Global tech IPO market has best quarter in two years based on volume: 29 IPOs – Including five Unicorns – In Q2 2017

Welcome to the Q2 2017 issue of PwC’s Global Technology IPO Review. It was the best quarter for technology initial public offerings (IPOs) in two years as the upbeat mood in the capital markets increased the appetite of investors for new public offerings. In the second quarter, 29 technology companies completed IPOs for total proceeds of US$6.1 billion. This is the most technology IPOs since Q2 2015 when there were 36.

The improvement of economic fundamentals in the major developed economies, continued rallies in many equity markets and the backlog of tech companies waiting to go public led to the increased volume.

While five Unicorns completed their IPOs, the big names continued to stay on the sidelines. The pace of Unicorn IPOs in the remainder of calendar 2017 is likely to be influenced by the post-IPO performance of Unicorns that completed their IPOs in the first half.

Geographically, China continued to show robust growth in the technology IPO market with 16 companies raising a total of US$1.2 billion. Chinese IPOs were favorably impacted by the efforts of the China Securities Regulatory Commission (CSRC) to speed up the approval process. South Korea had a strong quarter with two IPOs, raising US$2.405 billion, including the largest IPO of Q2—Netmarble Games Corp. with proceeds of US$2.356 billion. Germany followed South Korea with the second largest IPO of the quarter, Delivery Hero AG, which raised US$989 million.

The US had six IPOs with total proceeds of less than a billion, a 50% improvement over the preceding quarter, though significantly below comparable historical levels achieved during strong IPO cycles. After a drought of five quarters, the UK had one technology IPO in Q2 2017, raising US$324 million. Rounding out Q2, Belgium, Canada and Israel had one IPO each.

In a rare turn of events, Internet Software & Services barely beat out Semiconductors in volume, with nine IPOs to Semi’s eight. As for total proceeds, Internet Software & Services raised US$4.5 billion, and Semiconductors a more modest US$832 million. Internet Software & Services benefitted from Netmarble’s and Delivery Hero’s proceeds. Semiconductors benefitted from IPOs by five Chinese companies. It was the first time Semiconductors had eight or more IPOs since Q4 2010, when it had 12.

Looking ahead, we expect the second half of 2017 to continue the positive momentum of the first half. However, any significant decline or increase in volatility in the capital markets has the potential to change investor sentiment in a hurry. Factors to watch include Chinese regulatory developments; the tone, tenor and timing of US budget, debt ceiling and tax reform deliberations, and the continuity of overall global economic progress without inflationary pressures. Lastly, gaps between private company valuations in the recent past and the valuations investors are willing to give public companies will influence how many and which Unicorns test the capital markets in the second half of 2017.

Sincerely,

Raman Chitkara
Partner and Global Technology Industry Leader
PricewaterhouseCoopers LLP
raman.chitkara@us.pwc.com

*Issue size greater than US$40 million (includes overallotment) and based on trade date; See Methodology
Table of contents

1. Q2 2017 Global tech IPO summary
   Global tech IPO market has best quarter in two years based on volume 3
   First-half 2017 average proceeds are higher than first-half 2015 and 2016 – Led by five Unicorn listings 4
   The Asian tech IPO market takes center stage this quarter 5
   Tech IPOs in Q2 2017 have wider geographic spread than the previous quarter 6
   Global macroeconomic conditions improve as Asia gains strength; political challenges continue in the US and Europe 7
   Semiconductor surprise: Subsector almost shares top spot for number of IPOs with Internet Software & Services 8

2. Country and stock exchange detail
   China 9
   South Korea 10
   US 11
   UK 12
   Stock exchange distribution 13
   Q2 2017 tech IPOs – Offering details 14

3. Key financials – Q2 2017

4. Q2 2017 Technology IPO listings: Valuation metrics

5. Top three subsectors in Q2 2017
   Internet Software & Services 23
   Semiconductors 30
   Software 37

6. Methodology

7. For more information
**Q2 2017 Global tech IPO summary**

*Tech IPOs continue to ride high on positive investor sentiment*

After a positive start to the year, Q2 2017 saw an increase in technology IPOs. Deal volume increased significantly as 29 IPOs raised a total of US$6.1 billion in the second quarter; the number of listings rose 61% quarter over quarter and 107% year over year. Proceeds increased an impressive 313% year over year and 5% over the first quarter 2017.

Chinese technology companies led with 16 IPOs raising US$1.2 billion. South Korea had two IPOs that raised more than US$2.4 billion. The US had six tech IPOs with total proceeds of US$764 million.

Technology IPOs included five Unicorns, more than twice the number in Q1. All were in the Internet Software & Services subsector: Netmarble Games Corp of South Korea (proceeds of US$2.4 billion), Delivery Hero (proceeds of US$989 million), China Rapid Finance Ltd of China (US$69 million), Okta Inc (US$187 million) and Cloudera Inc (US$259 million) of the US. While Netmarble, Delivery Hero and Okta were priced above pre-IPO valuations, the other two were priced lower than pre-IPO valuations.

"Looking ahead, we expect the second half of 2017 to continue the positive momentum of the first half. However, investor sentiment could change in a hurry as a result of a significant negative political development or increased volatility in the capital markets."

**Raman Chitkara**
*Global Technology Industry Leader*
First-half 2017 average proceeds are higher than first-half 2015 and 2016 – Led by five Unicorn listings

Two Unicorns in particular, Netmarble (Q2) and Snap (Q1), raised total proceeds disproportionately and acted as positive outliers in the Q2 and Q1 2017 IPO environments. As for average proceeds, H1 2017 was higher than the previous two first-half periods at US$254 million. H1 2015 had average proceeds of US$207 million and H1 2016 had US$94 million.

However, although the volume of tech IPOs rose substantially in Q2, average proceeds declined from US$323 in Q1 to US$210 in Q2 owing to smaller offerings including three of the five Unicorns garnering less than US$600 million in aggregate.

Figure 2: H1 2010-H1 2017 total proceeds, average proceeds and no. of IPOs

Source: S&P Capital IQ with analysis by PwC
The Asian tech IPO market takes center stage this quarter

Asia reported 19 technology IPOs, the highest for any region in Q2, with total proceeds of US$3.7 billion. China led with 16 IPOs, followed by South Korea with two and Israel with one. South Korea’s Netmarble was the biggest IPO in the Asian market and the largest tech IPO of the quarter, raising just under US$2.4 billion. China raised US$1.2 billion, and Israel had proceeds of US$46 million.

Figure 3: Q2 2016-Q2 2017 – Asia – total proceeds and no. of IPOs

Source: S&P Capital IQ with analysis by PwC
Tech IPOs in Q2 2017 have wider geographic spread than the previous quarter

Q2 2017 had a wider geographic distribution than the prior two quarters with eight countries reporting technology IPOs. China led with 16, followed by the US with six and South Korea with two. Germany, the UK, Canada, Belgium and Israel had one IPO each. China accounted for 55% of IPOs in Q2 while South Korea had 39% of IPO proceeds.

The UK reported one technology IPO after five quarters of none. That’s progress, but lingering uncertainty about the impact of Brexit continues to hinder UK and European IPO activity.

Figure 4: Q2 2017 geographic distribution

Source: S&P Capital IQ with analysis by PwC
**Global macroeconomic conditions improve as Asia gains strength; political challenges continue in the US and Europe**

Europe had three IPOs, one each from Germany, Belgium and the UK, together raising US$1.6 billion in Q2 2017. Nonetheless, it continued to lag behind Asia and North America with the fallout from Brexit still putting a damper on enthusiasm.

Asia was at full throttle with 19 IPOs raising US$3.7 billion. In North America, the US had six IPOs and Canada had one. The valuation gap is still a concern for technology companies in the US, with private placements valuing them at much higher multiples compared to their likely IPO valuations.

---

**Figure 5: Regional analysis of IPO proceeds**

Source: S&P Capital IQ with analysis by PwC

**Figure 6: Regional analysis of number of IPOs**

Source: S&P Capital IQ with analysis by PwC
**Semiconductor surprise: Subsector almost shares top spot for number of IPOs with Internet Software & Services**

The Semiconductor subsector was second in volume with eight IPOs in Q2 2017, just behind Internet Software & Services – the perennial tech IPO leader – with nine IPOs. Between them they had 17, more than half the total.

The two subsectors also had the top proceeds. Internet Software & Services raised US$4.5 billion and Semiconductors had US$832 million. All five Unicorns in the quarter were in the Internet Software & Services subsector, impacting those total proceeds.

Internet Software & Services proceeds increased by 2% from the previous quarter and the number of IPOs was up by 80%. Semiconductors witnessed a sharp increase of 167% sequentially in the number of IPOs with proceeds increasing by 142% from the previous quarter.

Of the eight Semiconductor IPOs, five were from China and one each from South Korea, Belgium and the US. Clearances issued by China regulatory authorities led to the upsurge in Semiconductor IPOs this quarter.

The Software subsector was a distant third in Q2 with four IPOs raising a total of US$250 million.

---

**Figure 7: Subsector distribution showing total proceeds**

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Q2 2016</th>
<th>Q1 2017</th>
<th>Q2 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Software &amp; Services</td>
<td>$4,395</td>
<td>$4,150</td>
<td>$4,491</td>
</tr>
<tr>
<td>Software</td>
<td>$660</td>
<td>$660</td>
<td>$660</td>
</tr>
<tr>
<td>Semiconductors</td>
<td>$145</td>
<td>$149</td>
<td>$165</td>
</tr>
<tr>
<td>Electronics</td>
<td>$59</td>
<td>$125</td>
<td>$202</td>
</tr>
<tr>
<td>Computers &amp; Peripherals</td>
<td>$0</td>
<td>$0</td>
<td>$214</td>
</tr>
<tr>
<td>Communications Equipment</td>
<td>$125</td>
<td>$185</td>
<td>$293</td>
</tr>
<tr>
<td>IT Consulting &amp; Services</td>
<td>$341</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
</tbody>
</table>

Source: S&P Capital IQ with analysis by PwC

**Figure 8: Subsector distribution showing number of IPOs**

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Q2 2016</th>
<th>Q1 2017</th>
<th>Q2 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Software &amp; Services</td>
<td>3</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Software</td>
<td>6</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Semiconductors</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Electronics</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Computers &amp; Peripherals</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Communications Equipment</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>IT Consulting &amp; Services</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: S&P Capital IQ with analysis by PwC
Country and stock exchange detail

China

The Chinese tech IPO market continues its momentum with 16 IPOs in Q2 2017, or 55% of the total

With 16 IPOs, China had the largest piece of the tech IPO market in Q2, with proceeds of US$1.2 billion. With this, China topped its numbers of the last five quarters.

Significantly, only one of the 16 Chinese IPOs was listed on the NYSE; the others were on the Chinese exchanges. The biggest IPO in China this quarter was Olympic Circuit Technology, which raised US$195 million. The increasing participation of companies from mainland China was due to the attraction of the relatively higher PE ratio for companies on Chinese exchanges compared to the US and European exchanges, and the acceleration of the IPO approval process by the regulatory authorities (CSRC).

“Though Chinese tech IPOs continued their escalating trend in Q2 2017, there have been signs that China regulatory authorities (CSRC) may slowdown the IPO approval process in the second half of 2017. In spite of this, number of Chinese tech IPOs is still expected to reach a historical high in 2017, due to the increase of small to medium sized deals.”

Jianbin Gao
Technology Industry Leader, PwC China
South Korea

South Korea shines in the Q2 2017 tech IPO market with the high-profile listing of Netmarble

After three quarters of no IPOs, South Korea’s Netmarble raised the highest tech IPO proceeds globally in Q2 2017.

Investors are now more comfortable with recent political developments in South Korea. Investor confidence in the economy has improved with exports becoming more robust and stronger-than-expected GDP figures reported for Q1 2017. The Korean currency has grown stronger along with stock prices reaching an all-time high as investors continued to buy technology stocks on the back of their promising outlooks, led by the South Korean tech giant Samsung Electronics with its record breaking Q2 earnings.

The IPO market is also expected to receive a boost from the new rules introduced at the beginning of the year. These rules allow start-ups without net income to list; earlier laws allowed only listings by companies with reported net income. However, the IPO market in H2 2017 may slow down somewhat as a result of certain companies postponing their IPO plans and any further escalating tension with North Korea could also curtail enthusiasm.

Figure 10: Q2 2017 South Korean tech IPOs

Source: S&P Capital IQ with analysis by PwC

“While favorable market factors led to an excellent second quarter for tech IPOs in South Korea, the second half of 2017 may not prove as robust due to several major companies postponing their listings.”

Steven Kang
Technology Industry Leader, PwC South Korea
Two Unicorns supported the US tech IPO market, although with much lower average proceeds

The US reported six tech IPOs with proceeds of US$764 million, much lower than last quarter's US$4.5 billion, most of which was from the Snap IPO. The average proceeds in Q2 were US$127 million.

The two US Unicorns—Cloudera and Okta—listed this quarter. It is worth noting that Cloudera’s post-IPO valuation was lower than its pre-IPO valuation: US$2.3 billion versus US$4.1 billion. Okta’s post-IPO valuation was slightly higher than its pre-IPO valuation: US$1.5 billion against US$1.2 billion.

**UK**

**The UK technology IPO market finally opens up after a persistent drought of five straight quarters**

With one IPO in Q2, the UK broke its long drought. But does one IPO suggest the UK market is regaining the momentum it lost due to last year’s Brexit vote? It remains to be seen. Much will depend on how well the “divorce” negotiations with the EU proceed in the coming months. The appetite for IPOs could return as the Brexit election shock subsides and investors start to get a clearer picture of the new landscape. Pent up demand could also give the market a push.

---

**Figure 12: UK tech IPOs**

Source: S&P Capital IQ with analysis by PwC
Stock exchange distribution

Q2 2017 saw an increase in stock exchange participation. China’s exchanges led with 15 listings total whereas the Korean exchange dominated in proceeds with just one IPO.

The US exchanges had seven listings in Q2 2017, one more than Q2 2016. However, numbers for China’s exchanges increased by 11 IPO listings and proceeds by US$832 million.

Shanghai Stock Exchange had 31% of the total listings, whereas Korea Stock Exchange had 39% of the total proceeds—the result of the biggest IPO of the quarter, Netmarble.

Figure 13: Q2 2017 stock exchange distribution

Source: S&P Capital IQ with analysis by PwC
## Q2 2017 tech IPOs – Offering details

### Table 1: Q2 2017 tech IPOs – By highest proceeds

<table>
<thead>
<tr>
<th>Issue date</th>
<th>Company</th>
<th>Subsector</th>
<th>Proceeds (US$ million)</th>
<th>Primary exchange</th>
<th>Domicile nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/02/2017</td>
<td>Netmarble Games Corporation</td>
<td>Internet Software &amp; Services</td>
<td>2355.75</td>
<td>Korea Stock Exchange (KOSE)</td>
<td>South Korea</td>
</tr>
<tr>
<td>06/29/2017</td>
<td>Delivery Hero AG</td>
<td>Internet Software &amp; Services</td>
<td>989.06</td>
<td>Deutsche Boerse AG (DB)</td>
<td>Germany</td>
</tr>
<tr>
<td>05/26/2017</td>
<td>Alfa Financial Software Holdings PLC</td>
<td>Internet Software &amp; Services</td>
<td>324.11</td>
<td>London Stock Exchange (LSE)</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>04/05/2017</td>
<td>X-FAB Silicon Foundries SE</td>
<td>Semiconductors</td>
<td>266.58</td>
<td>Euronext Paris (ENXTPA)</td>
<td>Belgium</td>
</tr>
<tr>
<td>04/27/2017</td>
<td>Cloudera Inc</td>
<td>Internet Software &amp; Services</td>
<td>258.75</td>
<td>New York Stock Exchange (NYSE)</td>
<td>United States</td>
</tr>
<tr>
<td>04/17/2017</td>
<td>Olympic Circuit Technology Co LTD</td>
<td>Semiconductors</td>
<td>194.69</td>
<td>Shanghai Stock Exchange (SHSE)</td>
<td>China</td>
</tr>
<tr>
<td>04/06/2017</td>
<td>Okta Inc</td>
<td>Internet Software &amp; Services</td>
<td>187</td>
<td>NASDAQ Global Select (NQGS)</td>
<td>United States</td>
</tr>
<tr>
<td>04/12/2017</td>
<td>Yext Inc</td>
<td>Internet Software &amp; Services</td>
<td>132.83</td>
<td>New York Stock Exchange (NYSE)</td>
<td>United States</td>
</tr>
<tr>
<td>05/05/2017</td>
<td>Real Matters Inc</td>
<td>Internet Software &amp; Services</td>
<td>114.38</td>
<td>The Toronto Stock Exchange (TSX)</td>
<td>Canada</td>
</tr>
<tr>
<td>04/11/2017</td>
<td>Raisecom Technology Co Ltd</td>
<td>Communications Equipment</td>
<td>113.1</td>
<td>Shanghai Stock Exchange (SHSE)</td>
<td>China</td>
</tr>
<tr>
<td>05/23/2017</td>
<td>Nanjing Huamai Technology Co Ltd</td>
<td>Communications Equipment</td>
<td>55.58</td>
<td>Shanghai Stock Exchange (SHSE)</td>
<td>China</td>
</tr>
<tr>
<td>04/06/2017</td>
<td>Zhejiang Jiemei Electronic and Technology Co Ltd</td>
<td>Semiconductors</td>
<td>110.57</td>
<td>Shenzhen Stock Exchange (SZSE)</td>
<td>China</td>
</tr>
</tbody>
</table>

*Source: S&P Capital IQ*
Table 1: Q2 2017 tech IPOs – By highest proceeds

<table>
<thead>
<tr>
<th>Issue date</th>
<th>Company</th>
<th>Subsector</th>
<th>Proceeds (US$ million)</th>
<th>Primary exchange</th>
<th>Domicile nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/12/2017</td>
<td>Shenzhen Genvict Technologies Co Ltd</td>
<td>Electronic Computer Manufacturing</td>
<td>93.28</td>
<td>Shenzhen Stock Exchange (SZSE)</td>
<td>China</td>
</tr>
<tr>
<td>06/28/2017</td>
<td>Fujian Raynen Technology Co Ltd</td>
<td>Software</td>
<td>76.26</td>
<td>Shanghai Stock Exchange (SHSE)</td>
<td>China</td>
</tr>
<tr>
<td>05/24/2017</td>
<td>Appian Corporation</td>
<td>Software</td>
<td>75</td>
<td>NASDAQ Global Market (NasdaqGM)</td>
<td>United States</td>
</tr>
<tr>
<td>04/25/2017</td>
<td>Jiangsu Transimage Technology Co Ltd</td>
<td>Computers &amp; Peripherals</td>
<td>69.89</td>
<td>Shenzhen Stock Exchange (SZSE)</td>
<td>China</td>
</tr>
<tr>
<td>04/27/2017</td>
<td>China Rapid Finance Limited</td>
<td>Internet Software &amp; Services</td>
<td>69</td>
<td>New York Stock Exchange (NYSE)</td>
<td>China</td>
</tr>
<tr>
<td>06/05/2017</td>
<td>SG Micro Corp</td>
<td>Semiconductors</td>
<td>65.74</td>
<td>Shenzhen Stock Exchange (SZSE)</td>
<td>China</td>
</tr>
<tr>
<td>06/14/2017</td>
<td>Suzhou Etron Technologies Co Ltd</td>
<td>Electronics</td>
<td>62.91</td>
<td>Shanghai Stock Exchange (SHSE)</td>
<td>China</td>
</tr>
<tr>
<td>06/29/2017</td>
<td>Tintri Inc</td>
<td>Internet Software &amp; Services</td>
<td>60</td>
<td>NASDAQ Global Market (NQGM)</td>
<td>United States</td>
</tr>
<tr>
<td>05/12/2017</td>
<td>Fujian Apex Software Co Ltd</td>
<td>Software</td>
<td>58.12</td>
<td>Shanghai Stock Exchange (SHSE)</td>
<td>China</td>
</tr>
<tr>
<td>05/23/2017</td>
<td>Nanjing Huamai Technology Co Ltd</td>
<td>Communications Equipment</td>
<td>55.58</td>
<td>Shanghai Stock Exchange (SHSE)</td>
<td>China</td>
</tr>
<tr>
<td>05/24/2017</td>
<td>Shenzhen Sunnypol Opto-electronics Co Ltd</td>
<td>Computers &amp; Peripherals</td>
<td>55.51</td>
<td>Shenzhen Stock Exchange (SZSE)</td>
<td>China</td>
</tr>
<tr>
<td>05/26/2017</td>
<td>EmbedWay Technologies (Shanghai) Corporation</td>
<td>Semiconductors</td>
<td>51.57</td>
<td>Shanghai Stock Exchange (SHSE)</td>
<td>China</td>
</tr>
</tbody>
</table>

Source: S&P Capital IQ
<table>
<thead>
<tr>
<th>Issue date</th>
<th>Company</th>
<th>Subsector</th>
<th>Proceeds (US$ million)</th>
<th>Primary exchange</th>
<th>Domicile nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/23/2017</td>
<td>SMART Global Holdings Inc</td>
<td>Semiconductors</td>
<td>50.55</td>
<td>NASDAQ Global Select (NasdaqGS)</td>
<td>United States</td>
</tr>
<tr>
<td>05/29/2017</td>
<td>Philoptics Co Ltd</td>
<td>Semiconductors</td>
<td>49.65</td>
<td>KOSDAQ (KOSDAQ)</td>
<td>South Korea</td>
</tr>
<tr>
<td>05/29/2017</td>
<td>Telrad Networks Ltd</td>
<td>Communications Equipment</td>
<td>45.66</td>
<td>Tel Aviv Stock Exchange</td>
<td>Israel</td>
</tr>
<tr>
<td>06/26/2017</td>
<td>Shenzhen JingQuanHua Electronics Co Ltd</td>
<td>Electronics</td>
<td>45.42</td>
<td>Shenzhen Stock Exchange (SZSE)</td>
<td>China</td>
</tr>
<tr>
<td>04/23/2017</td>
<td>Will Semiconductor CO Ltd Shanghai</td>
<td>Semiconductors</td>
<td>42.42</td>
<td>Shanghai Stock Exchange (SHSE)</td>
<td>China</td>
</tr>
<tr>
<td>04/17/2017</td>
<td>Shanghai Koal Software Co Ltd</td>
<td>Software</td>
<td>40.13</td>
<td>Shanghai Stock Exchange (SHSE)</td>
<td>China</td>
</tr>
</tbody>
</table>

Source: S&P Capital IQ
Key financials – Q2 2017

The majority of the technology companies that listed IPOs in Q2 2017 reported net income for their last twelve months (LTM); their LTM net income average was US$23 million. The other 8 companies reported net losses that lowered the overall LTM net income average of US$(108) million. The average for the previous quarter was a net loss.

The tech IPO companies’ average LTM revenue for Q2 2017 was US$219 million, a 37% decline from the previous quarter. The average LTM EBITDA for Q2 2017 was US$4 million, a 69% decrease over the US$13 million LTM EBITDA in Q1 2017.

Seven of the Q2 companies that reported LTM net losses were from the Internet Software & Services subsector, of which five listed on a US stock exchange. One of Q2’s five Unicorns, Cloudera, from the Internet Software & Services subsector, reported the highest LTM net loss at US$366 million.

As noted, the overall average LTM revenue for Q2 2017 was US$224 million. The average LTM revenue for Asia, including China, was US$191 million. Netmarble from the Internet Software & Services subsector raised the Asian average. It had the highest LTM revenue of any Q2 IPO company at US$1,246 million.

The Internet Software & Services subsector, with nine IPOs, reported the highest average LTM revenue at US$312 million and the highest EV/LTM revenue at 9.7x. However, the subsector also reported the highest average LTM net loss—US$77 million.

The eight IPOs from the Semiconductors subsector, which raised total proceeds of US$832 million, reported the second highest average LTM revenue at US$270 million. At US$685 million, SMART Global Holdings, from the Semiconductor subsector, reported the second highest LTM revenue of the Q2 IPOs companies.

Figure 14: Q2 2017 and Q1 2017 tech IPOs – Net income

Source: S&P Capital IQ with analysis by PwC
Figure 15: Q2 2017—Average LTM revenue

Figure 16: Q2 2017—Average LTM EBITDA

Source: S&P Capital IQ with analysis by PwC
Figure 17: Q2 2017—Average LTM net income

Source: S&P Capital IQ with analysis by PwC

Figure 18: Q2 2017—Average total debt

Source: S&P Capital IQ with analysis by PwC
Figure 19: Q2 2017 — Average enterprise value

Source: S&P Capital IQ with analysis by PwC
Q2 2017 Technology IPO listings: Valuation metrics

Despite having 29 IPO listings in the quarter, the EV/LTM revenue metric in Q2 2017 failed to match that of Q1 2017 whereas Ev/LTM EBIDTA surpassed that of previous quarters.

In Q2, the technology sector’s average EV/LTM revenue multiple was 6.5x, down from 8.0x in Q1 2017 and 8.5x in Q2 2016.

The EV/LTM EBIDTA metric was 348.1x, higher than the 222.1x in Q1 2017.
Figure 21: Q2 2017 EV/LTM EBITDA

Source: S&P Capital IQ with analysis by PwC
**Top three subsectors in Q2 2017**

**Internet Software & Services**

The nine listings in the Internet Software & Services subsector reported the highest average LTM revenue at US$303 million.

The average LTM revenue increased by 53% quarter on quarter and by 223% year on year.

The subsector had nine offerings in Q2 2017, up from five deals in Q1 2017 and three deals in Q2 2016.

The subsector’s average LTM EBITDA (US$42 million) and average LTM net loss (US$77 million) were pulled down by significant LTM net losses reported by Cloudera, Delivery Hero and Tintri.

The subsector’s EV/LTM revenue decreased significantly to 9.7x in Q2 from 27.9x in Q1 2017.

Figure 22: Internet Software & Services – LTM revenue

Source: S&P Capital IQ with analysis by PwC
Figure 23: Internet Software & Services – LTM EBITDA

Source: S&P Capital IQ with analysis by PwC
Figure 2.4: Internet Software & Services – LTM net income

Source: S&P Capital IQ with analysis by PwC
Figure 25: Internet Software & Services – EV

Source: S&P Capital IQ with analysis by PwC
Figure 26: Internet Software & Services – Total debt

Source: S&P Capital IQ with analysis by PwC
Figure 27: Internet Software & Services – EV/LTM revenue

Source: S&P Capital IQ with analysis by PwC
Figure 28: Internet Software & Services – EV/LTM EBITDA

Source: S&P Capital IQ with analysis by PwC
**Semiconductors**

The Semiconductors subsector has maintained its position among the top three subsectors continuously for three quarters as measured by number of deals. The average proceeds increased by 49% quarter on quarter.

The subsector reported the second highest average LTM revenue for Q2 2017, US$270 million, a 49% increase quarter on quarter. Still, the subsector had the lowest EV/LTM revenue of 2.9x for Q2 2017. The EV/LTM EBITDA for Q2 2017 was 19.3x.

The number of IPOs increased year over year by 300% whereas the quarter-over-quarter increase was 167%.

The total debt for the quarter increased by 284% over Q1 2017.

![Figure 29: Semiconductors – LTM revenue](image-url)
Figure 30: Semiconductors – LTM EBITDA

Source: S&P Capital IQ with analysis by PwC
Figure 31: Semiconductors – LTM net income

Source: S&P Capital IQ with analysis by PwC
Figure 32: Semiconductors – Enterprise Value

[Graph showing enterprise value and number of IPOs by quarter from Q2 2016 to Q2 2017.]

Source: S&P Capital IQ with analysis by PwC
Figure 33: Semiconductors – Total debt

Source: S&P Capital IQ with analysis by PwC
Figure 34: Semiconductors – EV/LTM revenue

Source: S&P Capital IQ with analysis by PwC
Figure 35: Semiconductors – EV/LTM EBITDA

Source: S&P Capital IQ with analysis by PwC
Software

After just one IPO in Q1, the Software subsector made a comeback in Q2 2017 with four IPOs, enough to place it back among the top three subsectors.

The quarter-over-quarter numbers increased 300%, although the year-over-year number was a 33% decline.

The average LTM revenue, which was US$112 million in Q2, increased by 31% quarter over quarter. The average LTM EBITDA of US$7 million and the average LTM net income of US$5 million were declines of 133% and 121%, respectively.

The highest deal value for the subsector was US$76 million by China-based Fujian Raynen Technology. The subsector had three of the four technology IPO listings on the Shanghai Stock Exchange (SHSE) in Q2.

The subsector had the highest EV/LTM EBITDA of 97.9x for the quarter. However, EV/LTM revenue decreased to 6.0x from 11.7x in Q1 2017.

Source: S&P Capital IQ with analysis by PwC
Figure 37: Software – LTM EBITDA

Source: S&P Capital IQ with analysis by PwC
Figure 38: Software – LTM net income

Source: S&P Capital IQ with analysis by PwC
Figure 39: Software – Enterprise value

Source: S&P Capital IQ with analysis by PwC
Figure 40: Software – Total debt

Source: S&P Capital IQ with analysis by PwC
Figure 41: Software – EV/LTM revenue

Source: S&P Capital IQ with analysis by PwC
Figure 42: Software – EV/LTM EBITDA

Source: S&P Capital IQ with analysis by PwC
Methodology

The Global Technology IPO Review for Q2 2017 is based on PwC’s analysis of transaction data extracted from S&P Capital IQ. The analysis considers IPOs across all countries worldwide during the period 1 April 2017 to 30 June 2017 (Q2), financial data was also obtained from S&P Capital IQ.

The definition of the Technology sector is based on the S&P Capital IQ database industry classifications and includes the following subsectors:

- Internet Software & Services
- IT Consulting & Services
- Professional Services (e.g., Application Software, Software Solutions)
- Semiconductors
- Software
- Computers & Peripherals
  - Computers, Computers Peripheral Equipment
  - Computers, Storage Device Manufacturing
- Electronic Computer Manufacturing (“Electronics”)
- Communications Equipment

Only IPOs with issue size greater than US$40 million were included in the analysis.

All monetary amounts are in US dollars unless otherwise indicated.

LTM – Last 12 months

Most figures are rounded to one decimal, except where comparisons require more.
For more information

If you would like to discuss how these findings might impact your business or your future strategy, please reach out to any of our technology industry leaders listed below.

Raman Chitkara  
Global Technology Leader  
Phone: 1 408 817 3746  
Email: raman.chitkara@pwc.com

Rod Dring – Australia  
Phone: 61 2 8266 7865  
Email: rod.dring@au.pwc.com

Estela Vieira – Brazil  
Phone: 55 1 3674 3802  
Email: estela.vieira@br.pwc.com

Christopher Dulny – Canada  
Phone: 1 416 869 2355  
Email: christopher.dulny@pwc.com

Jianbin Gao – China  
Phone: 86 21 2323 3362  
Email: gao.jianbin@cn.pwc.com

Pierre Marty – France  
Phone: 33 1 5657 58 15  
Email: pierre.marty@fr.pwc.com

Werner Ballhaus – Germany  
Phone: 49 211 981 5848  
Email: werner.ballhaus@pwc.com

Sandeep Ladda – India  
Phone: 91 22 6689 1444  
Email: sandeep.ladda@in.pwc.com

Masahiro Ozaki – Japan  
Phone: 81 3 5326 9090  
Email: masahiro.ozaki@jp.pwc.com

Steven Kang – Korea  
Phone: 82 2 709 0201  
Email: steven.c.kang@kr.pwc.com

Ilja Linnemeijer – The Netherlands  
Phone: 31 88 792 4956  
Email: ilja.linnemeijer@nl.pwc.com

Yury Pukha – Russia  
Phone: 7 495 223 5177  
Email: yury.pukha@ru.pwc.com

Mark Jansen – Singapore  
Phone: 65 6236 7388  
Email: mark.jansen@sg.pwc.com

Jass Sarai – UK  
Phone: 44 0 1895 52 2206  
Email: jass.sarai@pwc.com

Mark McCaffrey – US  
Phone: 1 408 817 4199  
Email: mark.mccaffrey@pwc.com

Alan Jones – US (Deals partner)  
Phone: 1 415 498 7398  
Email: alan.jones@pwc.com
About PwC’s technology institute

The Technology Institute is PwC’s global research network that studies the business of technology and the technology of business with the purpose of creating thought leadership that offers both fact-based analysis and experience-based perspectives. Technology Institute insights and viewpoints originate from active collaboration between our professionals across the globe and their first-hand experiences working in and with the technology industry.

About PwC

At PwC, our purpose is to build trust in society and solve important problems. We’re a network of firms in 157 countries with more than 223,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by visiting us at http://www.pwc.com/

This content is for general information purposes only and should not be used as a substitute for consultation with professional advisors.

© 2017 PwC. All rights reserved. PwC refers to the US member firm or one of its subsidiaries or affiliates, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.