EMEA Private Equity Market Snapshot

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S&P Global
Market Intelligence
Editor's Note
Welcome to the 18th issue of the EMEA Private Equity Market Snapshot, a quarterly publication focusing on the private equity (PE) market in Europe, the Middle East and Africa (EMEA) from S&P Global Market Intelligence.
This issue leads with a review of the EMEA region in the first half of the second quarter, revealing a 148% increase in aggregate capital deployed in the region compared to the same period last year. This was due to a dramatic increase in average deal size of 168% over 2018.
Next we travel to the Iberian Peninsula. Despite a tough decade post-crisis in which deal activity slowed to a trickle, the deal-making landscape is showing marked signs of improvement. Global PE firms have resumed activity at levels resembling pre-crisis years.
Then we take a look at the health of the Fintech sector in EMEA and North America, revealing a shift in deal activity in recent years toward EMEA targets and away from North American alternatives. This year is off to a strong start for the sector, with 378 deals already recorded globally. The future appears bright for Fintech PE/VC-backed investment activity in 2018 and beyond.
Finally, we welcome contribution from S&P Global Ratings which deep dives into high tech sector. High tech has not only been an attractive sector from an equity perspective, but issuance has been well-received in the bond market. This sector issues convertible debt at a high rate and has seen strong investor demand in recent years.
At the heart of our analysis are the Market Intelligence Platform and the S&P Capital IQ Platform, an offering of S&P Global Market Intelligence. These platforms incorporate databases capturing more than 3.1 million historical transactions, including deal values and transaction multiples, target company fundamental data, sector-level financials and comprehensive private equity manager and fund information.
We look forward to receiving feedback and suggestions on regions or sectors of interest for future analysis. To subscribe or comment on the EMEA Private Equity Market Snapshot, email market.intelligence@spglobal.com.

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EMEA Attracting Mega Deals

Aggregate capital deployed into Europe, the Middle East, and Africa (EMEA) totalled €40bn during our study period of April 1, 2018 through May 31, 2018, marking a 148% increase compared with the same period last year. Total deal activity remained steady with 672 new investments, contributing to an average deal entry size of €120m – an increase of 168%.

Delving deeper behind the statistics reveals nine entry investments in the €1bn+ plus bracket, with particular prevalence in the Benelux and Southern Europe regions, where seven of the ten largest entry investments occurred and significantly contributed to the surge in aggregate capital deployed.¹

Southern Europe outpaced all other regions attracting €11.5bn in new investments, a 2242% jump from the comparable period last year. This represented 29% of the total investment in EMEA, a significant swing in the region’s share compared with the 3% it captured during the same period in 2017.

On a deal activity basis, the UK retained its top spot with 177 new entry investments,² up 5% from the same period in 2017, dispelling fears that the Brexit vote could stifle GP interest in the UK.³ Within the country, Information Technology (IT) led with 81 new entry investments from global GPs, accounting for 29% of total EMEA IT investment. This is a continuation of the IT investment momentum explored in Issue 16 of PEMS.

On the opposite end of the spectrum, France saw the largest contraction in capital deployed at just €1.5bn, down 56% from the comparable period last year. Conversely, deal activity in the region increased by 3%, with 126 new French investments, leading to a reduction of the average entry investment size to €16.4m, the lowest regional average observed during the study period.

On the exits front, aggregate capital realized from exit activity increased 17% from the 2017 period to €99.03bn. This increase can be largely attributed to several mega deals in the Spanish and Italian Industrials sectors. Total deal value from target sales there amounted to €45.2bn, a 45% share of the total capital realized in EMEA.⁴ Interestingly, the total number of exits declined by 52% to 433 with all regions registering double digit decreases. Germany had the largest contraction in exit activity, with 40 exits in the study period, a 195% drop.

Still, there appears to be plenty of room for optimism for would-be sellers. Average Implied Equity Value/Net Income exit multiples increased in seven out of ten industries, with historical highs of 20.3x, 19.4x, and 32.5x observed in the Utilities, Industrials, and Healthcare sectors respectively.

²177 new deals brought an additional €3.1bn into the UK from global PE firms, S&P Global Market Intelligence
EMEA-based GPs Turn to Africa in Search of Superior Returns

Our study period revealed another busy cycle for EMEA-based GPs, as total capital deployed globally rose by 70.3% from €18.4bn to €31.3bn across 176 new deals. Divestiture activity also increased in comparison with 2017 to €38.2bn from €25bn.

Target locations for capital deployment appear to be undergoing an intriguing shift as EMEA GPs are showing increasing interest in African targets. With 33 entry investments into the region, up 57% from the comparable period last year, GPs may be seeking to take advantage of favorable demographics and a rapidly emerging middle-class.5

This intensified interest in the African continent could be further explained by improving macroeconomic indicators such as GDP growth; expectations are in excess of 5% for seven Sub Saharan Africa (SSA) nations in 20186 following the strengthening of oil and commodity prices.

SSA’s macroeconomic outlook enjoyed a further boost in March, as South Africa’s GDP forecast was revised upwards to 2% for 2018 and 2.1% for 2019.7 Reasons for this adjustment included improving investor sentiment of lower bond yields, a stronger rand, and lower inflation.8

Positive investor sentiment has also been observable through related fundraising activity. Carlyle, for example, closed two African-focused funds at $700m and $500m respectively.9 Similarly, Allianze has established itself as the first large commercial lender to commit long-term funding to an African infrastructure fund with a $120m twelve-year loan to a vehicle underwritten by western development agencies.10

From an industry standpoint, Africa’s IT sector led all others with 16 new entry investments by EMEA GPs. These account for almost half of all inbound investments into the continent with the majority occurring in Egypt, Nigeria, and South Africa, while Kenya, Ghana, and Senegal also benefitted from these new capital inflows. A key theme emerging from these IT investments is that that the majority falls within the Application Software and Software Services sub-sectors. Additionally, acquired targets operate mostly within growth technologies ranging from microfinance applications and mobile payment platforms to technologies underpinning the evolving digitalization of the African FMCG sector.

This observed skew towards Africa’s IT sector aligns to the global trend, as the sector continues to be the most favored for EMEA GPs

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7South Africa’s GDP was 1% for 2018 and 1.7% for 2019 before revisions in March 2018, S&P Global Market Intelligence


EMEA Private Equity Market Snapshot (as reported in Issue 17 of this publication). EMEA-based PE firms made 322 new investments in IT, which was distantly followed by Consumer Discretionary with 95.

On the venture capital (VC) front, EMEA-based firms invested €3.08bn, a 38% increase from the comparable period last year. Geographically, North America led the pack with most capital deployed at €1.2bn across 76 deals.

**Iberia – Run of Form**

The Iberian private equity11 (PE) deal making landscape is off to a good start in 2018 (Fig.1). From January 1, 2018 through May 31, 2018 stands at €9.7bn new capital invested already, a 12% increase over the entire year of 2017. Average entry multiples also remain healthy in 2018 at 8.7x EBITDA, in line with valuations over the past few years.

With the Organisation for Economic Co-operation and Development (OECD) projecting favourable economic growth for both Spain12 and Portugal13 in 2018 and 2019, the expectation is that the region will continue to attract healthier levels of investment. PE-backed deals announced since January 2018 and yet to be closed could add another €1.2bn of capital to 2018’s total deal value. This would bring the 2018 aggregated deal value closer to the 10-year record high amount of the pre-bailout year of 2011.

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11Iberia is defined as Spain and Portugal.

**Iberia: The Dark Ages**

Iberia has not always attracted such robust PE activity. Looking at the level of capital inflows into the region prior to Spain’s 2012 bailout, 2011 was the best year in terms of capital committed to Iberian targets at €12.8bn. This represented an impressive 82% increase compared to 2010 across 271 new deals. However, tough economic conditions as a result of the banking crisis contributed to a loss of interest from the global GP community in the years that followed. 2012 registered a 55% drop in capital allocations to the region compared to the previous year, standing at only €5.8bn. Consistent with a decline in total capital committed to Iberian targets, average entry multiples also shrank. The average entry Enterprise Value/EBITDA deal multiple stood at 10.7x in 2011, the period when
capital allocation was at its highest. Yet in 2012 it was only 6.4x EBITDA, highlighting how economic conditions at the time made it difficult for local targets to attract high valuations. By contrast, the average entry EBITDA multiple across EMEA targets stood at 10.7x in 2012.

However, as Iberia began its post-crisis recovery, the deal making landscape showed signs of improvement, with Global PE firms resuming activity at levels resembling those of the pre-crisis years. 2016 was the first year in which capital inflows reached similar levels to 2011; global GPs invested €11.4bn of new money into the region across 306 deals that year.

**Iberian Mid-Market Dominating Position**

It is worth noting that the Iberian PE market is dominated by middle and upper mid-market investments.14 During our overall study period (January 1, 2008 – May 31, 2018), total capital allocation into this category outside of the mega deals accounted for 54% of the aggregate amount invested, or €51.2bn out of €94.4bn.

During the 2018 study period (January 1, 2018 – May 31 2018), middle and upper mid-market targets took in €2.9bn of new capital, representing 29% of the total amount invested in the 2018 period.

To assess who is buying these targets, we classified Iberian deals into four categories, as outlined in Table 1. Using this classification system, a very clear pattern of buyers begins to emerge.

| Category One | Lower mid-market: entry deal with values between €0mn to €50mn |
| Category Two | Middle mid-market: entry deal with values between €50mn - €500mn |
| Category Three | Upper mid-market: entry deal with values between €500mn - €1bn |
| Category Four | Mega deals: entry deal with values greater than €1bn |

**Category One** targets received investments predominantly from single buyer local GPs. Over the 10 year study period (January 1, 2008 – May 31, 2018), capital deployed by domestic PE firms totalled €1.9bn, 57% more than the amount invested by foreign GPs. Additionally, when looking at club deals within the lower mid-market category, where present, the clubs were largely a concentration of Iberian GPs. In 2018 thus far there have been 44 lower mid-market club deals, 34 of which have been made by 76 Iberian buyers.

However, as deal size increases, the presence of domestic buyers fades and that of foreign GPs grows, either in the form of club or single deal. During the 2018 study period, single foreign buyers invested €540m in Iberian targets, while single domestic GPs contributed just €60m. Once deals move into the upper mid-market, Iberian PE firms completely disappear from the picture.

Within **Category Three**, upper mid-market investments into Iberia are dominated by single international GPs and international clubs. Over the 10 year study period, foreign PE firms invested €18bn of capital into the region with no involvement from Iberian GPs. The only exception was the presence of a single domestic buyer in a club deal with a U.S. GP in the acquisition of Mivisa Envases S.A.U., a Spanish

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14 The deal buckets breakdown is as follows: €0m-€50m is Lower Mid-Market; €50m-€500m is Middle Mid-Market; €500m-€1,000m is Upper Mid-Market; above €1,000m is Mega Deals
Materials company.\textsuperscript{15} In 2018 to date, foreign investors have already allocated €1.7bn into upper mid-market deals. Finally, within \textit{Category Four}, the mega deals category, the majority of capital allocation comes from international clubs. Since 2016 they have been the only buyers allocating capital towards the region. Over the 10 year study period, clubs invested €24.2bn across 10 mega deals, showcasing their ability to spend more capital. In 2018, club buyers have already allocated €6.6bn across only two deals within more traditional PE sectors: Utilities\textsuperscript{16} and Industrials.\textsuperscript{17}

From a sectorial perspective, IT led the Category One lower mid-market targets, attracting €1.7bn of capital over the past 10 years. However, in all other categories, sector interest shifted towards more traditional industries. Within middle mid-market, Industrials was the winner within the study period, netting €6.5bn of capital. At the same time, upper mid-market and mega deals saw Utilities and Financials sectors take the lion’s share of investment, with €12.7bn and €11.3bn, respectively.

Looking at the industry spread within PE-backed announced deals this year, Industrials are currently in the lead, with €1bn of additional capital currently committed to the sector.


**EMEA: a Hot Destination for Fintech**

During the study period of January 1, 2014 – May 31, 2018, combined sponsor and non-sponsor backed investment activity (Private Equity/Venture Capital and Merger & Acquisitions) into the Fintech industry\(^\text{18}\) totalled €173.6bn from 3,987 deals. The strongest year for this sector was 2015, during which aggregated deal value totalled €51bn from 997 deals.

EMEA Fintech has seen year-over-year growth during the study period, peaking in 2017 with €12.5bn in aggregated deal value. During 2016 and 2017, shifts in deal activity indicated a preference towards targets in EMEA as opposed to North America. Similarly, EMEA-based Fintech firms recorded a 25.5% increase in Private Placement activity, contrasting with a 22% drop in North American Private Placement activity in 2017 (€13.8bn) from its peak two years prior. The observed decline in North American deal count and aggregate deal value had a significant impact on global aggregate Fintech deal value in 2016 and 2017, with a notable decline from the lofty heights of 2015 to €39.3bn and €33.3bn respectively.

2018 is off to a good start as the Fintech sector has registered €26.1bn in aggregate deal value globally from 378 deals, with strong M&A activity observed in both North America and EMEA. Mega deals, such as DST Systems, Inc’s acquisition by SS&C Technologies Holding Inc\(^\text{19}\) and Worldpay’s takeover by Vantiv,\(^\text{20}\) propelled total capital spent on M&A alone to €20.6bn. The momentum appears set to continue with other big deals in the works, including PayPal’s buyout of Sweden’s iZettle for €1.8bn. If the trend continues, 2018 is on track to surpass 2015’s record aggregate deal value, as it’s already at 50% more capital compared to full 2015.

\(^{18}\)For the purpose of this article financial technology and payments sub-sectors tracked on S&P Global Market Intelligence includes the following: Banking Technology, Digital Lending, Financial Media and Data Solutions, Insurance Technology, Investment and Capital Markets Technology, Mobile Wallets, Money Transfer and Remittance, Payment Processors, Payment Service Providers and Gateways, Payments Fraud Management, Payments Infrastructure.


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**Fig. 3: Global Investment Activity in Fintech Sector by Region**

For illustrative purposes only. S&P Global Market Intelligence as of 31/05/2018
Top Scorer: Corporate Buyers' Co-investments

Fintech Private Placement transaction activity (with known buyers) also saw a sharp uptick in participation among Corporate Venture Capital (CVC) investors. In 2014, one-third of all Fintech Private Placement activity involved CVC participation, which grew 50% in 2017.

Over the past five years, CVC co-investment activity alongside traditional PE/VC buyers increased considerably, with deal counts surging by 85% from 2014 to 2017. In 2015 and 2016, such tandem Private Placement deals contributed €6.1bn and €6.9bn respectively to the Fintech sector, representing a five-fold increase compared to the 2014 total. Following a softer 2017, the Corporation tandem trend has resumed in 2018, with €3.6bn of capital deployed across 79 Private Placements, representing 70% of aggregate Private Placement deal value (€5.1bn) in the sector year-to-date.

For illustrative purposes only. S&P Global Market Intelligence as of 31/05/2018

“PE/VC buyers only” refers to all Private Placement transaction whereby PE/VC firm participated as buyers alone, club deals with other PE/VC buyers or Asset Managers

“CVC only” refers to all Private Placement transactions whereby Corporate/CVC participated alone or club deals with other Corporates/CVCs

“CVC alongside PE/VC buyers” refers to all Private Placement deals whereby at least one Corporate/CVC buyer participated alongside one or more PE/VC buyers
**Digital Lending and InsureTech Dominating the Field**

When comparing PE-/VC-backed investments across the various subsectors of the broader global Fintech industry, Digital Lending and InsureTech represented 36% of global aggregate deal volume over the four-year period.

North American InsureTech companies were the most targeted, accounting for 34% of invested capital between 2014 and 2017, followed by Digital Lending, which received 20% of the total allocation.

In EMEA, Payment Processing was the leading subsector during this same period capturing 27% of total capital invested, with InsureTech emerging as the winner in terms of deal count.

Digital Lending and Money Transfer and Remittance were the top two subsectors for capital allocation in APAC, each representing around 30% of total capital invested. These were followed by Payment Processors and InsureTech, which combined represented 16% of total deal volume.

**US, UK and China: Winners of the Sponsors Group**

Data from S&P Global Market Intelligence indicates that interest from PE/VC GPs in the Fintech sector has softened, albeit to a lesser extent compared to overall global investment activity (see Fig. 3). Aggregate deal value increased from €11.3bn in 2014 to €17bn in 2015; 2017 was the first year experiencing a drop to €13.4bn. Meanwhile, deal count echoed the overall global trend and remained flat with 430 in 2017.

From a geographical perspective, North America was the most targeted region on both a deal value and deal count basis. Between 2014 and 2017, the region attracted €25.5bn of new money from 786 deals, accounting for 41% of total capital deployed and 48% of all PE/VC-backed deals globally. During the same period, the EMEA region netted €18.2bn (473 deals), with Asia Pacific receiving €14.1bn (342 deals).

With the exception of 2016, EMEA has enjoyed a steady increase in deal volume against a backdrop of falling investment activity in both North America and APAC. Following an exceptionally subdued 2016, EMEA Fintechs received in excess of €7.1bn in capital, surpassing the 2015 total of €5bn. The notable uptick in new capital deployed into EMEA was largely driven by the €3.5bn public to private transaction of the UK-based Paysafe Group by CVC Capital Partners and The
Within EMEA, the UK remains the standout Fintech market overall, with UK Fintechs attracting €4.3bn of total PE and VC investments in 2017 alone, up from €0.2bn in the prior year. This represents just over half of all PE/VC-backed EMEA Fintech investment activity (€7.4bn) and 32% of global activity, underscoring the UK’s position as a prominent PE/VC market resilient to Brexit uncertainties.

From an APAC capital inflow perspective, China has been the most attractive destination for PE buyers, netting €10bn of new money, with India coming in a distant second with €2bn of capital deployed. Yet, in terms of total deal count, India led the pack with twice as many closed investments in 2017 (30 vs. 15). In 2017, China saw significantly reduced activity with €1.2bn in invested capital, down from €4.5bn in the prior year. This reverses a two-year trend of strong deal making, with a possible explanation for the dip being increased government controls and new Fintech industry regulation. Conversely, the other regional jurisdictions of Singapore and Hong Kong reported a noticeable increase in capital inflow with almost three times more capital invested in 2017 versus 2016 – albeit not sufficient enough to positively impact APAC’s 2017 total capital deployed.

Looking ahead, the future is bright for Fintech PE-/VC-backed investment activity in 2018. As of May 31, the total amount invested into Fintech targets stood at €5.4bn across 198 deals. This represents a significant increase from the comparable period last year with €3.5bn (177 deals).

EMEA also had a good start to the year with twice the additional capital invested versus the comparable period last year. North America has already attracted €2.5bn of investments in 2018, and considering the recently announced PE-/VC-backed deals that are yet to be closed, a further €3bn is to be injected. This will push aggregate capital deployed into the region ahead of the total figure for

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22China to tighten regulation of fintech consumer loans. (2017, October 29). Retrieved from https://www.ft.com/content/20c88594-bc7a-11e7-b8a3-38a6e088f8d4


China appears equally buoyant with aggregated invested capital for 2018 (through the end of May) already surpassing the 2017 total. With investments into Indian Fintechs at parity, indications are positive for a bumper year for APAC targets overall.

**High Tech Snapshot: Equity Darling with Moderate Risk Bond Portfolio**

If any sector has captured the attention of investors recently, it's been high tech. This industry has outperformed in equity markets, and has some of the largest holders of offshore cash. In terms of credit quality, though, this is a sector with private ownership stakes which appear to run the gamut of being higher, lower, or in line with broad industry averages – depending on both the geography and creditworthiness of issuers.

While other sectors currently overshadow high tech in terms of near-term risks (oil and gas, retailers), this sector is heavily dominated by speculative-grade firms and has recently undergone a swath of inter-spec-grade downgrades, pushing the sector’s overall credit quality lower. Nonetheless, this sector generally enjoys lower borrowing costs than other nonfinancial industries, and a historically lower default rate in recent years.

**Overview**

- High tech has not only been an attractive sector from an equity perspective, but issuance has been well-received in the bond market. This sector issues convertible debt at a high rate and has seen strong investor demand in recent years.
- Rates of private ownership in high tech are generally in line with other nonfinancial sectors, with the notable exception of its higher-rated members. These firms remain much more attractive to private investors in both the U.S. and Europe.
- The sector has seen a sharp deterioration in credit quality in recent years with many weaker-positioned borrowers having been downgraded after initiating shareholder-friendly actions. Almost half of high tech in the U.S. and Europe is rated ‘B’, or ‘B-’ by S&P Global Ratings.
- High tech has shown lower relative default risk in the past 10 years. We expect defaults to remain subdued for the next 12 months, but with the potential for increasing headwinds in coming years.

From an equity perspective, the high tech sector has returned handsome gains in recent years; outpacing broad averages since the global financial crisis (see Fig. 7). With the S&P 500 Index and the tech-heavy Nasdaq Index losing roughly 40% each in 2008, both have seen strong gains since, with the Nasdaq outpacing the S&P 500 in every year but 2011 and 2016.

The high tech sector is one of the largest issuers of convertible debt; offering fixed income investors the opportunity to enjoy upside, as well as to help keep these issuers' borrowing costs lower.
Private Ownership Keen on High Tech’s Strongest Borrowers

Private ownership stakes in high tech companies with debt rated by S&P Global Ratings exhibits some distinct trends across the U.S. and Europe. In terms of the percentage of rated firms with private ownership stakes, those among investment-grade are clearly much more appealing to private equity firms than their other nonfinancial counterparts (see Fig. 8 and 10).

In the U.S., roughly 80% of high tech firms with an investment-grade rating have some level of private ownership, compared to 46% of firms in other nonfinancial sectors.

In Europe, a similar divergence between high tech and other sectors with investment-grade ratings exists, but to a lesser extent overall, relative to the U.S. (45% vs 33%). In both regions, the percentage of private ownership in high tech firms rated speculative-grade, while those who have defaulted are roughly in line with the proportions for other nonfinancial companies. It should be noted that in Europe, none of the existing group of defaulters have any private owners.

That said, speculative-grade firms (and those in default) generally have much higher average percentages of private owners (see Fig. 9 and 11). It is also clear that average private ownership stakes in high tech firms across all credit quality are generally in line with those in...
other nonfinancial industries, with the notable exception of European speculative-grade firms.
Though private ownership stakes in many of our rated firms are generally low, some issuers have much higher percentages (see table 2). Globally there are only 15 publicly rated firms with private ownership rates above 1%, and 10 of those firms either possess a speculative-grade rating, or are currently in default.

Table 2: Global High Tech Companies with Highest Share of Private Ownership*

<table>
<thead>
<tr>
<th>Company</th>
<th>Subsector</th>
<th>Country</th>
<th>Current Rating</th>
<th>Last Rating Date</th>
<th>% Private Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceridian HCM Holding Inc.</td>
<td>Software &amp; Services</td>
<td>U.S.</td>
<td>B-</td>
<td>31/03/15</td>
<td>79.2</td>
</tr>
<tr>
<td>First Data Corp.</td>
<td>Software &amp; Services</td>
<td>U.S.</td>
<td>B+</td>
<td>28/10/15</td>
<td>49.6</td>
</tr>
<tr>
<td>Casa Systems Inc.</td>
<td>High Tech Equipment</td>
<td>U.S.</td>
<td>BB-</td>
<td>30/11/16</td>
<td>41.4</td>
</tr>
<tr>
<td>Anacom Inc.</td>
<td>Computer Peripherals</td>
<td>U.S.</td>
<td>D</td>
<td>01/10/00</td>
<td>33.9</td>
</tr>
<tr>
<td>Genpact Ltd.</td>
<td>Software &amp; Services</td>
<td>Bermuda</td>
<td>BBB-</td>
<td>19/12/13</td>
<td>27</td>
</tr>
<tr>
<td>Semiconductor Manufacturing International Corp.</td>
<td>Semiconductors</td>
<td>Cayman Islands</td>
<td>BBB-</td>
<td>22/10/13</td>
<td>15</td>
</tr>
<tr>
<td>Eastman Kodak Co.</td>
<td>High Tech Equipment</td>
<td>U.S.</td>
<td>CCC+</td>
<td>14/11/17</td>
<td>7.5</td>
</tr>
<tr>
<td>Ericsson (Telefonaktiebolaget L.M.)</td>
<td>High Tech Equipment</td>
<td>Sweden</td>
<td>BB+</td>
<td>24/07/17</td>
<td>6.7</td>
</tr>
<tr>
<td>Anixter International Inc.</td>
<td>Diversified Technology</td>
<td>U.S.</td>
<td>BB</td>
<td>22/06/10</td>
<td>6.6</td>
</tr>
<tr>
<td>Technicolor S.A.</td>
<td>Diversified Technology</td>
<td>France</td>
<td>B+</td>
<td>14/03/18</td>
<td>5.3</td>
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<tr>
<td>NVIDIA Corp.</td>
<td>Semiconductors</td>
<td>U.S.</td>
<td>BBB+</td>
<td>20/09/17</td>
<td>4.5</td>
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<td>Global Payments Inc.</td>
<td>Software &amp; Services</td>
<td>U.S.</td>
<td>BB+</td>
<td>10/03/16</td>
<td>3.3</td>
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<td>Celestica Inc.</td>
<td>High Tech Equipment</td>
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<td>BB</td>
<td>25/02/10</td>
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<td>Taiwan Semiconductor Manufacturing Co. Ltd.</td>
<td>Semiconductors</td>
<td>Taiwan</td>
<td>A+</td>
<td>20/04/10</td>
<td>6.38</td>
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<td>Broadcom Ltd.</td>
<td>Semiconductors</td>
<td>Singapore</td>
<td>BBB-</td>
<td>22/12/16</td>
<td>1.16</td>
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</tbody>
</table>

*Defined as 1% or greater. Publicly rated issuers only. Sources: Global Fixed Income Research, an offering of S&P Global Ratings; S&P Capital IQ Platform.
Issuance Trends Reflect High Demand and Convertible Presence

In the U.S., the high tech has seen a boom in bond issuance since 2013, with a combined total of $698 billion through May 31 (see Fig. 12). In contrast, European high tech issuance has generally hovered just below the $20bn mark annually since 2012; however 2017 saw $26.4bn come to market – a record year for the sector in Europe. Broad issuance trends among high tech, particularly in the U.S., stand in stark contrast to looking at the rated population by issuer count. Since 2013, $511bn of the $698bn total is attributable to investment-grade issuers – in particular: Apple Inc., Microsoft Corp, Oracle Corp, IBM Corp, and Cisco Systems Inc. – which combined for $309bn. However, when considering our rated population of high tech issuers, the speculative-grade total in the U.S. of 154 issuers is roughly triple the 52 investment-grade issuers.

Riding on the popularity of the sector’s equity performance in recent years, high tech firms in both regions have been heavy issuers of convertible bonds (see Fig. 13).

Investors have been attracted to the prospect of convertibility within this growth sector, and issuers have also benefitted from lower borrowing costs associated with convertible debt.

The demand for high tech convertible debt has remained so strong that, thus far in 2018 through May 31, issuers in the U.S. have come to market with average yield of only 0.68%.
U.S. high tech bonds have been particularly popular during this post-2012 period, with over two-thirds of the total being oversubscribed in the last five years (see Fig.14). In general, most bonds have been riding the bull market over this time period, but high tech is clearly showing higher demand. Notably though, this advantage has disappeared in the most recent four quarters – for the first time in over five years.

In Europe, high tech has seen bouts of high demand, but this has been much more sporadic. At times demand for high tech bonds has exceeded that of other nonfinancial, but then retreats below them as well, in nearly equal measure, and in what appears to be a fairly cyclical pattern.

**Sector Profile Is Weak, But Holding (So Far)**

The high tech sector is dominated in the news by its small cadre of very large companies at the high end of the investment-grade spectrum. These issuers have benefitted from both increased demand for the bonds and equity, as well as from an extended period of low borrowing costs.

From a ratings perspective however, the sector is overwhelmingly
speculative-grade, with many lower-rated issuers having recently received downgrades. The largest rating category within this sector, in the U.S. is ‘B’, and many issuers have recently been downgraded to ‘B-’ — some as a result of similar equity-friendly actions taken by their more well-positioned peers.

This recently caused a marked increase in the proportion of the lowest speculative-grade ratings (see Fig. 15). As a percentage of the total speculative-grade population, those issuers rated ‘B-’ and lower are now at an all-time high of 33.6%. This is over 10 percentage points higher than the similar measure for all speculative-grade issuers, and it is up from 17.3% only three years ago in the first quarter of 2015.

Among nonfinancial sectors, only retail/restaurants saw a higher proportion of these lowest-rated firms (39.1%). Historically, the ‘B-’ rating has a one year default rate of 8.4%, and a three year default rate of 22.4% in the U.S.

Despite a recently declining credit profile, the high tech sector in the U.S. has yet to see an uptick in its default rate (see Fig. 16). Historically, the default rate in high tech spiked in the 2000-2002 cycle (the dot com bubble), exceeding that of the overall speculative-grade rate at the time.

That said, the sector has shown itself to be largely low-default risk in the period leading up to the global financial crisis and thereafter, with a trailing 12-month default rate that has remained well below the overall rate in the U.S. ever since. In fact, in the 12-months through April 30, there were no defaults within high tech.
Meanwhile, in Europe, the high tech sector has historically produced relatively few defaults, both before and after the dot-com cycle. Since 1984, there have only been 15 high tech defaults in Europe, with 10 in the last 10 years.

**Default Rates Will Stay Low For Now, But Credit Cycle in Its Later Stages**

Overall, any risk emanating from high tech should be minimal over the near-term horizon, but headwinds are growing over the longer-term. Looking ahead, S&P Global Fixed Income Research expects the U.S. corporate trailing-12-month speculative-grade default rate to decrease to 2.5% by March 2019 from 3.4% in March 2018 (see Fig 17). In general, we expect defaults in the U.S. to be heavily represented by the energy and natural resources, and consumer/service sectors, with little contribution from high tech.

Despite most of our leading indicators of default pressure pointing toward fewer defaults in the near future, risks remain for the longer term. These include tighter monetary policy, a new tax code containing debt-deterring elements that will only become more restrictive in future years, and a boost to GDP from various fiscal stimulus that may prove short-lived.

As these factors progress over the next few years, they could converge to produce significant stress and at a time when the proportion of issuers from the riskiest rating levels has been climbing to a post-recession high.
Meanwhile, in Europe, S&P Global Fixed Income Research expects the 12-month speculative-grade default rate among corporate issuers to rise to about 2.5% through the end of 2018, continuing the gradual upward trend of the past few years. (see Fig. 18). European macroeconomic trends and credit conditions continue to support a low default rate, in our view. Debt issuance from speculative-grade European corporates has also been increasing as lending standards continue to loosen and debt funding costs remain low.

However, some credit factors are more negative. We expect a more moderate trajectory for economic growth in the U.K., as Brexit uncertainties dampen investment. The negative ratings bias among speculative-grade corporates has been declining in recent months. Similar to the U.S., the ratings distribution is becoming more concentrated on lower rating levels, suggesting rising aggregate credit risk; this is partly due to rising corporate leverage. Currently, corporates are looking at a favorable backdrop for the near future, but the longer-term horizon is facing increased default risk in Europe.

Sources: Global Fixed Income Research, an offering of S&P Global Ratings; CreditPro®, an offering of S&P Global Market Intelligence. For illustrative purposes only. S&P Global Ratings as of 31/03/2018
EMEA – Based Targets

Number of Private Equity Entry Transactions by Region
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

Number of Private Equity Exit Transactions by Region
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

Aggregate Private Equity Entry Transaction Values by Region (€bn)
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

Aggregate Private Equity Exit Transaction Values by Region (€bn)
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

For illustrative purposes only. Source: S&P Global Market Intelligence. As of May 31, 2018
EMEA – Based Targets (continued)

Average Entry Transaction Size by Region (€mn)
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

- Africa
- BeNeLux
- France
- Germany
- Middle East
- Nordics
- RoE
- Southern Europe
- United Kingdom

Average Exit Transaction Size by Region (€mn)
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

- Africa
- BeNeLux
- France
- Germany
- Middle East
- Nordics
- RoE
- Southern Europe
- United Kingdom

Number of Private Equity Entry Transactions by Industry
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

- Consumer Discretionary
- Consumer Staples
- Energy
- Financials
- Healthcare
- Industrials
- Information Technology
- Materials
- Real Estate
- Telecommunication Services
- Utilities

Number of Private Equity Exit Transactions by Industry
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

- Consumer Discretionary
- Consumer Staples
- Energy
- Financials
- Healthcare
- Industrials
- Information Technology
- Materials
- Real Estate
- Telecommunication Services
- Utilities

For illustrative purposes only. Source: S&P Global Market Intelligence. As of May 31, 2018
Data Pack

EMEA – Based Targets (continued)

**Aggregate Private Equity Entry Transaction Values by Industry (€bn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

**Aggregate Private Equity Exit Transaction Values by Industry (€bn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

**Average Entry Transaction Size by Industry (€mn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

**Average Exit Transaction Size by Industry (€mn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

For illustrative purposes only. Source: S&P Global Market Intelligence. As of May 31, 2018
EMEA – Based GPs (continued)

**Average Entry Transaction Size by Region (€mn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

**Average Exit Transaction Size by Region (€mn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

**Number of Private Equity Entry Transactions by Industry**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

**Number of Private Equity Exit Transactions by Industry**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

For illustrative purposes only. Source: S&P Global Market Intelligence. As of May 31, 2018
EMEA – Based GPs (continued)

**Aggregate Private Equity Entry Transaction Values by Industry (€bn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

**Aggregate Private Equity Exit Transaction Values by Industry (€bn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

**Average Entry Transaction Size by Industry (€mn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

**Average Exit Transaction Size by Industry (€mn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

For illustrative purposes only. Source: S&P Global Market Intelligence. As of May 31, 2018
VC EMEA – Based GPs

**Number of Venture Capital Entry Transactions by Region**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

- Africa
- Asia
- BeNeLux
- France
- Germany
- Indian Sub-Continent
- Latin America
- Middle East
- Nordics
- North America
- RoE
- Southern Europe
- United Kingdom

**Number of Venture Capital Entry Transactions by Industry**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

- Consumer Discretionary
- Consumer Staples
- Energy
- Financials
- Healthcare
- Industrials
- Information Technology
- Materials
- Real Estate
- Telecommunication Services
- Utilities

**Aggregate Venture Capital Entry Transaction Values by Region (€mn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

**Aggregate Venture Capital Entry Transaction Values by Industry (€mn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

For illustrative purposes only. Source: S&P Global Market Intelligence. As of May 31, 2018
VC EMEA – Based GPs (continued)

Average Entry Transaction Size by Region
(€mn)
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

Average Entry Transaction Size by Industry
(€mn)
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

For illustrative purposes only. Source: S&P Global Market Intelligence. As of May 31, 2018
**VC EMEA - Based Targets**

**Number of Venture Capital Entry Transactions by Region**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018
- Africa
- BeNeLux
- France
- Germany
- Middle East
- Nordics
- RoE
- Southern Europe
- United Kingdom

**Number of Venture Capital Entry Transactions by Industry**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018
- Consumer Discretionary
- Consumer Staples
- Energy
- Financials
- Healthcare
- Industrials
- Information Technology
- Materials
- Real Estate
- Telecommunication Services
- Utilities

**Aggregate Venture Capital Entry Transaction Values by Region (£mn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018
- Africa
- BeNeLux
- France
- Germany
- Middle East
- Nordics
- RoE
- Southern Europe
- United Kingdom

**Aggregate Venture Capital Entry Transaction Values by Industry (£mn)**
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018
- Consumer Discretionary
- Consumer Staples
- Energy
- Financials
- Healthcare
- Industrials
- Information Technology
- Materials
- Real Estate
- Telecommunication Services
- Utilities
VC EMEA – Based Targets (continued)

Average Entry Transaction Size by Region (€mn)
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018

Average Entry Transaction Size by Industry (€mn)
1 Apr - 31 May 2017 vs. 1 Apr - 31 May 2018
Footnotes

Footnote 1:
The exit transaction aggregates have been calculated after removing the following deals to avoid overestimating the trend:
Materials:
China National Chemical Corporation completed the acquisition of 94.8% stake in Syngenta AG (SWX:SYNN) from BlackRock, Inc. (NYSE:BLK) and other shareholders for $40.7 billion on May 24, 2017.
Industrials:

Footnote 2:
The entry and exit transaction averages have been calculated after removing the following deal to avoid overestimating the trend on the back of a single deal:
Telecommunications:

Footnote 3:
The exit transaction aggregates have been calculated after removing the following deal to avoid overestimating the trend:
Southern Europe:

Footnote 4:
The entry transaction averages have been calculated after removing the following deals to avoid overestimating the trend:
Asia 1: Macquarie Infrastructure and Real Assets Pty Limited, The Retail Employees Superannuation Trust, British Columbia Investment Management Corporation and Qatar Investment Authority completed the acquisition of 50.4% stake in Endeavour Energy from NSW Government on May 11, 2017.
Asia 2: On April 28, 2017, Hangzhou Kuaizhi Technology Co., Ltd. closed the transaction, where the company received $5.5 billion in funding from Softbank Group Capital Limited, which invested $2 billion; SoftBank Group Corp. (TSE:9984), which invested $3 billion; and other investors.

Footnote 5:
The exit transaction averages have been calculated after removing the following deal to avoid overestimating the trend:
Southern Europe:

Footnote 6:
The exit transaction aggregates have been calculated after removing the following deal to avoid overestimating the trend:
Industrials:

Footnote 7:
The entry transaction averages have been calculated after removing the following deal to avoid overestimating the trend:
Telecommunications:
## EMEA Private Equity Market Snapshot

### Multiples Table

<table>
<thead>
<tr>
<th>Implied Enterprise Value/EBITDA</th>
<th>EMEA Private Equity Exits, 01/04/2017 - 31/05/2018</th>
<th>M&amp;A, 01/04/2017 - 31/05/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Discretionary</td>
<td>12.0</td>
<td>10.7</td>
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<td>Consumer Staples</td>
<td>8.7</td>
<td>9.9</td>
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<tr>
<td>Energy</td>
<td>11.9</td>
<td>6.6</td>
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<tr>
<td>Financials</td>
<td>11.4</td>
<td>12.3</td>
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<tr>
<td>Healthcare</td>
<td>15.7</td>
<td>13.6</td>
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<tr>
<td>Industrials</td>
<td>11.8</td>
<td>10.4</td>
</tr>
<tr>
<td>Information Technology</td>
<td>12.1</td>
<td>11.5</td>
</tr>
<tr>
<td>Materials</td>
<td>10.1</td>
<td>8.7</td>
</tr>
<tr>
<td>Telecommunication Services</td>
<td>9.5</td>
<td>8.2</td>
</tr>
<tr>
<td>Utilities</td>
<td>10.6</td>
<td>11.7</td>
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<tr>
<td>Real Estate</td>
<td>25.6</td>
<td>21.0</td>
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</table>

<table>
<thead>
<tr>
<th>Implied Equity Value/LTM Net Income</th>
<th>EMEA Private Equity Exits, 01/04/2017 - 31/05/2018</th>
<th>M&amp;A, 01/04/2017 - 31/05/2018</th>
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</thead>
<tbody>
<tr>
<td>Consumer Discretionary</td>
<td>14.4</td>
<td>17.6</td>
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<tr>
<td>Consumer Staples</td>
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<td>Energy</td>
<td>22.3</td>
<td>10.6</td>
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<tr>
<td>Financials</td>
<td>14.5</td>
<td>13.6</td>
</tr>
<tr>
<td>Healthcare</td>
<td>32.5</td>
<td>28.3</td>
</tr>
<tr>
<td>Industrials</td>
<td>19.4</td>
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<tr>
<td>Utilities</td>
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</tr>
<tr>
<td>Real Estate</td>
<td>11.1</td>
<td>15.7</td>
</tr>
</tbody>
</table>

*Multiples highlighted in bold & italics represent the sector average over a 2 year time horizon in order to provide a more comprehensive sector average.*
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EMEA Private Equity Market Snapshot

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