continues to be the hottest in Europe, despite seeing a drop in multiples to only 10.3x in Q4 2017 following steadily increasing prices through the first three quarters of the year.
- Other than Industrials and Chemicals, all sectors have seen a fall in multiples between Q2 and Q4 2017.
- The Industrials and Chemicals sector has seen stable pricing through the year at around its 2017 average of 10.2x, but has also seen higher price volatility than historically.
- Automotive and Financial Services quarterly average multiples deflated over the year and reached 6.7x and 9.4x respectively in Q4 2017. However, high multiples in the first half of the year drove an annual average for Financial Services businesses of 10.7x, a 0.6 increase when compared to 2016.
- Final quarter Business Services prices returned to levels seen in the first quarter of the year, below the annual average, after seeing high valuations in the middle of 2017.
- The Consumer sector saw average prices drop year on year from 10.5x in 2016 to 10.1x in 2017. Multiples paid by PE funds in Benelux, France and the Southern regions had the highest impact on this trend.
- During the year prices were most volatile in the Industrials and Chemicals, Real Estate and TMT sectors.

Quarterly average multiples - by sector



Quarterly analysis - deal sizes

2017 annual review

	Q1 2017	Q2 2017	Q3 2017	Q4 2017	2017 average	2016 average	St. Dev
1. < €50m	10.2	10.4	10.0	10.5	10.3	9.9	2.7
2. >= €50m & < €100m	9.8	10.3	10.1	9.3	9.8	9.8	2.7
3. >= €100m & < €250m	9.5	10.2	10.2	9.9	10.0	10.5	2.1
4. >= €250m & < €500m	9.3	11.5	12.0	10.2	11.0	10.7	3.2
5. >= €500m & < €1bn	13.0	12.4	10.2	11.1	11.6	10.3	2.5
6. >= €1bn	10.6	13.3	14.7	11.5	12.4	11.3	2.5
Europe	10.1	10.8	10.4	10.1	10.4	10.2	2.7

- These charts analyse the quarterly multiples by deal size for the year ending 31st December 2017.
- In general, as in 2016 and as expected, larger transactions have seen higher average multiples in 2017 than smaller transactions.
- The most significant annual multiple increase was recorded for deals with EVs between €500m and €1bn. This range saw an annual multiples increase of 1.3 to 11.6x and was mostly driven by high multiples in the first half of the year in Financial and Business Services sectors.
- Deals between €100m and €250m have decreased in value in 2017 compared to 2016. French deals in the Industrial and Chemicals sector had the highest impact on the decrease in prices in this deal range.
- "Mega deals" (€1bn+) multiples have decreased in Q4 2017 following exceptionally high levels in Q2 and Q3, when prices were at the highest level recorded since Q1 2014. Annual average price for €1bn+ deals exceeded the multiples paid in the previous year.
- Deals sub €100m have seen stable multiples through the year, fluctuating around their annual average level.
- Highest price volatility has been seen in the €250m and €500m deal range.

Quarterly average multiples - by size range

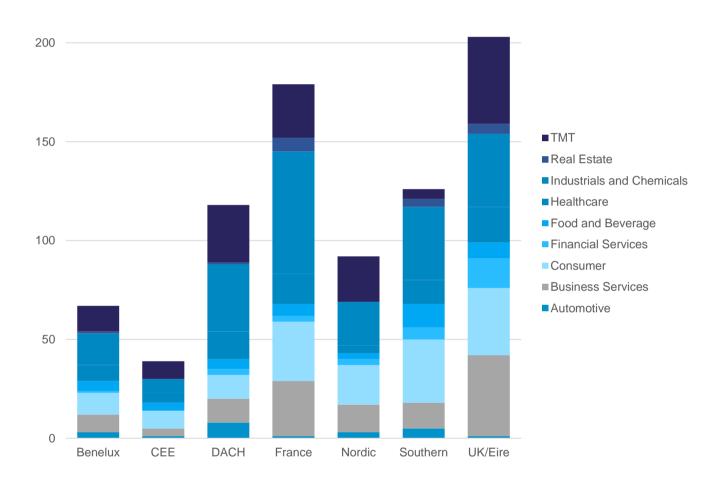


■1. < €50m ■2. >= €50m & < €100m ■3. >= €100m & < €250m ■4. >= €250m & < €500m ■5. >= €500m & < €1bn ■6. >= €1bn

Annual volumes – by region and sector

2017 annual review

2017 volume by sector by region

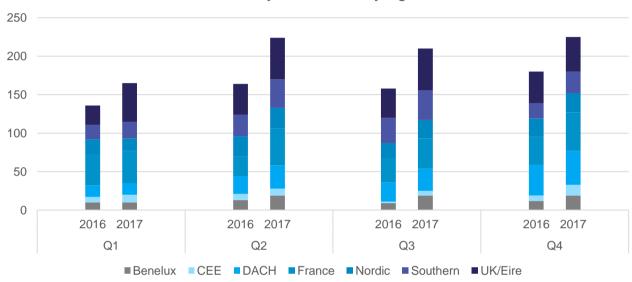


- The chart above tracks volume of deals in each sector by region in the year ending 31st December 2017.
- The highest number of deals within most regions were completed in the Industrial and Chemicals sector. The
 outliers were UK/Eire, Nordic and CEE regions, where TMT accounted for the largest proportion of total deal
 volume.
- The percentage of Consumer PE deals decreased from 22.4% in 2016 to 18.0% in 2017. This was mainly due to a shift in PE fund interest towards the TMT sector.
- In the UK/Eire region, Business Services was the second most invested in sector by financial sponsors and represented 20% of volume in the region. Industrials and Chemicals was the third most active sector. Lowest volume continued to be seen in the Automotive sector.
- Real Estate and Automotive deals accounted for less than 5% of total European deals.

Quarterly volumes – by region

2017 annual review



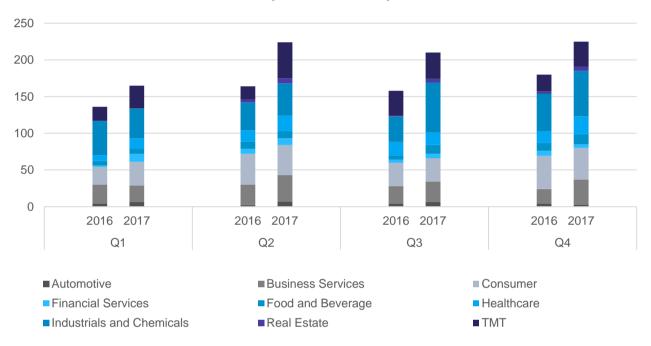


- The chart above compares quarterly volumes by region for the years 2016 and 2017.
- All regions across Europe have seen an increase in number of PE deals when compared to 2016.
- CEE remains the region with the lowest number of transactions. However, the region has seen the largest percentage annual increase with 63% more PE deals completed in 2017. The lowest growth in number of deals was in the Nordic region, with a 3% increase in annual volume.
- The highest number of deals in 2017 were closed in the UK/Eire region, with 23 more deals than the second most active region, France. UK/Eire saw a 41% increase in annual deal volume in 2017 while financial sponsors backed 34% more businesses in France this year.
- Volume of deals in Benelux increased by 52% and was the second highest growing region in Europe in 2017.
- Deals volume in the DACH region saw a decline as a proportion of total European PE deals in 2017. The region accounted for 14.3% of total deals in 2017 compared to 16.1% in 2016. Volumes increased by only 15 in the region year-on-year.
- The Southern region saw a 26% increase in volume in 2017. The region accounted for 15% of total deal volume in Europe.

Quarterly volumes – by sector

2017 annual review

Quarterly deals volumes by sector



- The chart above compares quarterly volumes by sector for the years 2016 and 2017.
- Industrials and Chemicals deals accounted for more than 26% of total European PE deals in 2017. The level of deals in the sector grew by 26% in the year.
- The TMT sector surpassed Consumer in deal completions and was the second most active sector in Europe, representing 18% of total deals.
- Volumes increased across all sectors in 2017. The highest increase was in Real Estate, where there were 125% more investments by Private Equity. This trend was particularly noticeable in France and the UK/Eire region.
- Consumer sector saw the lowest growth in deals volume at 3%. Growth in the sector was low across all regions
 and negative in Germany where Consumer deal volumes saw a drop of 25%.
- The TMT, Automotive and Financial Services sectors have also seen significant increases in PE deal volumes, with 60%, 57% and 55% growth rates respectively.
- Activity in the Business Services sector grew by 23%. This growth was largely driven by France, where 100% more deals were completed in the sector in 2017.

Quarterly volumes - by deal size

2017 annual review





- The chart above compares quarterly volumes by deal size for the years 2016 and 2017.
- The growth in PE deal volume in 2017 was driven by small deals with values of under €100m.
- The sub €50m deal range accounted for half of the total deal volume in 2017 and saw an annual increase of 45%, the highest increase among deal size ranges. This was driven by the number of Industrial and Chemicals deals in this smaller deal range which grew by 50%.
- Deals with values between €50m and €100m have seen an annual increase of 36% in 2017.
- Volume of deals valued between €250m and €500m has seen an annual drop of 6% in the year. The number of deals in this value range dropped by 50% in the DACH region and by 57% in the Nordic region during 2017.
- Deals with values in excess of €1bn have dropped slightly in volume, with 4% less deals closed in this range.

Multiples Heatmap

Key Data Sources



The Unquote research team collects proprietary data through direct contact with private equity houses and advisers that manage M&A processes. In some cases, this information is received in confidence and therefore can not be released in disaggregate form. The team also has access to Acuris Group intelligence products such as MergerMarket, Debtwire and InfraNews.



Public sources of information used in this report include Companies House; Companies Registration Office; financial and accounts data extracted and held by Creditsafe, Largest Companies, and Infocif; specialist and generalist press sources such as (but not limited to) The FT, Reuters, Expansión, Het Financiele Dagblad, Dagens Industri, Les Echos, Børsen, Capital Finance, City AM and AGEFI.



For recipients based in the United Kingdom, the document has been issued and approved for the purpose of COBS 4 of the FCA Handbook by Clearwater Corporate Finance LLP (otherwise trading as "Clearwater International"). Clearwater International is authorised and regulated by the Financial Conduct Authority (FRN 483062). Any person falling outside of a professional client under FCA rules should not treat this presentation as a promotion or act on it for any purpose whatsoever.

WWW.CLEARWATERINTERNATIONAL.COM

CHINA • DENMARK • FRANCE • GERMANY • IRELAND • PORTUGAL • SPAIN • UNITED KINGDOM • US

