

Global Technology IPO Review Q1 2016

Technology Institute

*A quarterly look at global trends
in the technology IPO market
May 2016*



*A weak Q1 sets the tone for a lackluster first half of the year**



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* Issue size greater than US\$40 million (includes overallocation) and based on trade date; See Methodology

Welcome to the first quarter 2016 issue of PwC's Global Technology IPO Review. Asia maintained a steady course as the year began, making it the bright spot in an otherwise weak quarter. Seven of the first quarter's ten technology IPOs were in Asia, on par with Asia's eight tech IPOs in the fourth quarter and six in the third quarter of 2015. In the first quarter of 2016, China led with three IPOs. India had two listings on the Bombay Stock Exchange—its first IPOs since the second quarter of 2013. There were also two listings in Japan.

The overall global tech IPO market began 2016 by hitting its lowest point in recent years. The ten IPOs in the first quarter of 2016 garnered cumulative proceeds of US\$769 million. The last time we reported fewer than ten tech IPOs was in the fourth quarter of 2012 when eight IPOs were issued. However, the proceeds were much higher at US\$1.3 billion.

Fearing lower valuations due to market volatility, technology companies on both sides of the Atlantic shelved their IPO plans. Neither the US nor the UK had a tech IPO. Since 2010, we have not had a quarter without a US domiciled tech IPO until now. Several factors caused the IPO market to plummet from its performance in the fourth quarter of 2015 (22 tech IPOs with proceeds of US\$10.8 billion):

- Slowdown in the Chinese economy;
- Depressed commodity prices, especially with oil at an historical low;
- Uncertainty over Fed rates; and
- The forthcoming referendum in the UK on whether to remain in the EU.

As suggested in our 2015 Annual Tech IPO report, the tech IPO market was not likely to continue last year's pace in this first quarter. In fact, the first quarter 2016 proceeds were the lowest of any quarter since the first quarter of 2010, with a sequential drop of 93% and year-on-year decline of 87%. The number of IPOs issued was down 55% quarter on quarter and 57% year on year.

The Internet Software & Services subsector has retained the lead in number of IPOs for the last five consecutive quarters—since the first quarter of 2015. It reported three of the ten IPOs in this quarter. After no IPOs in the fourth quarter, the Semiconductors subsector bounced back with two listings. China's Tongyu Communication Inc, in the Communications Equipment subsector, was the biggest IPO with proceeds worth US\$132.1 million.

When you add it all up—IPO numbers, total proceeds and lack of activity in the US and UK—the first quarter of 2016 goes in the books as the worst three months for global tech IPOs since the recession in 2009. Further, there is uncertainty on the future course of economic and monetary policies in the US and EU.

Sincerely,

A handwritten signature in black ink that reads "Raman". The signature is written in a cursive, flowing style.

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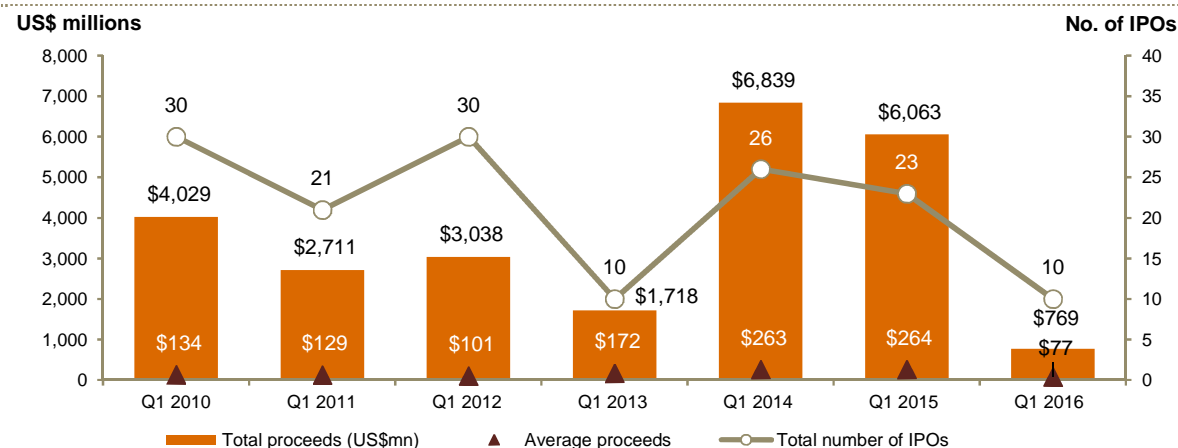
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Executive summary

In Q1 2016, proceeds from the global tech IPO market hit their lowest point since 2009. Various headwinds continue to discourage first-time issuers. These include historically low oil prices, a slowdown in the Chinese economy, uncertainty over US interest rates and the forthcoming UK referendum on whether to leave the EU—called Britain Exit (Brexit). Ten tech IPOs worth US\$769 million were launched, down 87% in proceeds and 57% in number from Q1 2015. The average proceed of US\$77 million, a year-over-year decline of 71%, was also the lowest. The market is expected to pick up its pace later this year because many companies with private funding are waiting on the sidelines for the recovery.

The US and UK markets were conspicuous by their absence during the quarter. Since 2010, we have not seen a single quarter without a tech IPO from the US. Contributing to the uncertainty is lack of clarity over US economic and foreign policies due to the upcoming presidential election.

Figure 1: Q1 global technology IPO trends



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

“Despite a relative shutout for US technology IPOs in the first quarter of 2016, there is no shortage of companies in the pipeline that are eager to test the waters and pursue an IPO path to growth. With one technology IPO already taking place in the second quarter, we are starting to see some life return to the tech IPO market.”

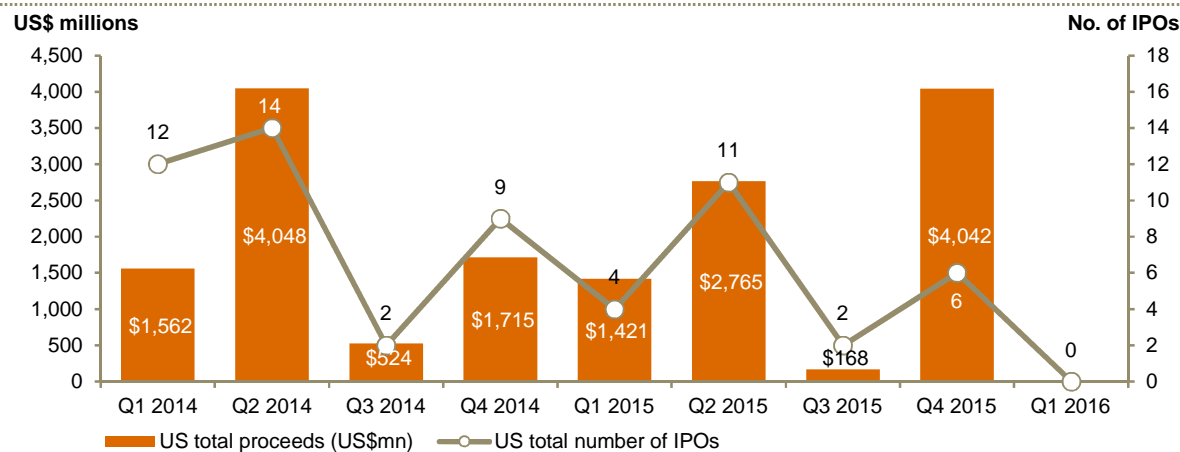
– Raman Chitkara
Global Technology Industry Leader

US, UK waiting on the sidelines

For the first time since the 2008-09 financial crisis, neither the US nor the UK issued a tech IPO in the reported quarter. The two markets on each side of the Atlantic tend to move in tandem—a pullback in the US significantly impacts the UK. Once before each had been missing from the tech IPO market—the US in Q1 2009 and the UK in Q2 2013—but not together as in Q1 2016.

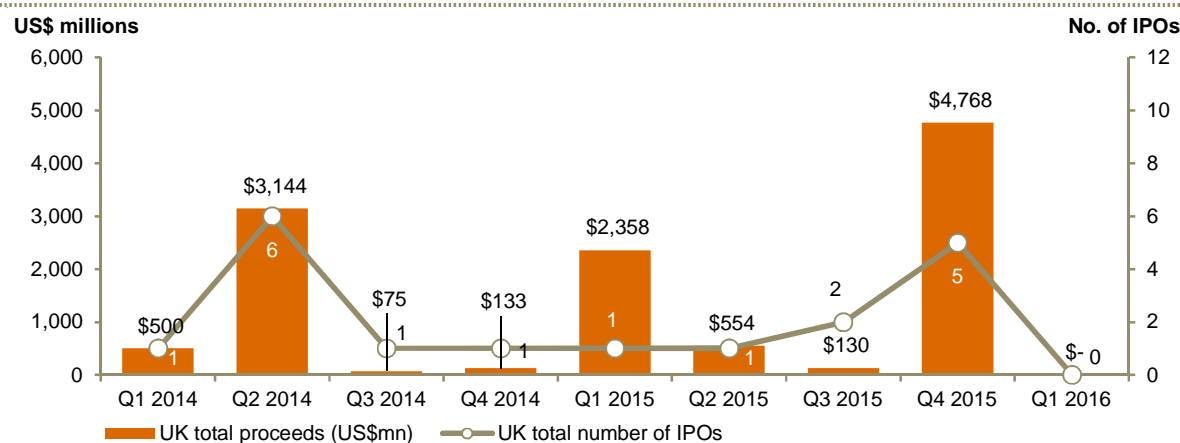
In Q1 2016, 15 companies from the US and one from Hong Kong either withdrew from the IPO market or delayed listing after filing their initial bid documentation. These decisions were driven by market volatility and down rounds. Historically, sharp volatility has always been a negative for IPOs.

Figure 2: US technology IPOs since 2014



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

Figure 3: UK technology IPOs since 2014

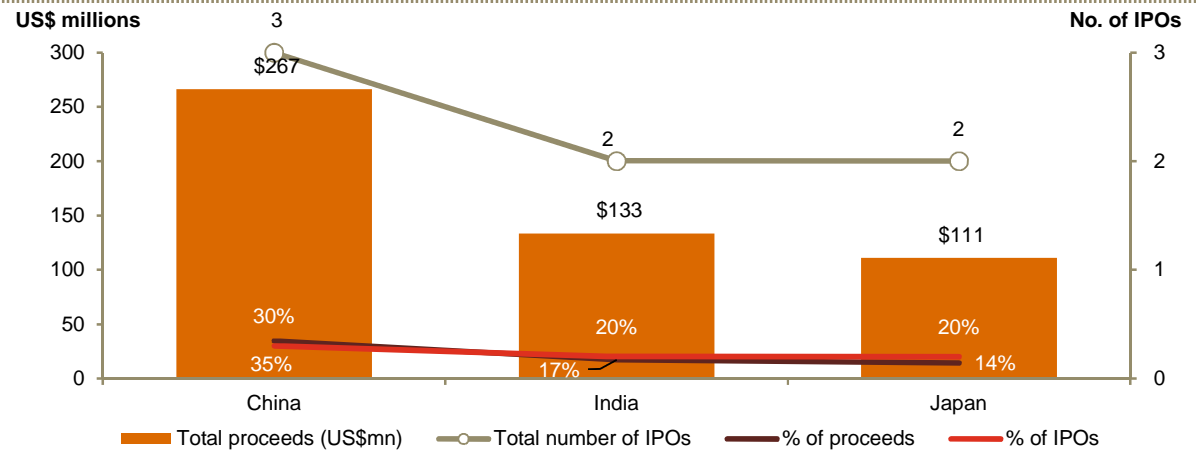


Source: S&P Capital IQ with analysis by PwC.

Asia stays a steady course

Asia was the saving grace in the quarter. Seven of the ten tech IPOs (70%) were from Asia, with China listing three and India and Japan two each. The Chinese government gave a boost to market sentiment there by easing monetary policy and by announcing plans with an undetermined start date to minimize Beijing's administrative intervention in the primary securities market. Asia contributed 66% of the total proceeds. The largest and most populous continent proved a better IPO market compared to the US or the UK, and maintained its steady course of recent quarters—Asia had eight IPOs in Q4 and six in Q3 of 2015.

Figure 4: Q1 2016 Asian technology IPOs



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

“India’s thriving technology start-ups and eCommerce sector, which has mainly grown on the back of venture capital and private equity funding, saw two major public listings this quarter. With strong government focus on start-ups in India and India’s stock market regulator, SEBI, announcing a fresh set of norms to facilitate easier listing, there is an expectation that more start-ups will list in the future—and will do well.”

– Sandeep Ladda

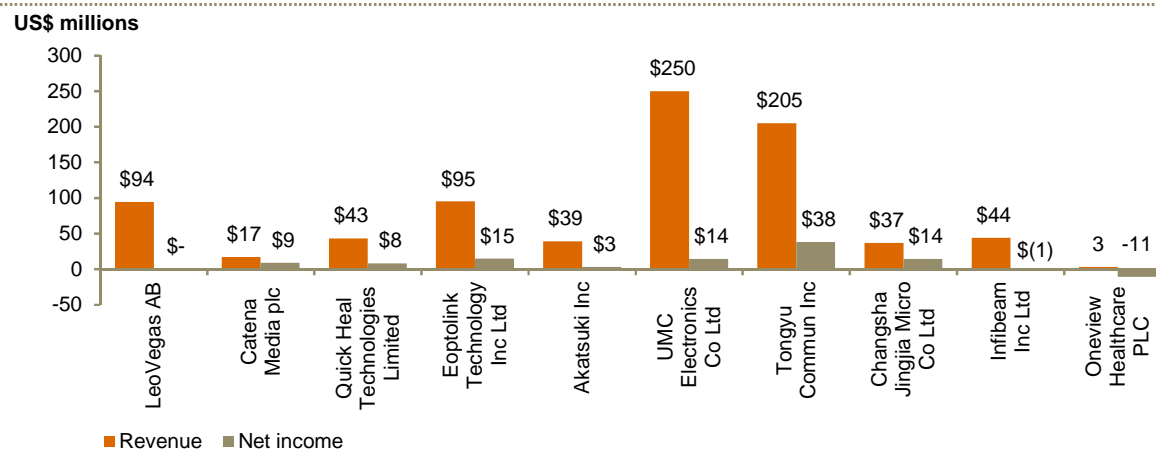
Technology & eCommerce Sector Leader, PwC India

Most IPOs came from mature companies

In the current volatile market, mostly relatively mature technology companies, with an average 13.7 years in operation, issued IPOs. In this quarter, only two companies of the ten were less than five years old. This indicates a shift away from the trend in which younger start-up companies with good private funding, but no net income yet, were listed, providing an early exit route to private equity (PE) investors and venture capitalists (VCs).

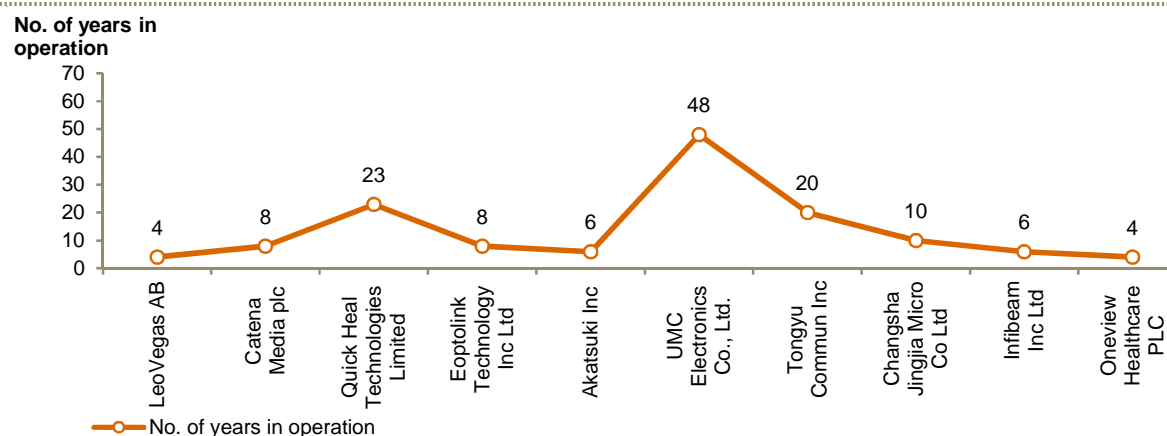
In recent quarters, revenue and revenue growth have been the basis for valuations, with a majority of IPO-bound technology companies reporting negative net income. But in Q1 only two listed companies had reported net losses, suggesting that net income might be returning, even replacing revenue and revenue growth, as the basis for valuation. Investors have shown restraint and companies with net losses are postponing their IPOs for a better time.

Figure 5: Q1 2016 tech IPOs – Revenue, net income



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

Figure 6: Q1 2016 tech IPOs – Number of years in operation



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

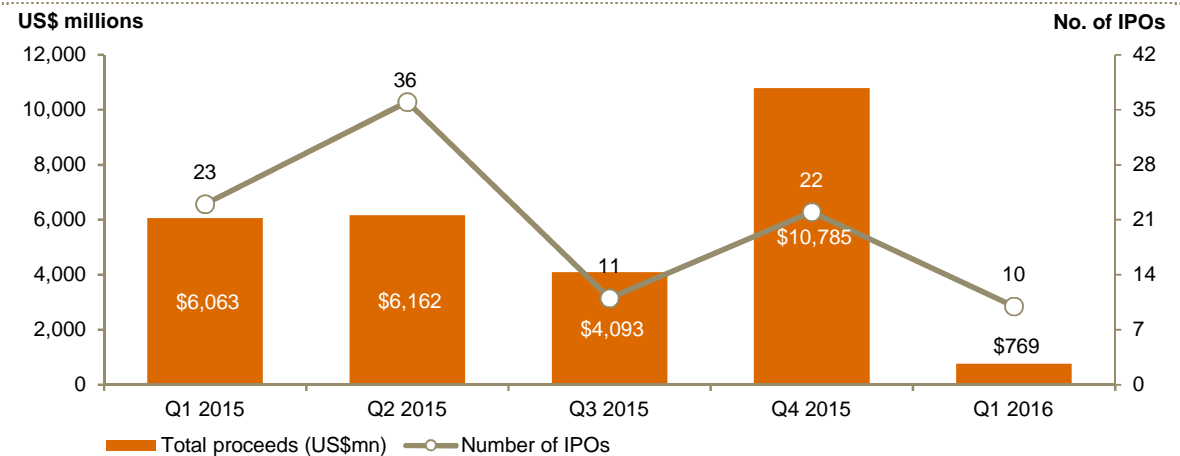
Q1 2016 global tech IPO summary

Sequentially, the tech IPO market took a nosedive from 22 IPOs worth US\$10.8 billion in Q4 2015 to 10 IPOs worth US\$769 million in Q1 2016—a 93% decline in proceeds and a 55% decline in number of IPOs. Total Q1 proceeds for the technology sector were weaker than any of the previous five quarters. The second worst quarter in the previous five was Q3 2015. It had one more IPO—11 total—than Q1 2016, but the proceeds were 533% greater at US\$4.1 billion.

Several macro-economic factors are acting in concert to cause the overall sluggish start to 2016. In Europe, the refugee crisis and the forthcoming EU referendum in the UK are fueling doubts about the stability of the Eurozone. In the US, with the presidential election just months away, there is uncertainty about economic and foreign policies beyond 2016. There is also uncertainty over monetary policy in many markets. The Federal Reserve is expected to increase interest rates this year. The European Central Bank, on the other hand, has kept interest rates negative. And there is a growing concern that the negative rates may lead to renewed crisis in the European banking system.

Technology offerings, usually one of the mainstays of US IPO activity, were absent in part because Unicorns (companies with US\$1 billion or greater valuations as of their most recent round of private funding) are waiting for better timing and improved sentiment for their high valuations.

Figure 7: Q1 2015-Q1 2016 global tech IPO trends



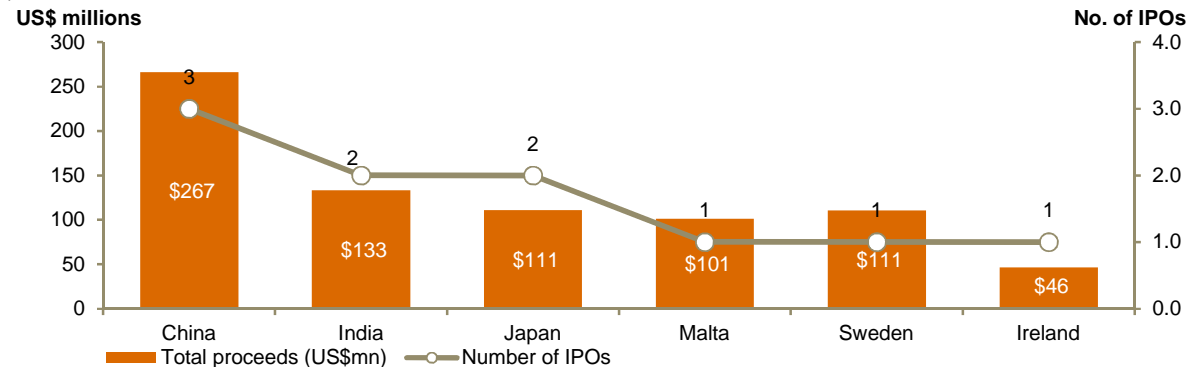
Source: S&P Capital IQ with analysis by PwC.

Geographic IPO trends – Q1 2016

As noted, the geographic distribution of tech IPO activity shifted from its traditional markets in the US, UK and Germany to Asia and smaller countries in Europe. China led with three IPOs, raising US\$267 million. The biggest IPO—Tongyu Communication Inc, with proceeds of US\$132.1 million—was listed on Shenzhen Stock Exchange. India had two IPOs, listed on the Bombay Stock Exchange. Japan issued two IPOs and Malta, Sweden and Ireland had one IPO each.

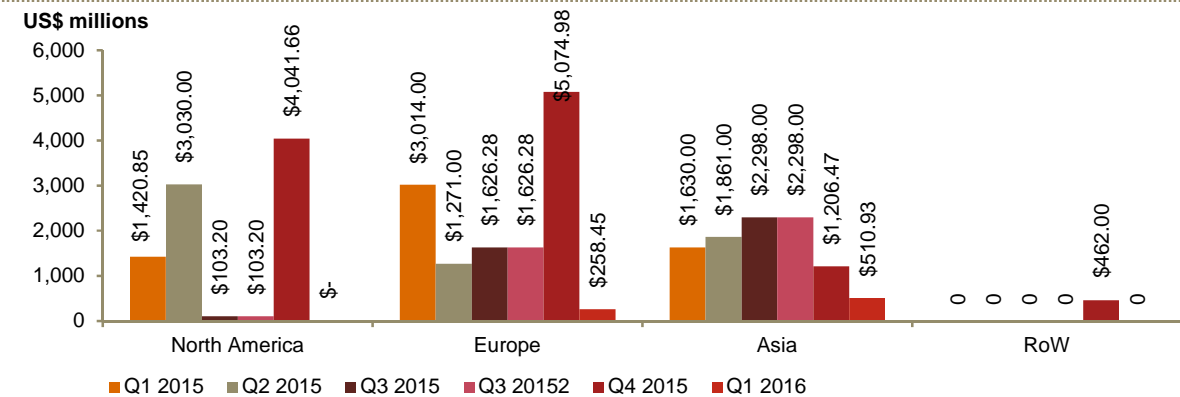
The US had no tech IPOs. Lower oil prices, US monetary policies, negative Chinese macro-economic numbers and other factors are impacting the market. Some US companies that were headed toward the IPO market have taken a wait-and-see policy due to lower valuations in recent months. But going slow might not remain an option for some technology companies that need cash because they are also seeing reduced VC and PE funding.

Figure 8: Geographic distribution of technology IPOs – Q1 2016



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

Figure 9: Regional analysis of IPO proceeds

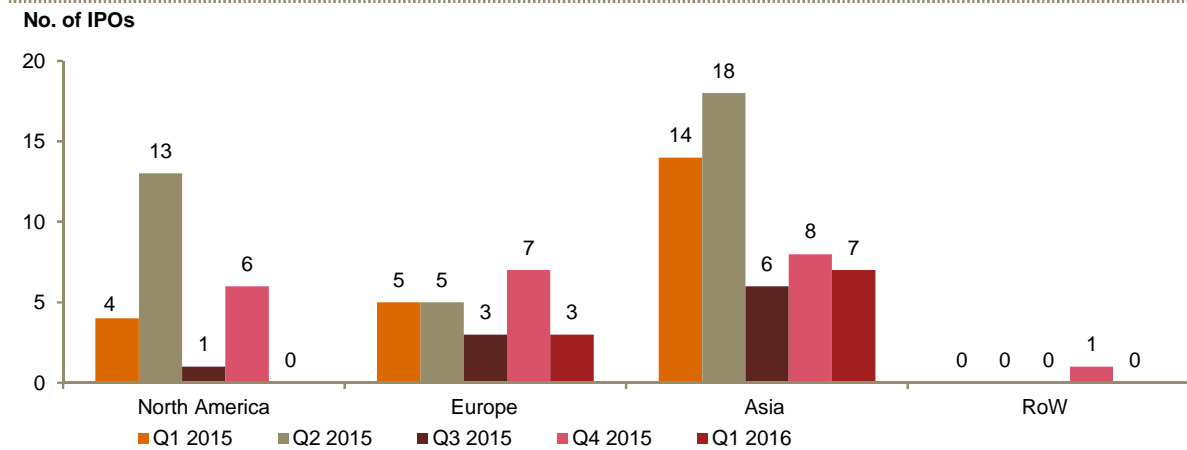


Source: S&P Capital IQ with analysis by PwC.

The UK, which had many tech IPOs in the last few quarters, also drew a blank. Volume and value of IPOs on the London Stock Exchange (LSE) is expected to continue to fall as doubts rise over interest rates in the UK. Elections in the US and France, and the possibility of the UK leaving the EU, are also dampening the market.

The New York Stock Exchange, NASDAQ and the LSE did not list a single tech IPO in the period. Asia led the way with seven IPOs with proceeds of US\$511 million. Europe had three IPOs from Sweden, Malta and Ireland, with proceeds of US\$258 million.

Figure 10: Regional analysis of number of IPOs



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



“The UK IPO market has experienced momentum in recent quarters, but is clearly paused for now. Many companies continue to evaluate their strategic options, including an IPO, but the market is currently challenging due to various uncertainties. Once these uncertainties are clarified, we expect positive sentiment to return and the pipeline to improve.”

– Jass Sarai
Technology Industry Leader, PwC UK

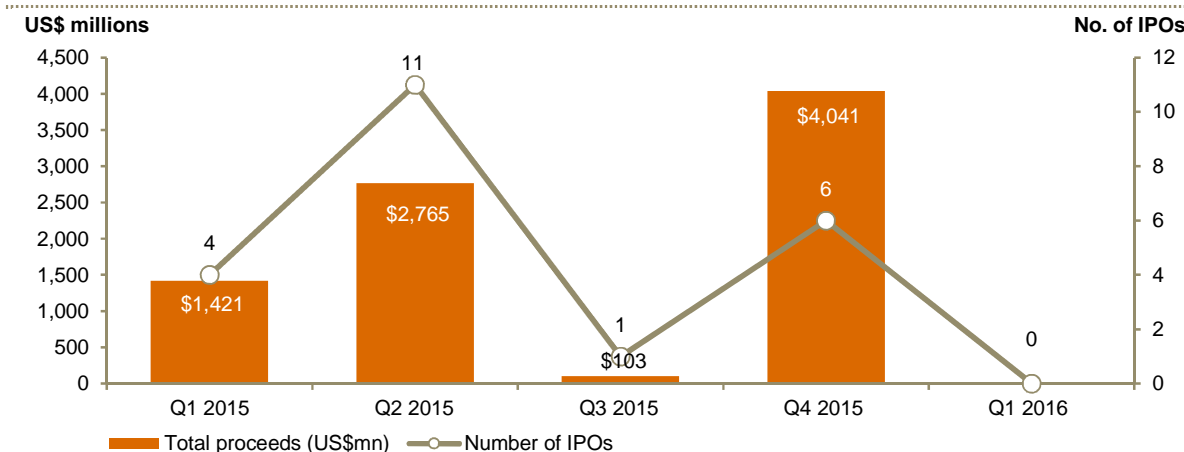
United States

The biggest setback for Q1 2016 was the fact that US tech companies avoided the IPO market. It reminded investors of the collapse of Lehman Brothers in 2008 which was followed by no tech IPOs in North America in Q1 2009. Compared to the previous quarter, Q1 2016 was dismal. In Q4 2015, the US reported six IPOs with US\$4.0 billion in proceeds.

Through most of the first quarter, the Volatility Index (VIX) remained above 20 and hovered around 27-28. The fear index reflected the volatile sentiment prevailing in the US market. The VIX hit an intra-day high of 30.90 on February 11. At some point this year, the Federal Reserve is widely expected to raise interest rates for the first time in nine years. There is no precedence for exiting a zero-rate environment, and so it is not clear how the Fed move, when it happens, will impact volatility in equity markets.

An early warning of things to come were the number of IPOs that priced below the range in the fourth quarter, an increase of 60%¹. That served as a deterrent for other tech companies planning to issue IPOs. About 22 Silicon Valley companies had filed to issue IPOs but then delayed registration while waiting for markets to improve and stabilize.²

Figure 11: US technology IPO trends



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

“With pent up demand, we expect the remainder of 2016 and 2017 to present more opportunities for companies looking to go public. Companies focused on IPO readiness, operational maturity and profitability will be best positioned when the window opens again. Finance effectiveness, tax, human resources, systems and SOX compliance are just some examples of critical areas that need to be addressed in preparation for an IPO.”

– Alan Jones
Deals Partner, PwC US

¹ <http://usblogs.pwc.com/deals/pwc-q4-2015-ipo-watch/>

² <http://www.breitbart.com/tech/2016/05/03/bursting-tech-bubble-2-o/>

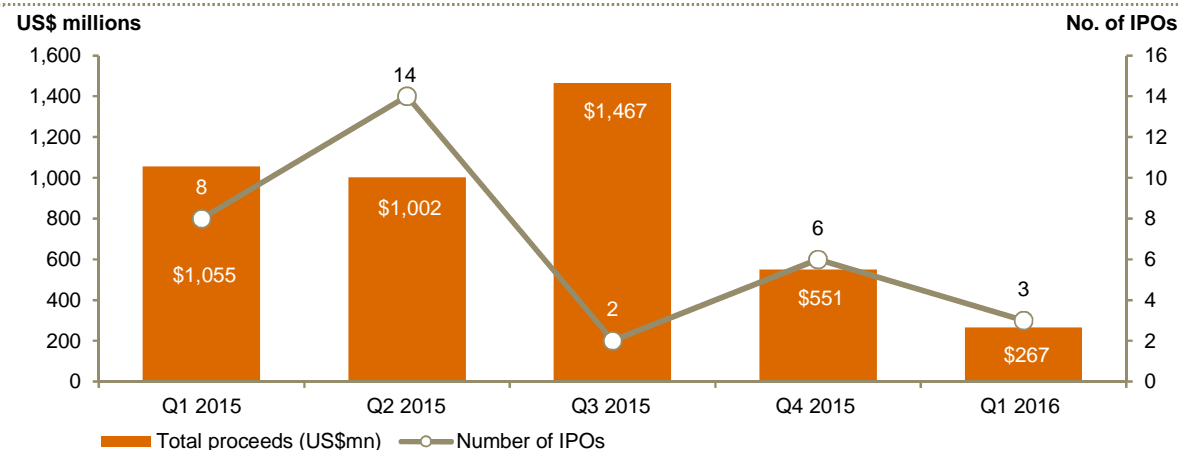
China

Asia's performance in this quarter, especially China's, was much better compared to rest of the world, evidence that investor risk and appetite vary across geographies. Chinese tech IPO activity declined in Q1. It led the quarter with three IPOs and US\$267 million in proceeds, but that was down from six IPOs and US\$551 million in proceeds in Q4 2015, or down 50% in number and 52% in proceeds. Year over year, the proceeds declined by 75%, from US\$1.1 billion and the number of IPOs dropped by 63% from eight.

To boost overall market sentiment, China has eased its monetary policies, with a further cut in reserve requirement ratios. It is expected to further support the IPO market through specific measures in times of economic downturn.

Mainland China's primary securities market is expected to gain momentum because Beijing is planning to install a "registration-based" IPO system. The timing of the moves is uncertain as China recently announced it would postpone the rollout, but in time it plans to hand over IPO vetting duties to stock exchanges, and minimize administrative intervention.

Figure 12: Chinese technology IPO trends



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

"The uncertainties in the domestic stock market were fueled by the postponement of the launch of the new board of Strategic Emerging Industries and the new registration-based system, together with the control of new share issuance. Establishment of a multi-layer capital market, especially the stratification of the New Third Board in China, would be the next highlight of the China market. However, we anticipate the number of IPOs in China's domestic capital market could reach a historical high given the significant pipeline."

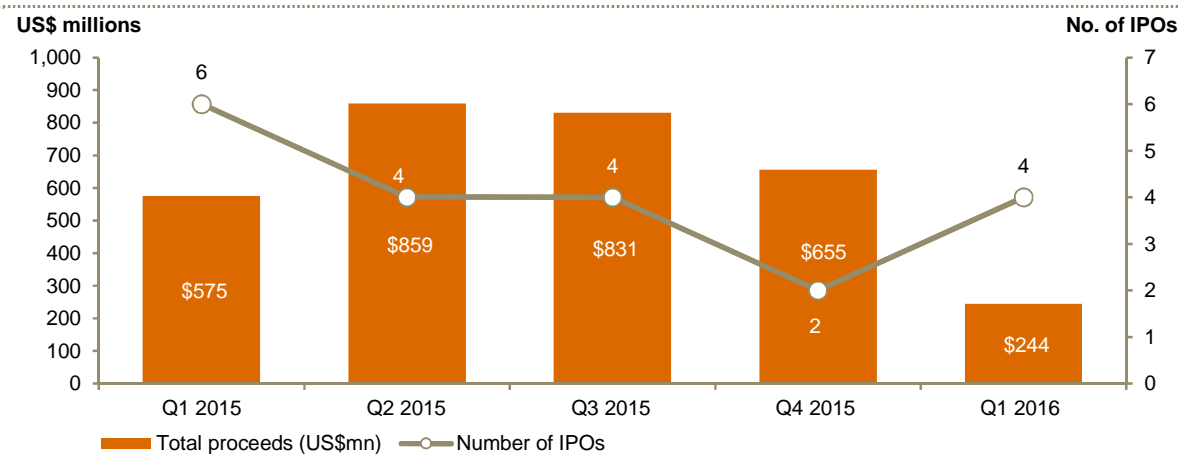
– Jianbin Gao

Technology Industry Leader, PwC China

The rest of Asia

Elsewhere in Asia, Japan and India each issued two IPOs with total proceeds of US\$244 million. It was a 100% increase in IPO numbers compared to the previous quarter, but a 63% decline in proceeds from the US\$655 million in Q4 2015. Year over year, the proceeds declined 57% and the number of IPOs dropped 33%. India's two IPOs raised US\$133 million, and Japan's two raised proceeds of US\$111 million.

Figure 13: The rest of Asia technology IPO trends



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

“PwC’s Global Technology IPO Review includes IPOs that raise US\$40 million or more. In Q1 2016, two Japanese IPOs met that threshold—Akatsuki and UMC Electronics. Akatsuki provides social gaming app services for smartphones and UMC Electronics provides electronic manufacturing services. In all, there were eight tech IPOs among the total of 22 IPOs in Japan during the quarter. The tech sector produced more IPOs than other sectors, and continues to lead the Japanese market along with the consumer service sector.”

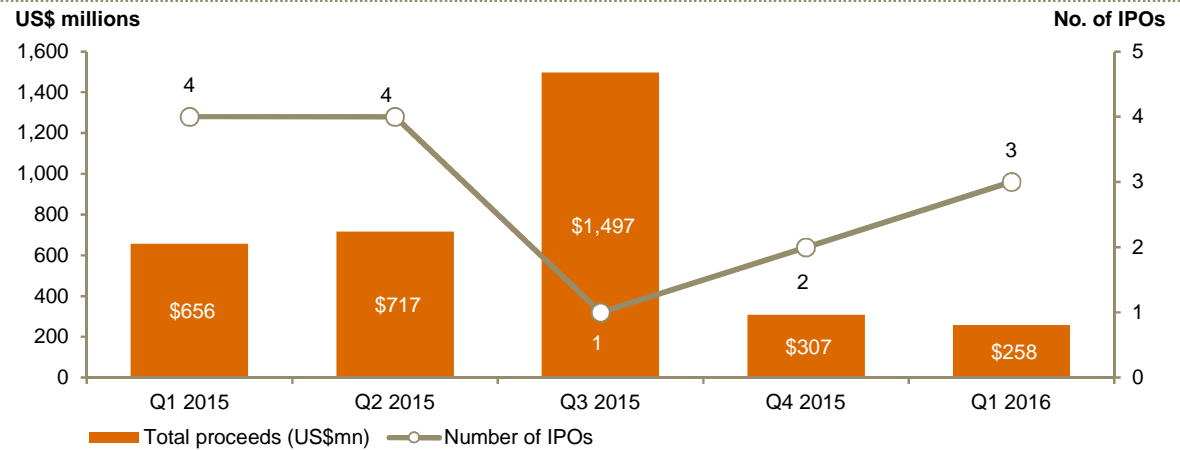
— Masaru Koshida
TMT Industry Leader, PwC Japan

Europe

As noted earlier, the LSE had no tech IPO in the quarter. From Europe overall, there were three IPOs with proceeds of US\$258 million—a sequential 16% decline in proceeds but a sequential 50% growth in number of IPOs. Compared to Q1 2015, the proceeds declined by 61% from US\$656 million and the number of IPOs declined by 25% from four. As challenging as the first quarter has been for IPO issuers in Europe, there is hope of recovery by late 2016 or early 2017.

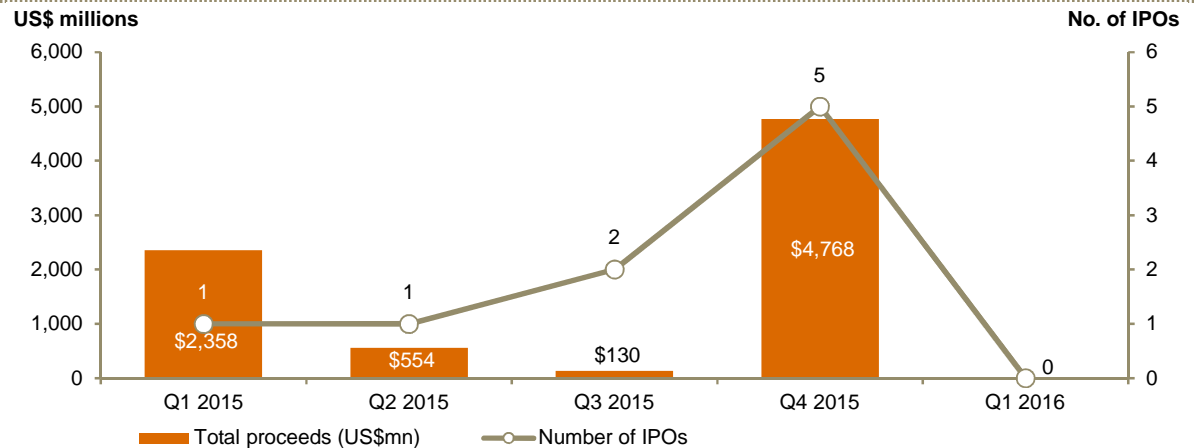
The UK's referendum to remain in or leave the EU, scheduled for June 23, 2016, has cast a wide shadow. Britain's exit from membership in the European market would call into question the viability and future of the EU in general. Until the vote, and depending how it goes, the European IPO market is not likely to improve greatly, and certainly not expected to reach the billion-dollar-plus mark in the near future.

Figure 14: Europe (excluding UK) technology IPO trends



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

Figure 15: UK tech IPO trends

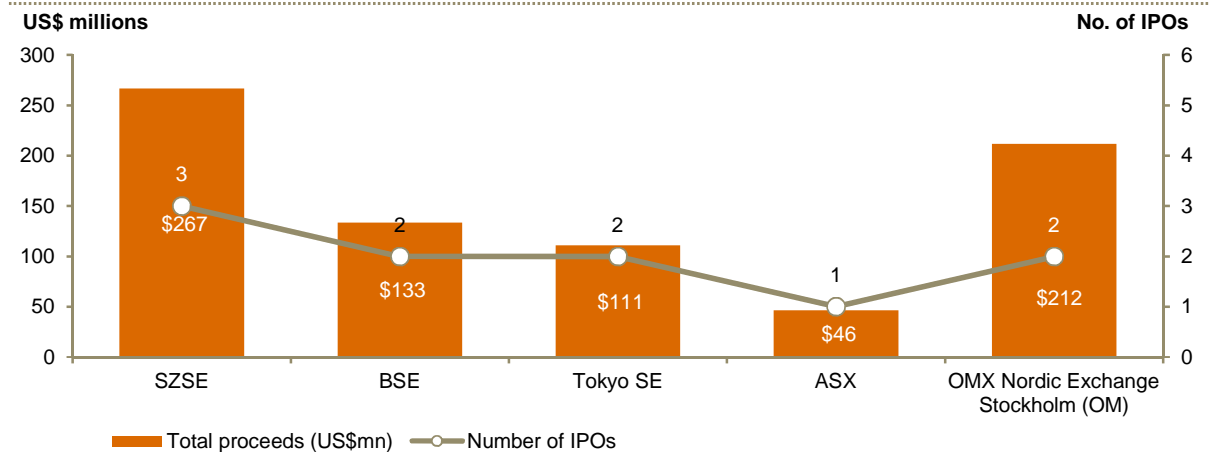


Source: S&P Capital IQ with analysis by PwC.

Stock exchange distribution – Q1 2016

In Q1 2016, the focus was on Asia, where seven of ten IPOs were listed. Shenzhen Stock Exchange led the way with three IPOs and proceeds of US\$267 million. Tokyo and Bombay Stock Exchanges reported two IPOs each with proceeds of US\$111 million and US\$133 million, respectively. As gauged by proceeds, Nordic Stock Exchange was second to Shenzhen with two IPOs raising US\$212 million. Major exchanges across the globe—LSE, NYSE, NASDAQ and Shanghai—did not issue a tech IPO in this quarter.

Figure 16: Q1 2016 stock exchange distribution



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



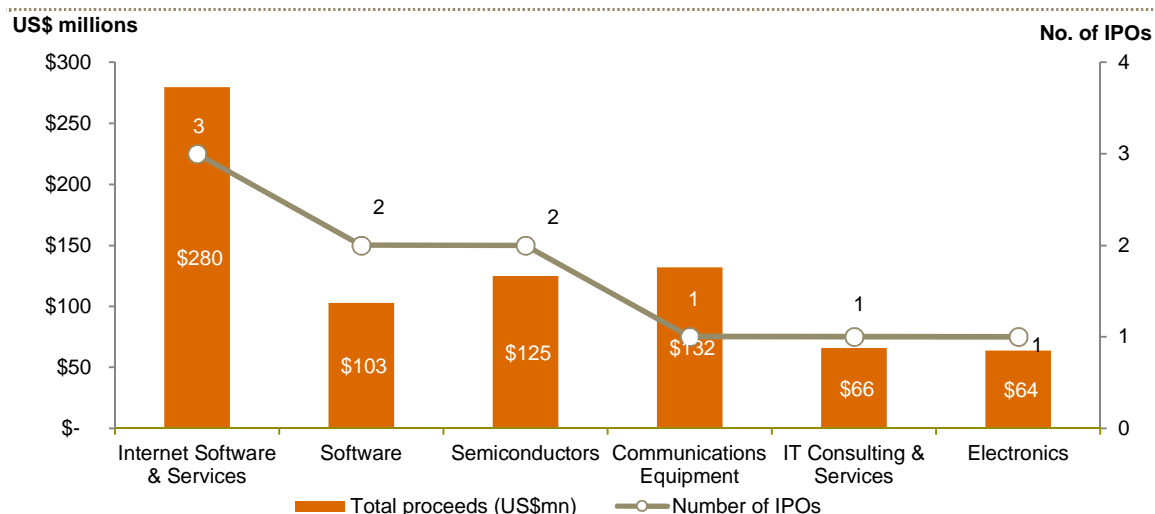
Subsector distribution – Q1 2016

In line with previous quarters, the Internet Software & Services subsector led Q1 2016 with three IPOs and US\$280 million in proceeds. The Semiconductors and Software subsectors had two IPOs each with proceeds of US\$125 million and US\$103 million, respectively. Communications Equipment had the second highest proceeds at US\$132 million—from one IPO. IT Consulting & Services and Electronics had one IPO each with proceeds of US\$66 million and US\$64 million, respectively.

Except Software and Communications Equipment, all subsectors posted year-over-year declines in numbers of IPOs, with Internet Software & Services seeing the greatest drop at a 63% decline.

The analysis of subsector distribution of IPOs reflects stalled activities in the US and UK as well as relatively less action in China. The overall weak performance of the subsectors is a result of the challenges discussed earlier in the report, primarily the global macro-economic situation, uncertainty over monetary policy in the US and Europe and fears of a British exit from the EU.

Figure 17: Subsector distribution – Q1 2016



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

Table 1: Q1 2016: Tech IPOs by region – Asia, including Australia**(Shanghai, Shenzhen, Tokyo Stock Exchange, Hong Kong Stock Exchange and Bombay Stock Exchange)***

Issue date	Company	Subsector	Proceeds (in US\$ millions)	Primary exchange	Domicile nation
3/21/2016	Tongyu Communication Inc	Communications Equipment	132.12	ShenzSME	China
3/15/2016	Changsha Jingjia Micro Co Ltd	Semiconductors	70.50	ShenzChNxt	China
3/28/2016	Infibeam Inc Ltd	Internet Software & Services	67.57	Mumbai Stock Exchange (BSE)	India
2/18/2016	Quick Heal Technologies Limited	IT Consulting & Services	65.91	Mumbai Stock Exchange (BSE)	India
3/3/2016	Eoptolink Technology Inc Ltd	Electronics	63.88	Shenzhen Stock Exchange (SZSE)	China
3/17/2016	Akatsuki Inc	Software	56.54	The Tokyo Stock Exchange (TSE)	Japan
3/15/2016	UMC Electronics Co Ltd	Semiconductors	54.41	The Tokyo Stock Exchange (TSE)	Japan
3/16/2016	Oneview Healthcare Plc	Software	46.45	Australian Securities Exchange (ASX)	Ireland

*IPOs have been classified based on the exchange where capital was raised.

Source: S&P Capital IQ with analysis by PwC

Table 2: Q1 2016 IPOs by region – Europe (Nordic Exchange)*

Issue date	Company	Subsector	Proceeds (in US\$ millions)	Primary exchange	Domicile nation
3/17/2016	LeoVegas AB	Internet Software & Services	110.67	OMX Nordic Exchange Stockholm (OM)	Sweden
2/11/2016	Catena Media plc	Internet Software & Services	101.33	OMX Nordic Exchange Stockholm (OM)	Malta

*IPOs have been classified based on the exchange where capital was raised.

Source: S&P Capital IQ with analysis by PwC

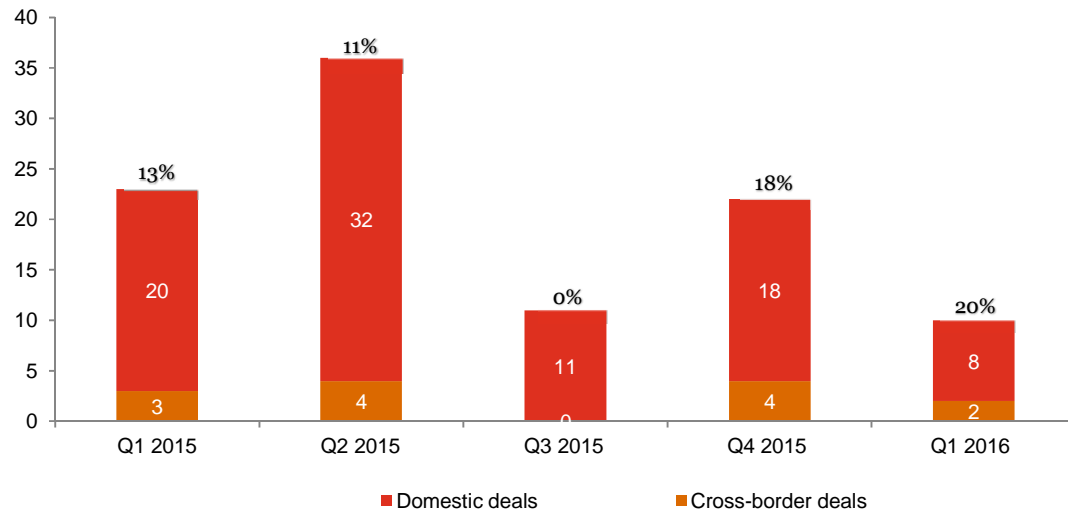


Cross-border listings – Q1 2016

Cross-border listings numbered two IPOs in this quarter, down from four in the last quarter. Catena Media Plc is domiciled in Malta and was listed on the OMX Nordic Exchange with proceeds of US\$101.3 million. Oneview Healthcare Plc, an Ireland-based company, was listed on the Australian Securities Exchange. Higher volatility in the US and UK markets is discouraging technology companies from other countries to list there.

The cross-border listing trends are in line with the previous quarter, with 20% of tech IPOs listed in a cross-border exchange. Also, if the US and UK markets had participated in the IPOs in Q1 2016, there could have been more cross-border listings. Improved equity markets forecasted for the second half of 2016 and early 2017 may help cross-border IPOs gain momentum.

Figure 18: Cross-border listings – Q1 2016



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

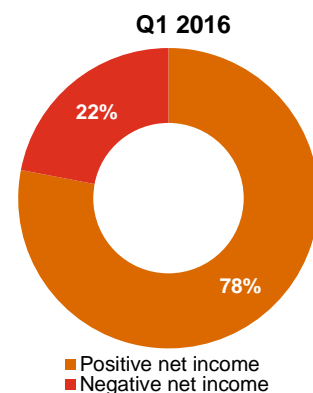
Key financials – Q1 2016

The number of tech IPOs in Q1 2016 decreased 55% quarter over quarter, with 10 deals compared to 22 in Q4 2015. Year over year, the decline was 57% from the 23 IPOs listed in Q1 2015. Of the 10 tech IPOs in Q1 2016, net income for one, LeoVegas AB, was not available. For the remaining nine IPOs, the average last twelve months' (LTM) net income in Q1 2016 was US\$10 million, with 78% (seven) of the companies reporting positive net income.

Tongyu Communication Inc, the only IPO from the Communications Equipment subsector, reported the highest net income, at US\$38 million, followed by Eoptolink Technology Inc from the Electronics subsector with a net income of US\$15 million. Oneview Healthcare Plc from the Software subsector reported the highest net loss, at US\$11 million. The only other company to report a net loss was Infibeam Inc Ltd from the Internet Software & Services subsector, with a net loss of US\$1 million.

The Software subsector, with two IPOs, reported the lowest average LTM net income for Q1 2016, with Oneview Healthcare PLC's net loss of US\$11 million offsetting Akatsuki Inc's net income of US\$3 million by a huge margin.

Figure 19: Q1 2016 tech IPOs – Net income



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

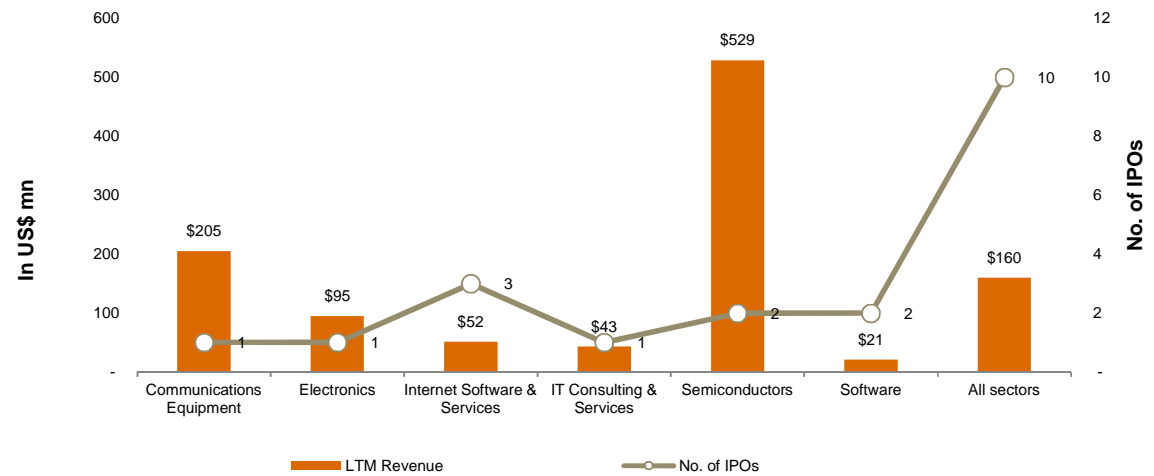
Note: Net income for LeoVegas AB is not available and the percentages have been calculated on the basis of the other nine companies that were listed.

The Semiconductors subsector listed two IPOs and reported the highest average revenue of US\$529 million in this quarter. The Communications Equipment and Electronics subsectors had one listing each with revenues of US\$205 and US\$95 million, respectively. The Internet Software & Services subsector had three listings and reported average revenue of US\$52 million, while the IT Consulting & Services subsector issued one IPO and posted revenue of US\$43 million. The Software subsector reported the lowest average revenue of US\$21 million and two listings in Q1 2016.

The Communications Equipment subsector reported the highest average LTM EBITDA, at US\$41 million, in Q1 2016, followed by Semiconductors (US\$17 million), IT Consulting & Services (US\$14 million) and Internet Software & Services (US\$4 million). Software was the only subsector to report a negative LTM EBITDA average, at US\$11 million, during the quarter. The average LTM EBITDA of the Electronics subsector was not available.

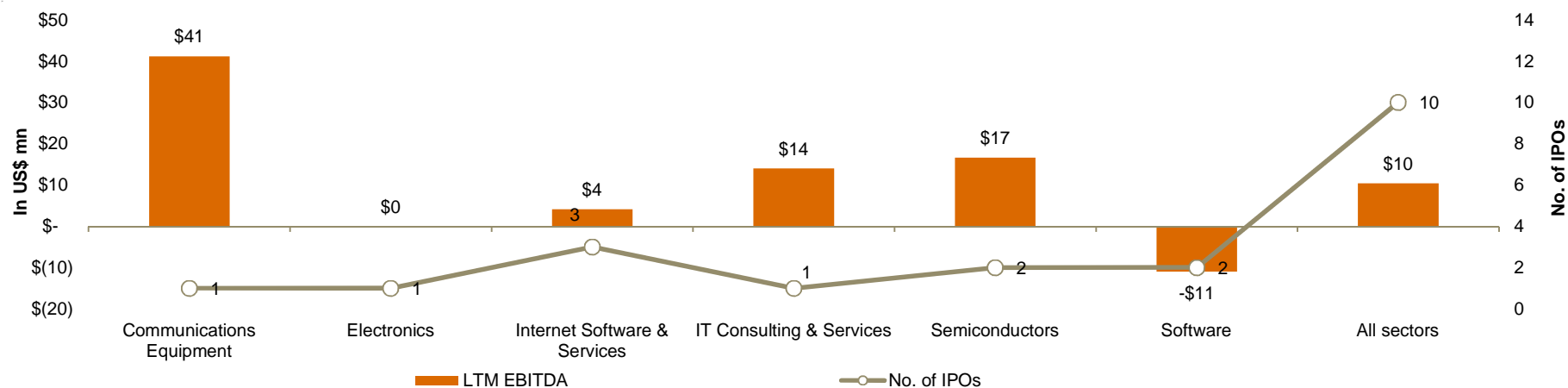
The Communications Equipment subsector also led in highest average enterprise value (EV), at US\$1 billion, followed by Internet Software & Services (US\$351 million), Semiconductors (US\$345 million), Software (US\$320 million) and IT Consulting & Services (US\$221 million). The average EV of the Electronics subsector was not available.

Figure 20: Q1 2016 –Average LTM revenue



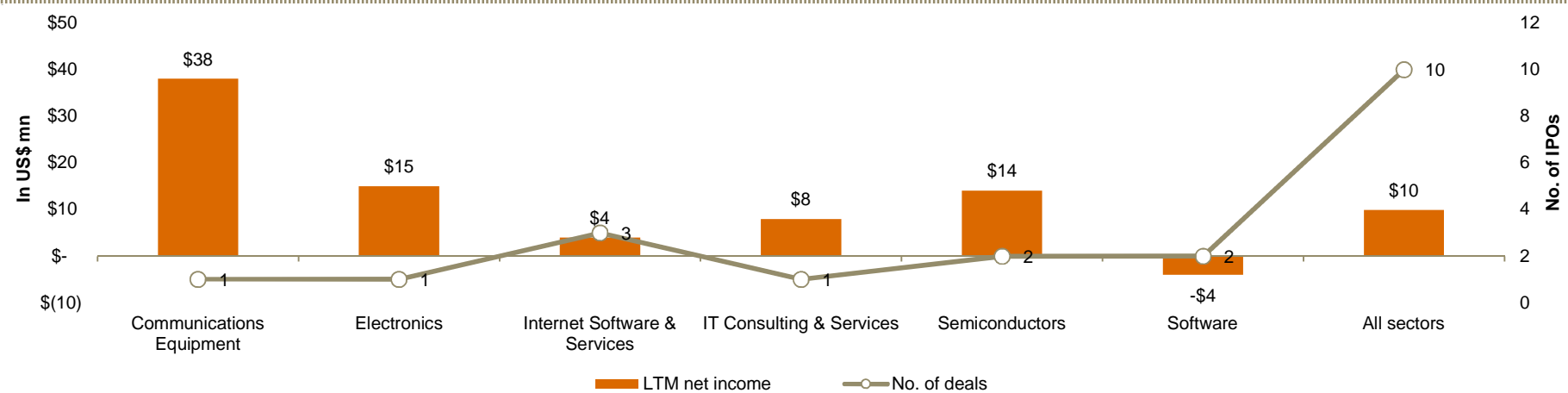
Source: S&P Capital IQ with analysis by PwC.

Figure 21: Q1 2016 – Average LTM EBITDA



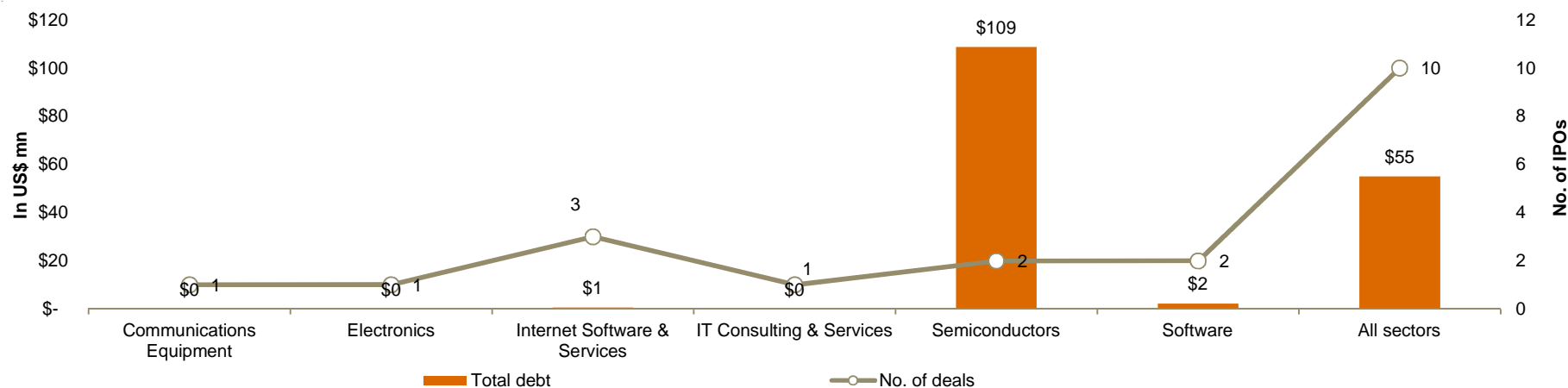
Source: S&P Capital IQ with analysis by PwC.

Figure 22: Q1 2016 – Average LTM net income



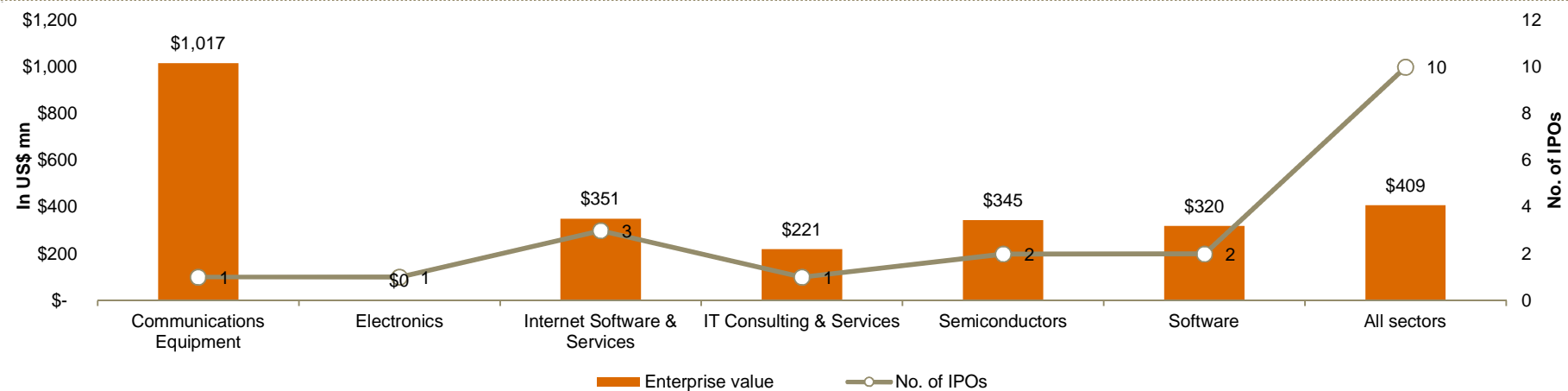
Source: S&P Capital IQ with analysis by PwC.

Figure 23: Q1 2016 – Average total debt



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

Figure 24: Q1 2016 – Average enterprise value



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

Q1 2016 Technology IPO listings: Valuation metrics

The overall proceeds of the tech IPO segment declined significantly during the quarter due to lack of any big-ticket IPOs. Q1 2016 proceeds dipped 93% to US\$769 million, from US\$10.8 billion in Q4 2015. Year over year, the Internet Software & Services (US\$280 million) and Communications Equipment (US\$132 million) subsectors reported the highest valuations during the quarter. The US and the UK did not report any tech IPOs in Q1 2016.

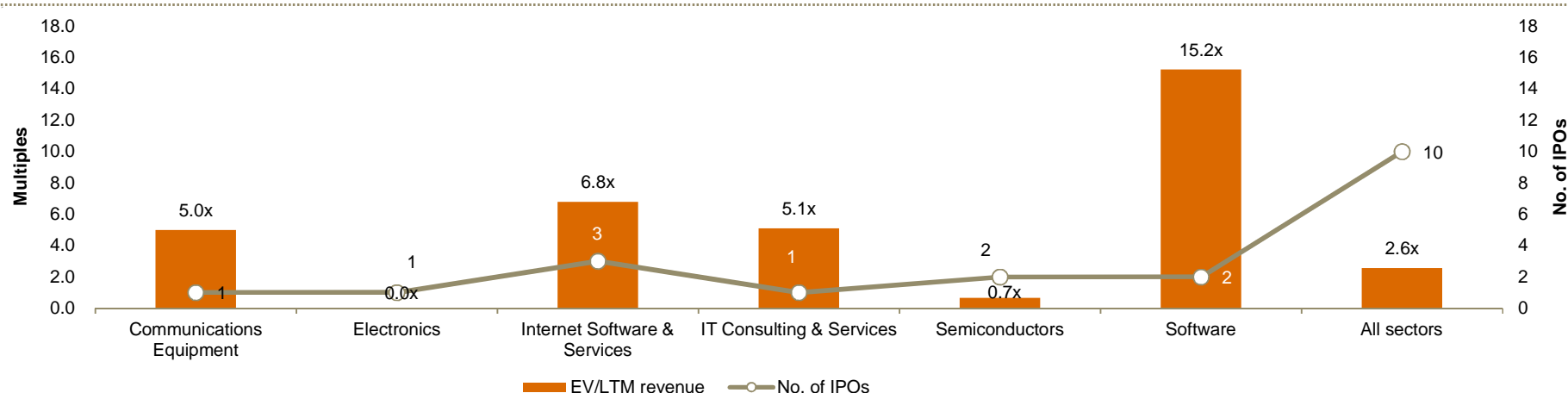
In the US, Silicon Valley companies with Unicorn valuations have put their IPO listing plans on the slow track to avoid down rounds. They are awaiting the current volatility to pass before taking in the IPO market. In the UK, VC activity was at its lowest level since Q4 2012.

In Asia, China led the way with three IPOs, raising US\$267 million. However, proceeds and number of IPOs dipped more than 50% both sequentially and year over year.

The average EV/LTM revenue for listed IPOs in Q1 2016 was 2.6x, down from 4.8x in Q4 2015. The Software subsector reported the highest revenue multiple of 15.2x, followed by Internet Software & Services with a multiple of 6.8x. IT Consulting & Services subsector companies posted an average revenue multiple of 5.1x, followed by Communications Equipment at 5.0x. Semiconductors came last at 0.7x.

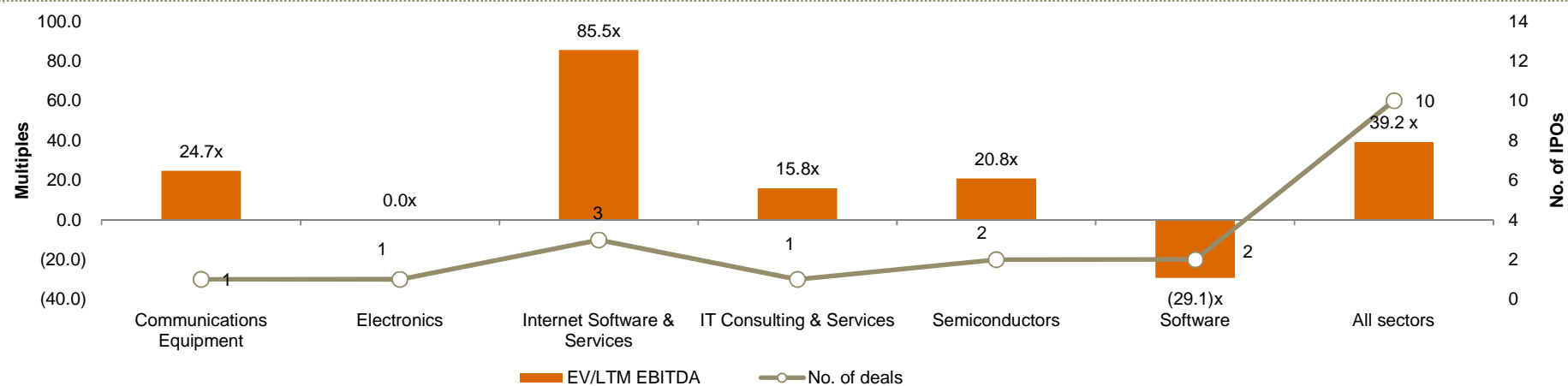
Overall, the average EV/EBITDA multiple was 39.1x in Q1 2016 compared to 30.5x in Q1 2015. The Internet Software & Services subsector led with the highest average EV/EBITDA multiple of 85.5x, followed by Communications Equipment at 24.7x. Semiconductors posted an average EV/EBITDA multiple of 20.8x, followed by IT Consulting & Services at 15.8x. The average EV/EBITDA multiple of the Electronics subsector was not available.

Figure 25: Q1 2016 EV/LTM revenue



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

Figure 26: Q1 2016 EV/LTM EBITDA



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

Top three subsectors in Q1 2016



Internet Software & Services

The Internet Software & Services subsector led the way in Q1 2016 with three IPOs raising proceeds worth US\$280 million. This represented 30% of total deals and 32% of total proceeds raised in the technology sector during the quarter.

However, on a comparative basis, the number of deals declined 63% year over year (8 IPOs in Q1 2015) and 77% quarter over quarter (13 IPOs in Q4 2015).

For average revenue, the Internet Software & Services subsector recorded a significant decline in Q1 2016, both year over year (85%) and quarter over quarter (95%).

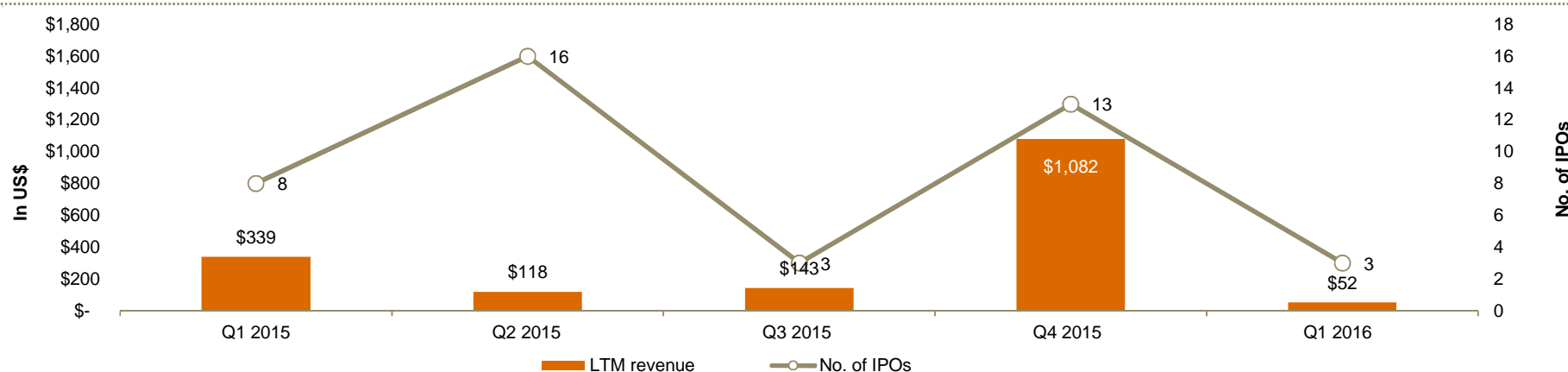
Average LTM EBITDA in Q1 2016 was just US\$4 million, an 88% decline year over year from the US\$34 million in Q1 2015 and a 99% decline quarter over quarter from the US\$309 million in Q4 2015.

On the upside, average net income in Q1 2016 was US\$4 million, breaking the string of negative average net incomes of the past five quarters.

Average debt in Q1 2016 was US\$1 million, a sharp decline of 100% both year over year and quarter over quarter.

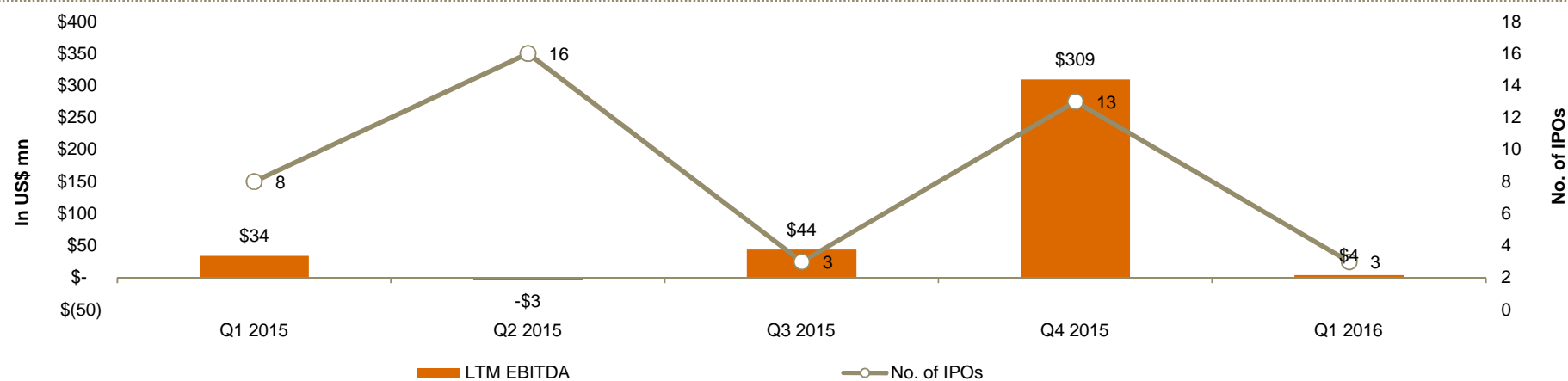
EV/LTM revenue (6.8x) grew 74% compared to Q1 2015, but declined 89% on a quarter-over-quarter basis. EV/LTM EBITDA grew 122% compared to Q1 2015, but declined 101% on a quarter-over-quarter basis.

Figure 27: Internet Software & Services – LTM revenue



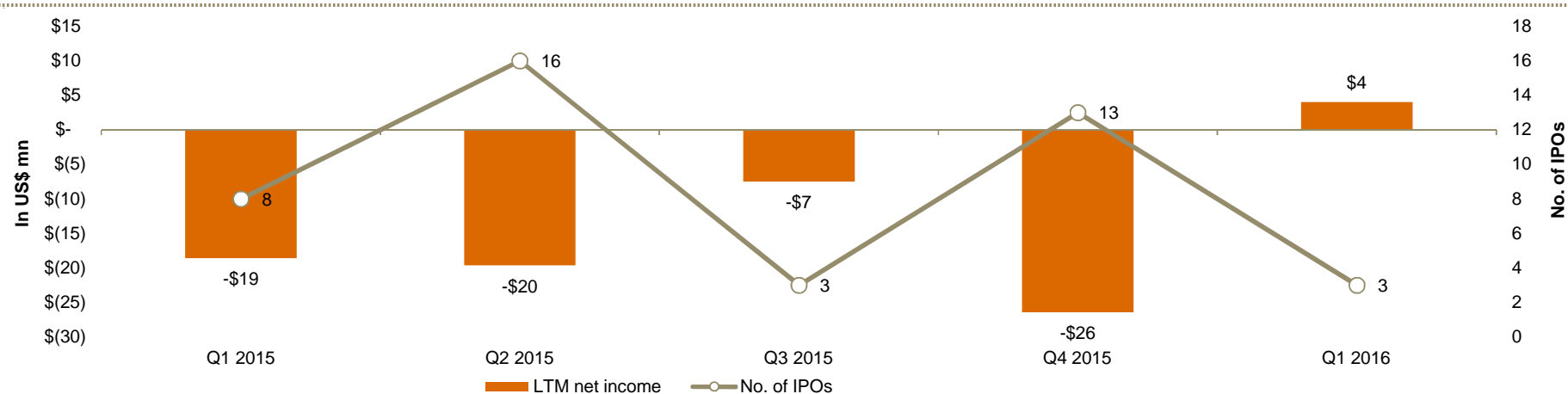
Source: S&P Capital IQ with analysis by PwC.

Figure 28: Internet Software & Services – LTM EBITDA



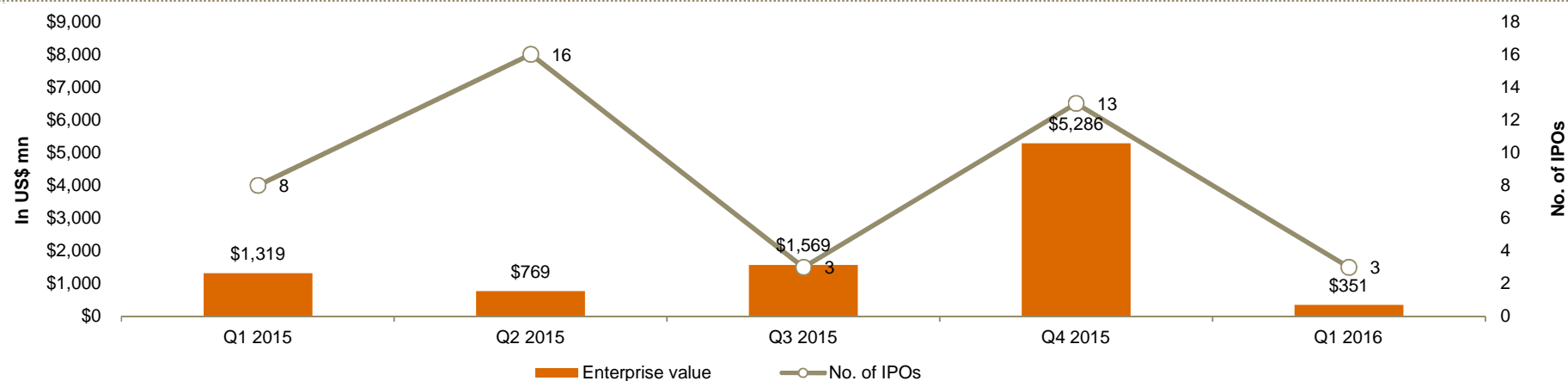
Source: S&P Capital IQ with analysis by PwC.

Figure 29: Internet Software & Services – LTM net income



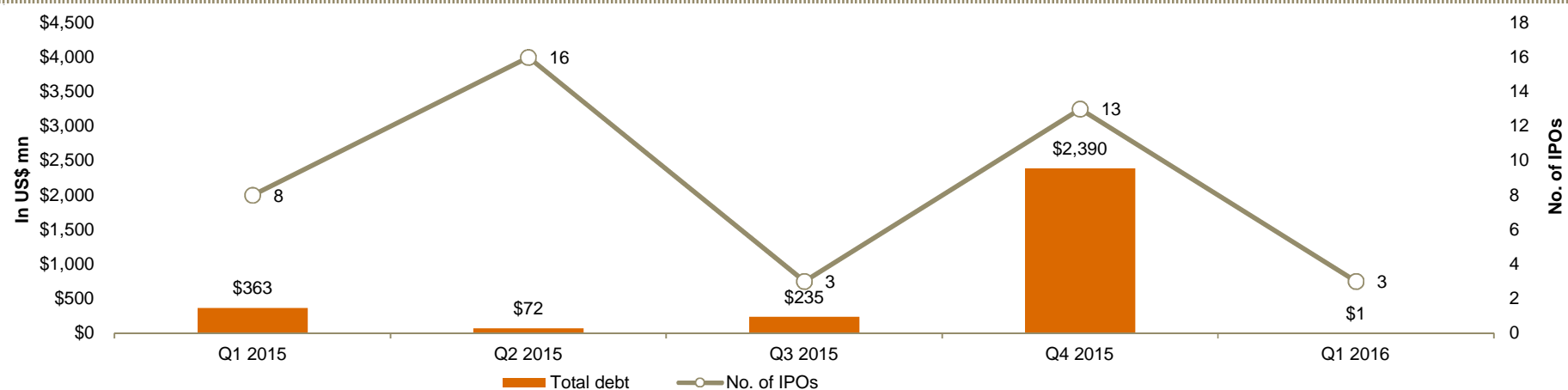
Source: S&P Capital IQ with analysis by PwC.

Figure 30: Internet Software & Services – Enterprise value



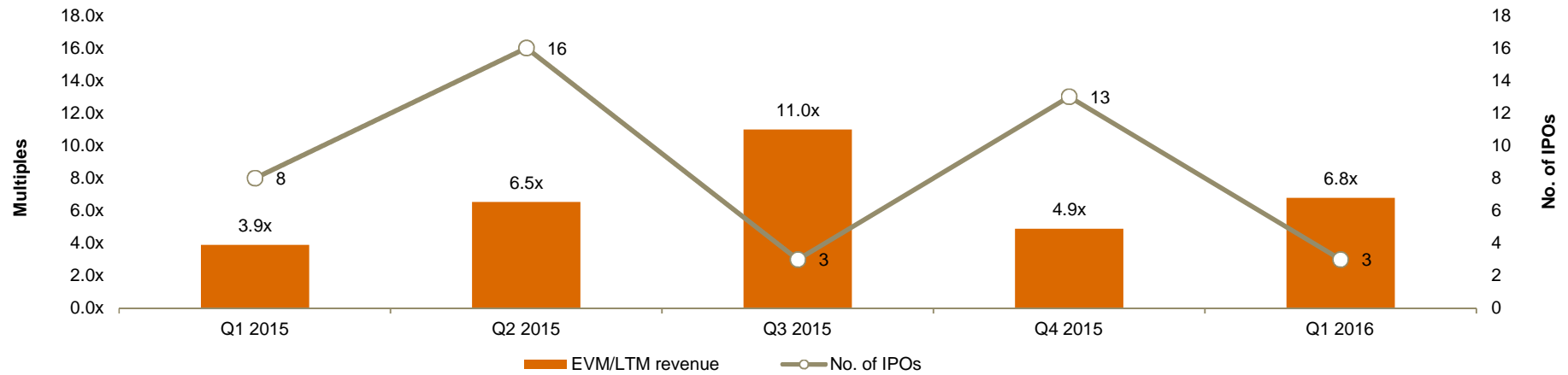
Source: S&P Capital IQ with analysis by PwC.

Figure 31: Internet Software & Services – Total debt



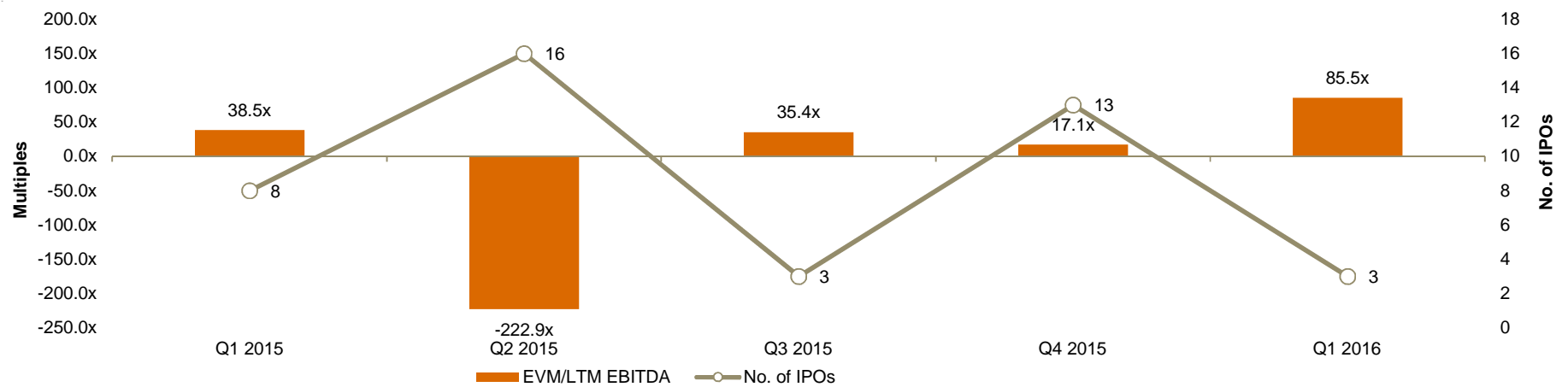
Source: S&P Capital IQ with analysis by PwC.

Figure 32: Internet Software & Services – EV/LTM revenue



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

Figure 33: Internet Software & Services – EV/LTM EBITDA



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



Software

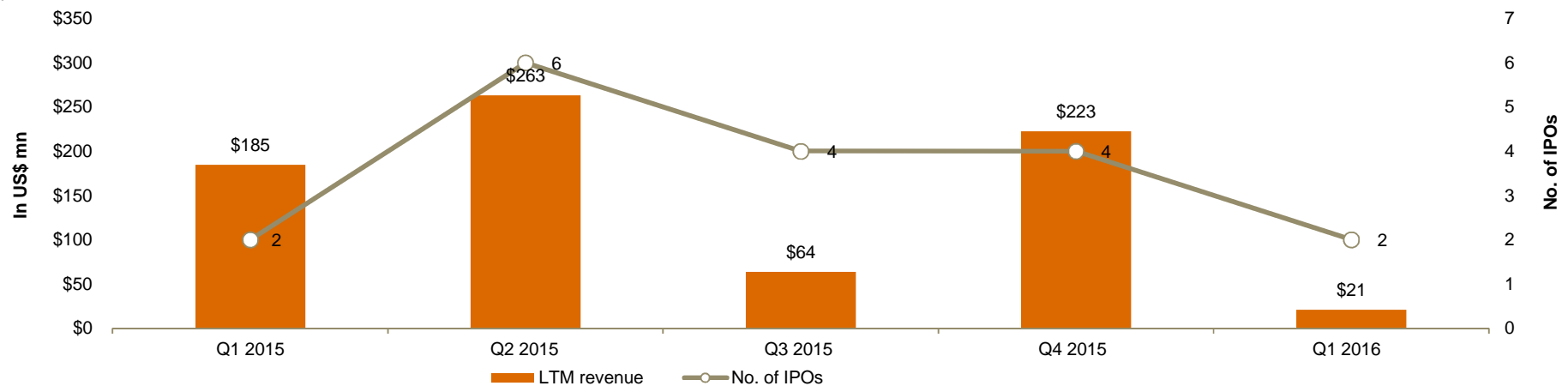
The subsector recorded average revenue of US\$21 million in Q1 2016, a year-over-year decline of 89% and a quarter-over-quarter decline of 91%.

Average LTM EBITDA in Q1 2016 was negative at US\$11 million. LTM EBITDA was positive in both Q4 2015 (US\$31 million) and Q1 2015 (US\$36 million).

Software's average EV declined 88% on a quarter-over-quarter basis from US\$2.7 billion in Q4 2015 to US\$320 million in Q1 2016. Compared to the US\$2.0 billion in Q1 2015, average EV declined 84% year over year.

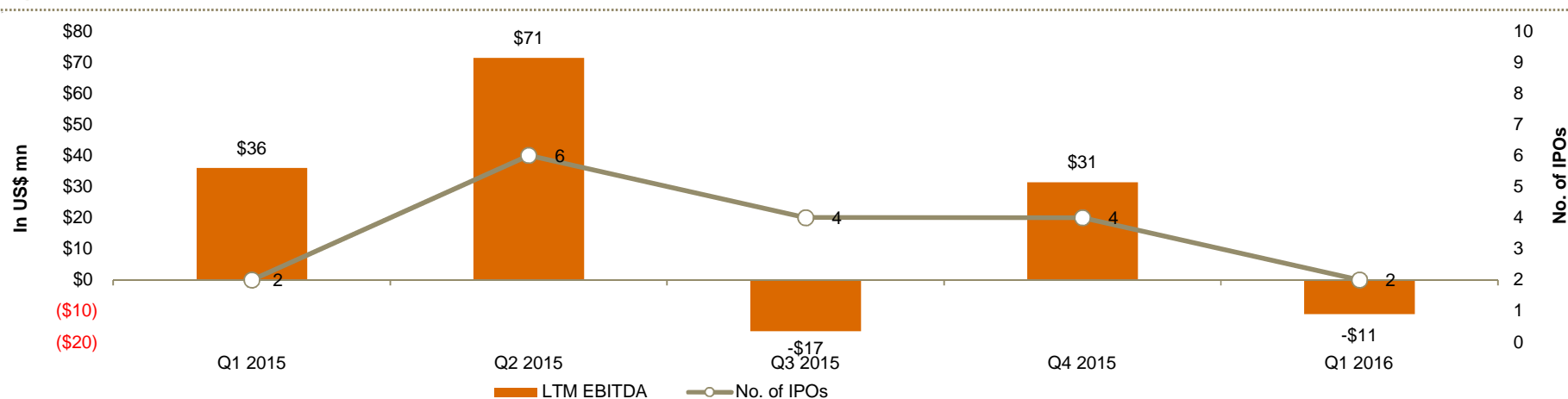
In Q1 2016, the subsector had a total debt of US\$2 million compared to zero debt in both Q4 2015 and Q1 2015. The valuation multiple of EV/LTM revenue Can (15.2x) increased 43% and 27% compared to last year and sequentially, respectively.

Figure 34: Software – LTM revenue



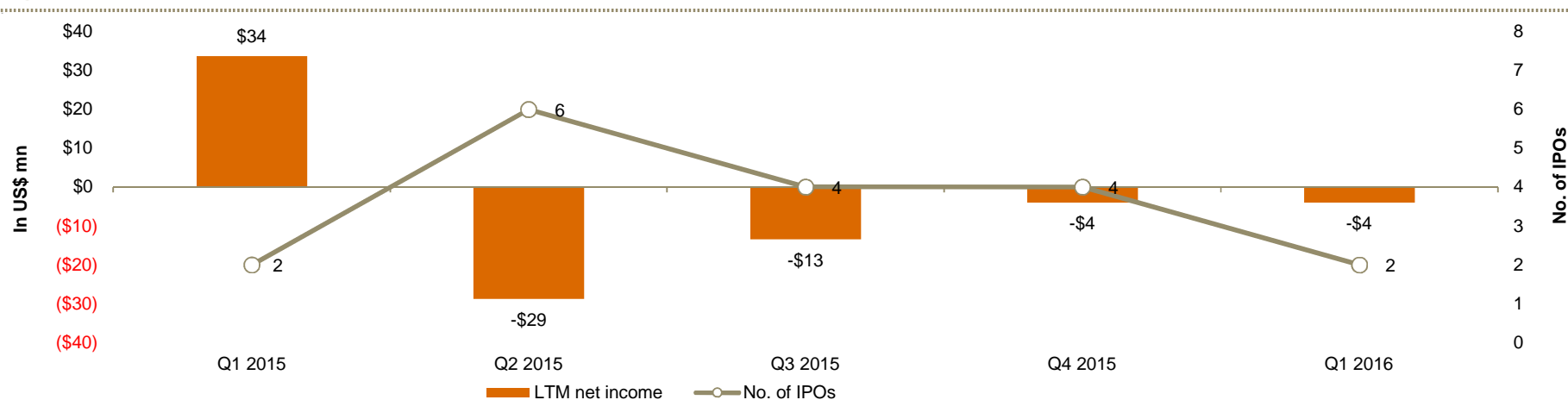
Source: S&P Capital IQ with analysis by PwC.

Figure 35: Software – LTM EBITDA



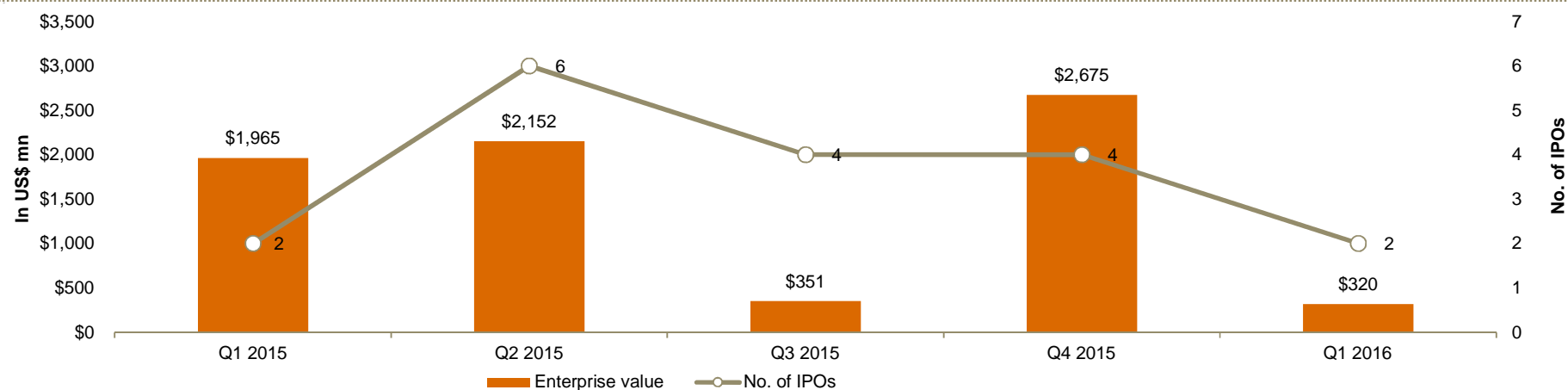
Source: S&P Capital IQ with analysis by PwC.

Figure 36: Software – LTM net income



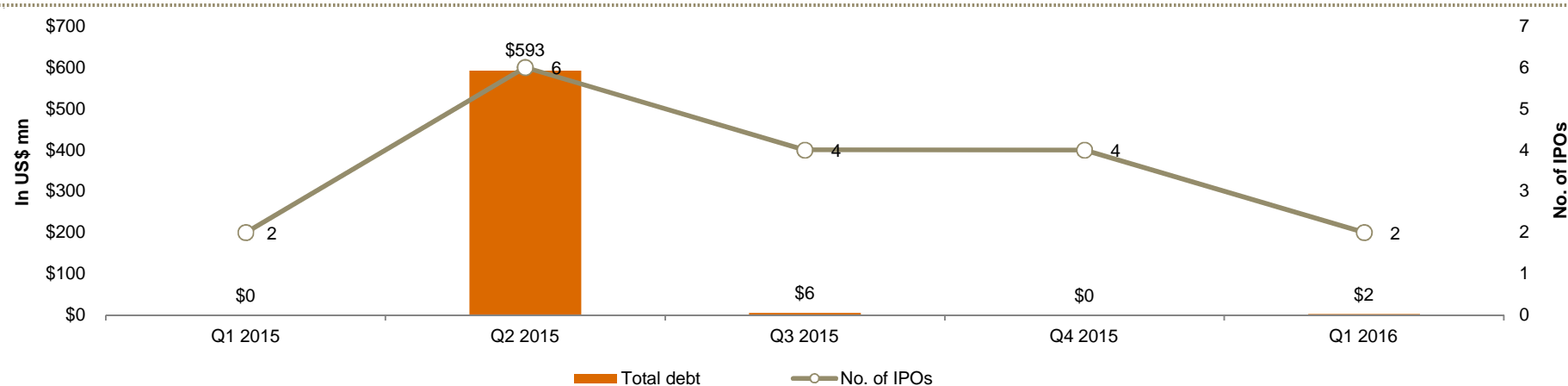
Source: S&P Capital IQ with analysis by PwC.

Figure 37: Software – Enterprise value



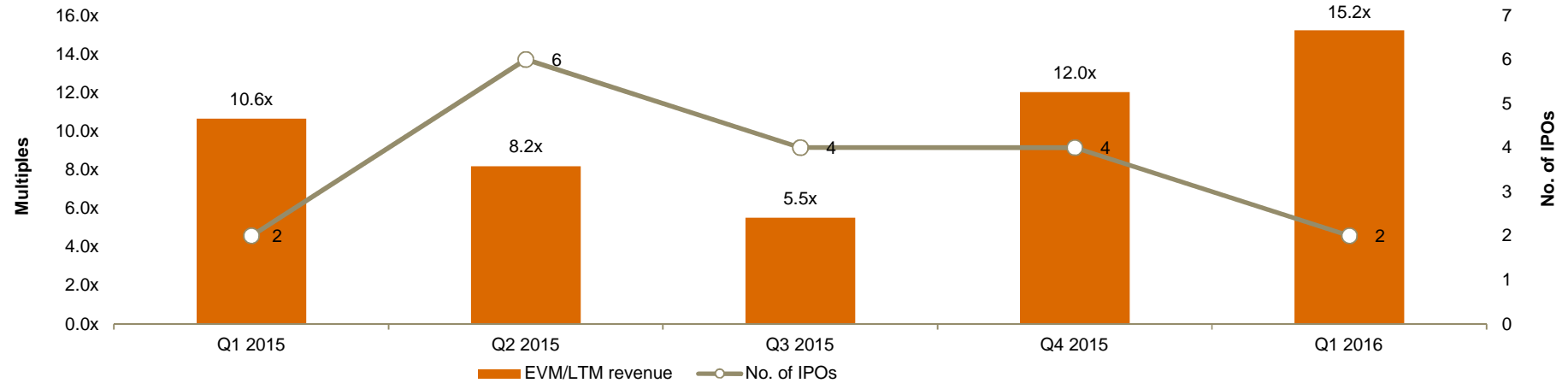
Source: S&P Capital IQ with analysis by PwC.

Figure 38: Software – Total debt



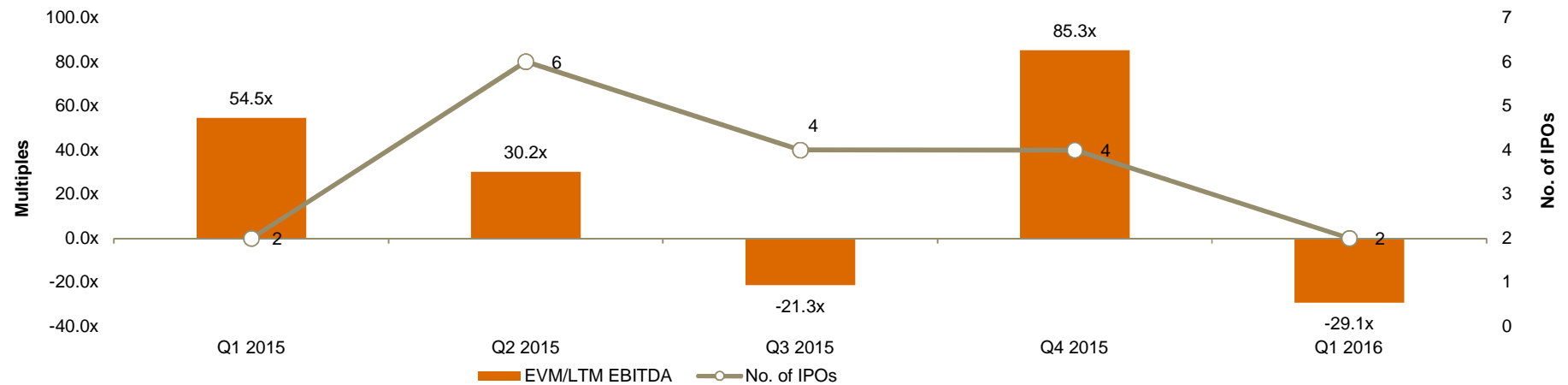
Source: S&P Capital IQ with analysis by PwC.

Figure 39: Software – EV/LTM revenue



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

Figure 40: Software – EV/LTM EBITDA



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



Semiconductors

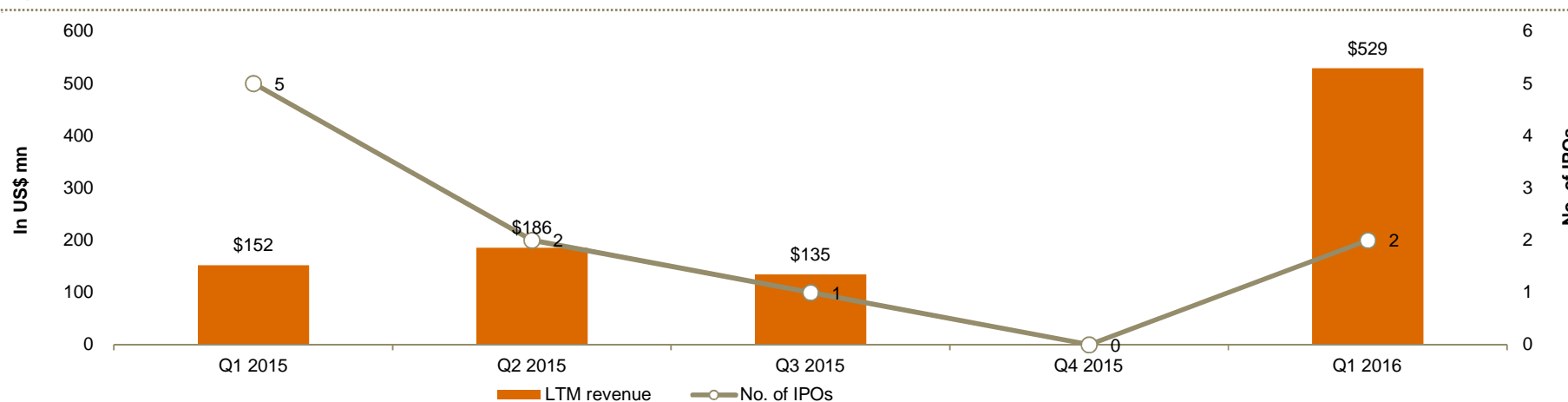
Among the few bright spots in Q1 2016 was this subsector. It made a comeback with two IPOs after a hiatus in the previous quarter. However, on a year-over-year basis, this was less than the five IPOs in Q1 2015.

Average LTM revenue in Q1 2016 was US\$529 million, a significant improvement of 247% over the US\$152 million in Q1 2015. On the other hand, average LTM EBITDA, at US\$17 million, was down 27% over the US\$23 million in Q1 2015. Consequently, average LTM net income, at US\$14 million, was down 14% over the US\$16 million in Q1 2015.

The subsector's EV dropped 73% in Q1 2016 to US\$345 million from US\$1.3 billion in Q1 2015. Total debt for the quarter stood at US\$109 million. This was the second highest since it recorded a debt of US\$186 million in Q4 2014. On a year-over-year basis, total debt was up 265% compared to the US\$30 million in Q1 2015.

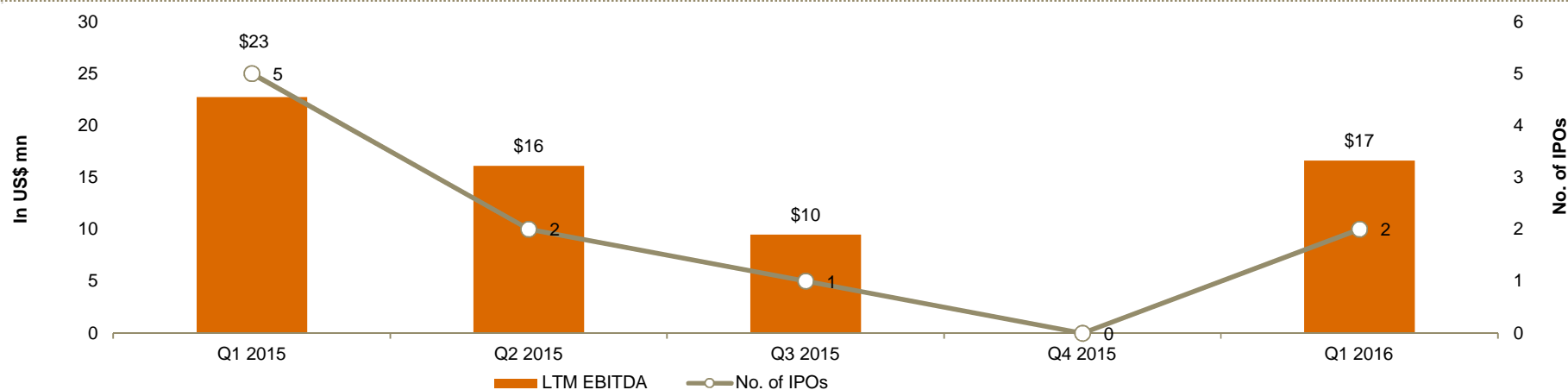
The EV/LTM revenue multiple for the subsector declined 92% from 8.43x in Q1 2015 to 0.7x in Q1 2016. EV/LTM EBITDA also declined 63%, from 56.44x in Q1 2015 to 20.8x in Q1 2016.

Figure 41: Semiconductors – LTM revenue



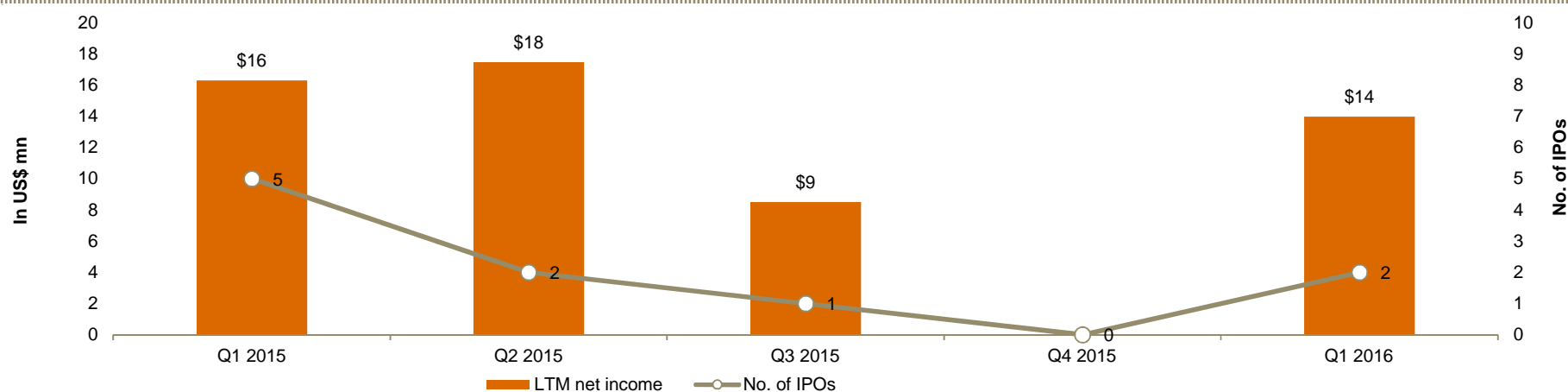
Source: S&P Capital IQ with analysis by PwC.

Figure 42: Semiconductors – LTM EBITDA



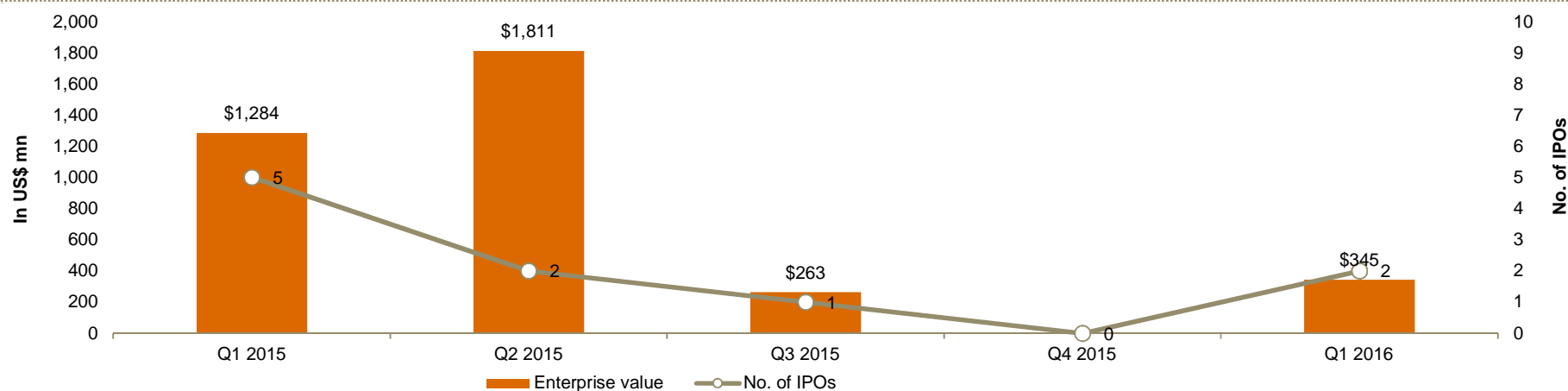
Source: S&P Capital IQ with analysis by PwC.

Figure 43: Semiconductors – LTM net income



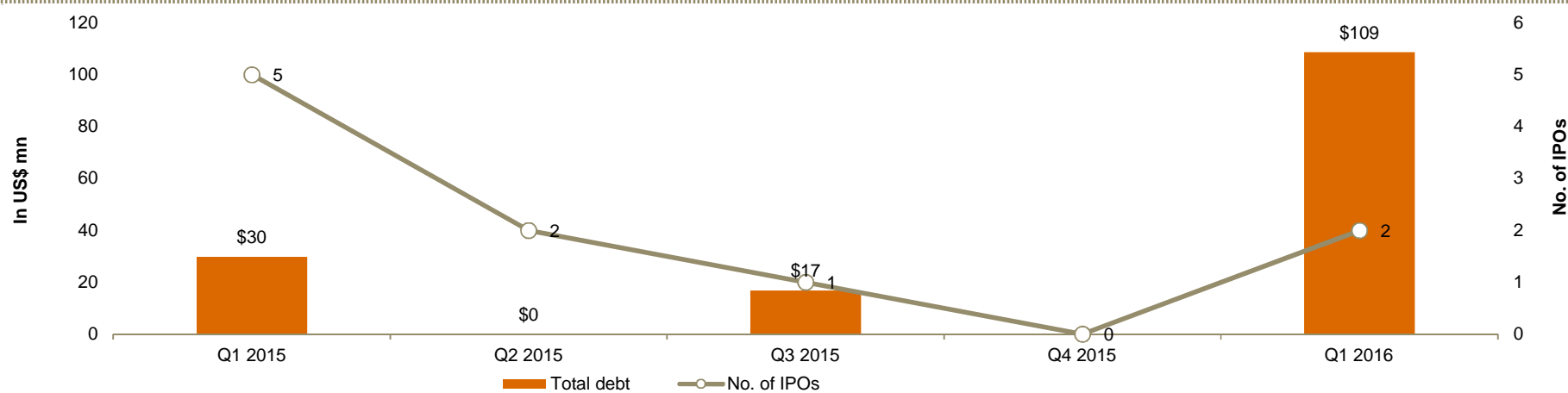
Source: S&P Capital IQ with analysis by PwC.

Figure 44: Semiconductors – Enterprise value



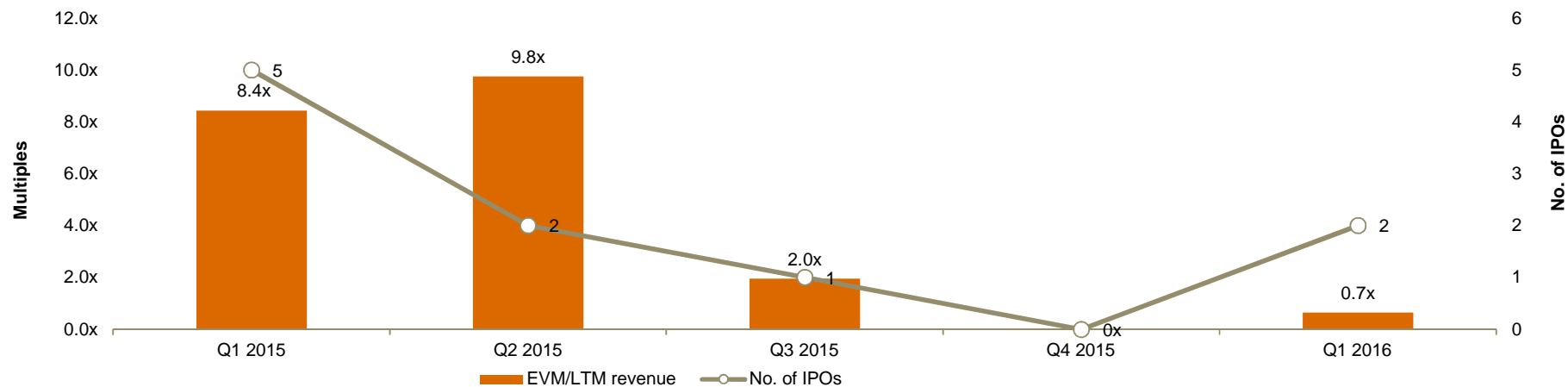
Source: S&P Capital IQ with analysis by PwC.

Figure 45: Semiconductors – Total debt



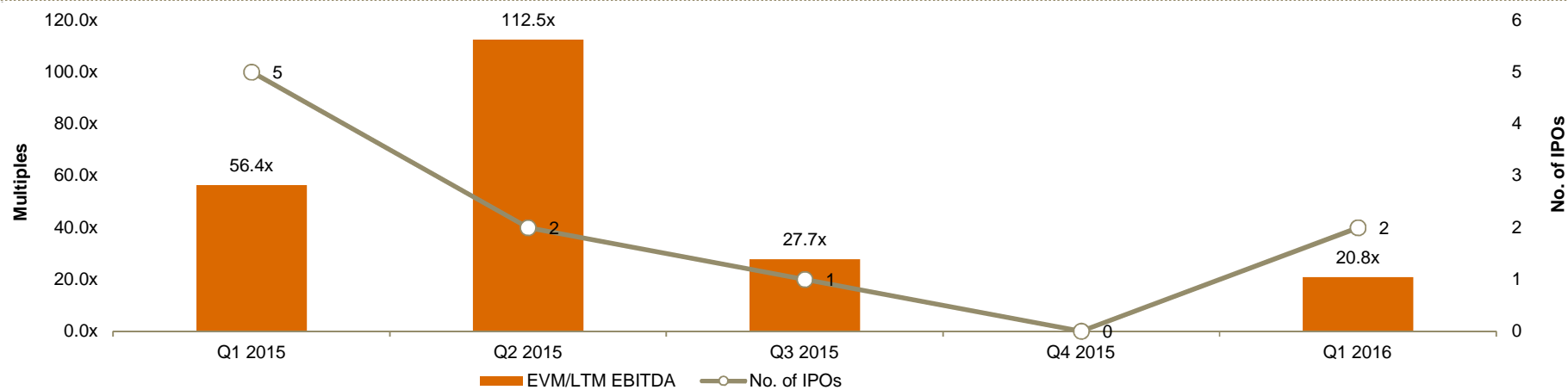
Source: S&P Capital IQ with analysis by PwC.

Figure 46: Semiconductors – EV/LTM revenue



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

Figure 47: Semiconductors – EV/LTM EBITDA



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

Methodology

The Global Technology IPO Review for Q1 2016 is based on PwC's analysis of transaction data extracted from S&P Capital IQ. The analysis considers IPOs across all countries during the period 1 January 2016 to 31 March 2016 (Q1), and from 2010-2014. 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 Computers 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 twelve months

Figures are rounded to one decimal.



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.

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