

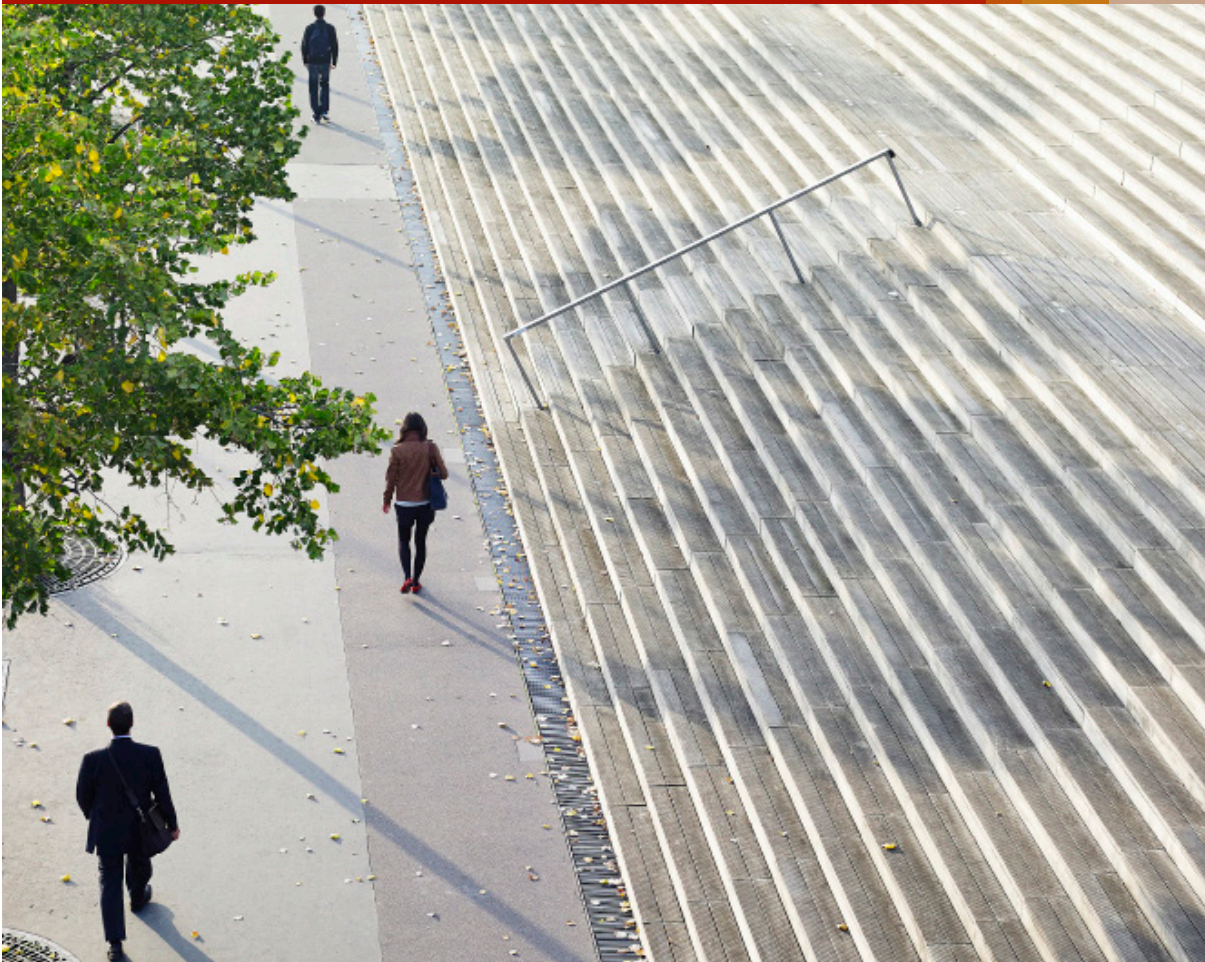
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Global Technology IPO Review Full-year and Q4 2013

Technology Institute

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

February 2014



pwc

The comeback



Raman Chitkara
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Industry Leader
PricewaterhouseCoopers LLP
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Welcome to the full-year and fourth quarter 2013 issue of PwC's Global Technology IPO Review. It's been some time since we've seen a strong technology IPO market. The past couple of years have started on a strong note but ended in disappointment. I'm happy to say that trend took an abrupt turnabout in 2013. Even in the face of an IPO freeze in China, 2013 ended on a high note, with Q4 contributing almost half to total annual IPO proceeds, due in part to Twitter's IPO.

As you'll see in the pages that follow, increased technology IPO activity occurred in many markets around the globe as competition across all sectors and, increasingly, all markets is driving demand for software solutions that digitise products and services. The outlook for 2014 is positive, not only due to the momentum established in Q4, but also because of the news from China that the authorities have lifted the freeze imposed in late 2012 on Chinese IPOs.

Please reach out to me or any member of our global technology team listed at the back of this document if you would like to discuss these findings and how they may impact your business.

Sincerely,

A handwritten signature in black ink that reads "Raman". The signature is written in a cursive style and is positioned above a horizontal line.

Raman Chitkara

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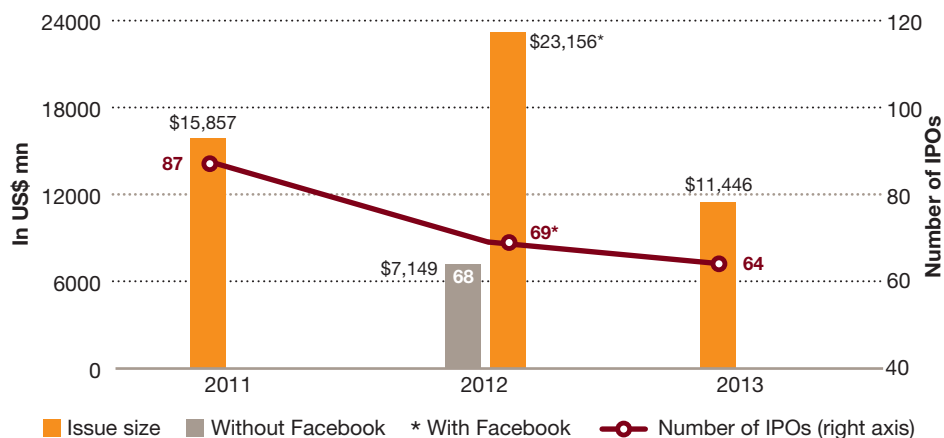
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Executive summary

After a muted second half performance in prior years, rising investor confidence and a generally improving economic environment contributed to robust IPO activity in the second half of 2013. Momentum in the capital markets led to the best IPO performance of the year in Q4 and set the stage for a strong 2014. Across the globe, 64 technology companies went public and garnered US\$11.4bn in total proceeds in 2013.¹

While year over year the number of technology IPOs declined from 69 in 2012 to 64 in 2013, excluding the May 2012 Facebook IPO, which raised \$US16bn, 2013 proceeds increased a substantial 60%.

Figure 1: Technology IPOs 2011–2013



Source: Dealogic with analysis by PwC.

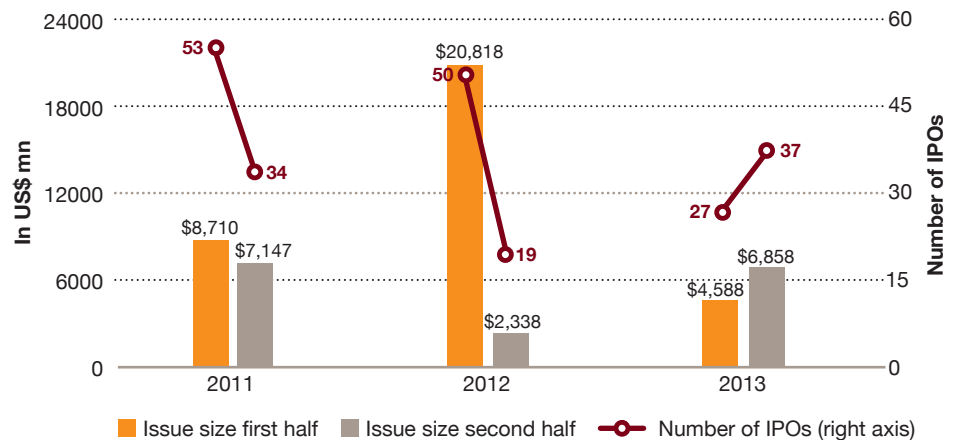
“Momentum in Q4 resulted in a strong end to 2013 and has set the stage for 2014 to be a very promising year. Improved investor confidence, healthy capital markets, the reopening of the China IPO market and improved economic conditions are all anticipated to positively influence IPO activity throughout 2014.”
– Raman Chitkara, Global Technology Industry Leader, PwC

¹ Issue size greater than US\$40mn

Q4 surge reverses the past two-year trend

In 2013, the second half witnessed 58% of IPO volume and 60% of proceeds. In the fourth quarter alone, 25 IPOs were priced compared to eight in Q4 2012, and Q4 contributed almost half (49%) of total 2013 proceeds, raising US\$5.6bn, a four-fold increase over Q4 2012. In contrast, 2012 and 2011 technology IPO activity was concentrated in the first half of the year, with significant declines in the second half: In 2012, 72% of volume and 90% of proceeds occurred in the first half, and in 2011, the first half recorded 61% of volume and 55% of proceeds.

Figure 2: Comparison of 1st versus 2nd half of year



Source: Dealogic with analysis by PwC.

Chinese technology IPOs subdued in 2013

Chinese companies accounted for 13% of technology IPOs in 2013 as compared to 48% in 2012 and 56% in 2011. China's contribution to the total population was negatively impacted by the freezing of the local IPO market in late 2012 by the China Securities Regulatory Commission (CSRC). Consequently, no technology IPOs were listed on Chinese stock exchanges in 2013 compared to 46% of the total volume in 2012 and 43% in 2011. With the CSRC announcing in late 2013 it would resume IPO approvals, the year 2014 is anticipated to be robust for Chinese IPOs.

Improving market conditions in Europe jumpstart IPO resurgence

Europe witnessed lower volatility and improving market indices, providing a stable platform for technology IPOs. A total of US\$1.5bn was raised through eight deals across the UK, Germany, France, Switzerland and Luxembourg in 2013 as compared to US\$352mn and three deals in 2012 (France, Ireland and Netherlands) and US\$1.8bn and five deals in 2011 (Netherlands, France and Sweden).

Increasingly digital economy raises interest and demand for Software and Software Services companies

From a subsector perspective, Internet Software & Services and Software recorded the most deals in 2013, together contributing 66% of total deal volume and 64% of total proceeds. This compares to 49% of total deals and 87% of total proceeds in 2012 and 44% of total deals and 55% of total proceeds in 2011. As the world increasingly goes digital, the demand for software continues to rise and as evidenced by continued pricing of IPOs of software companies. Price competition in devices is leading hardware companies to deliver more value-added software and/or services and companies traditionally seen outside the technology sector are digitising products and services with software. On a quarterly basis, the Internet Software & Services and Software subsectors contributed more than 68% (17 deals) of total deals and 75% (US\$4.2bn) of total proceeds in Q4 2013, compared to six IPOs (75% of total deals) contributing 30% (US\$399mn) of total proceeds in Q4 2012 and eight IPOs contributing 38% of deals and 60% (US\$3.4bn) of total proceeds in 2011.

Full-year 2013 technology IPO summary

In contrast to the past two years, 2013 global IPOs ended on a strong uptick in Q4. This, in combination with the reopening of the Chinese IPO market, suggests 2014 will remain active and that we may see a return to prior years' first half volumes and proceeds.

Figure 3: 2013 Global technology IPOs

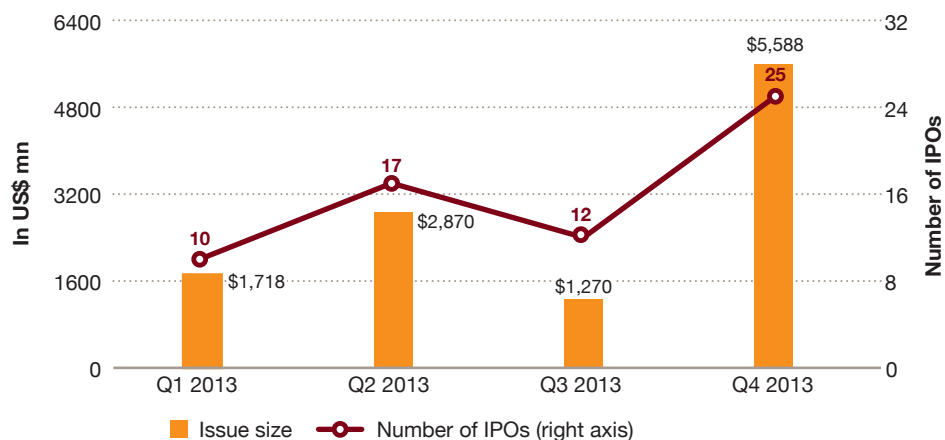


Figure 4: 2012 Global technology IPOs

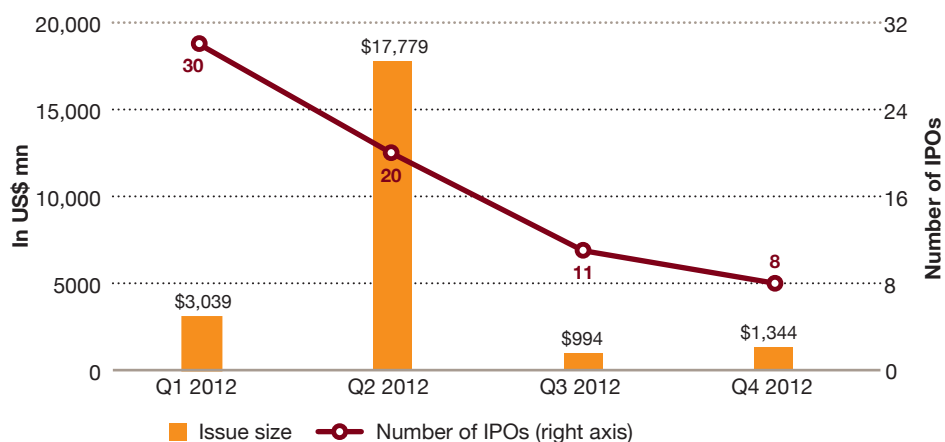
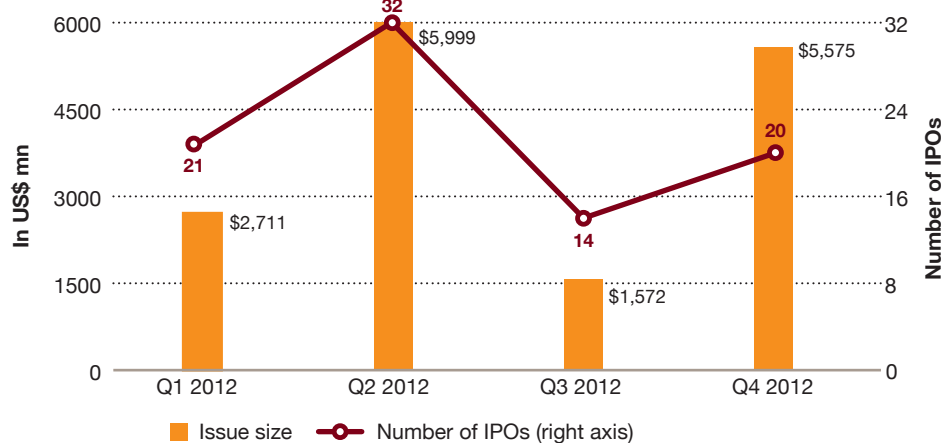


Figure 5: 2011 Global technology IPOs

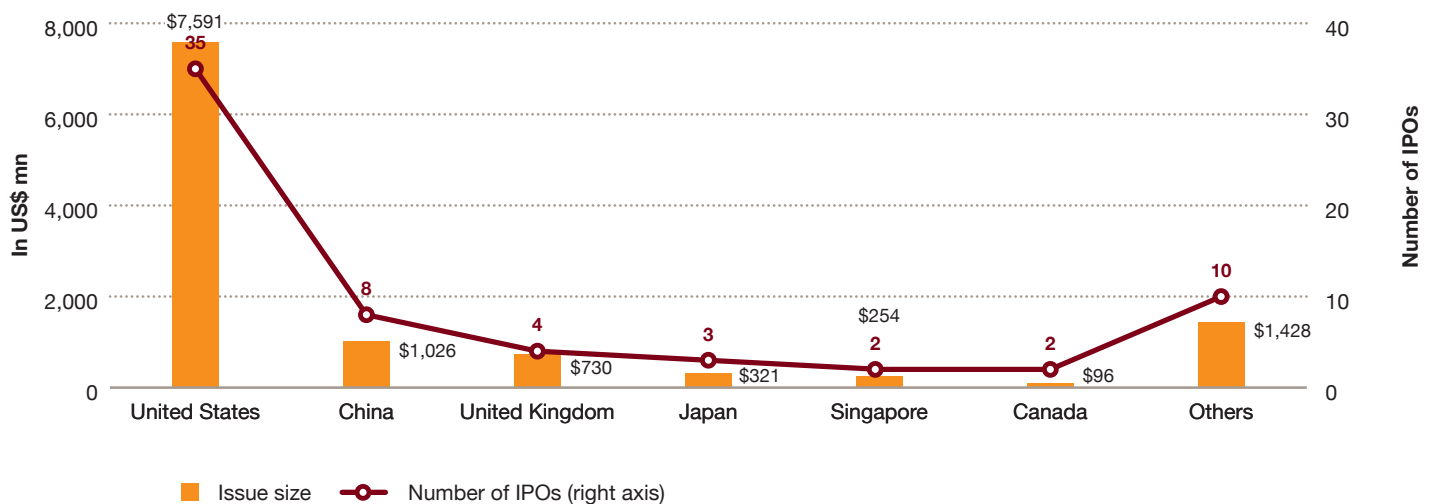


Full-year 2013 technology IPOs – Geographic distribution²

Relatively speaking, US IPOs appeared strong due to the IPO freeze in China. US companies led technology IPOs with 66% of total proceeds and 55% of total deals. This compares to 88% of total proceeds (primarily due to Facebook IPO of US\$16bn) and 46% of total deals in 2012. The US also recorded the top five technology IPOs of the year, including the only IPO over US\$1bn, Twitter Inc.

Only eight Chinese technology companies went public in 2013 raising a total of US\$1.03bn, as compared to 33 companies in 2012 raising a total of US\$2.44bn. Of the eight Chinese technology IPOs in 2013, three took place on NASDAQ, two on NYSE and three on the Hong Kong exchange. Internet Software & Services and Software were the top performing subsectors with four and three IPOs respectively.

Figure 6: Full-year 2013 geographic distribution



Source: Dealogic with analysis by PwC.

“The US technology IPO market ended the year strongly thanks to rising investor confidence and an improving economic outlook. The pace of innovation both within and outside of the technology industry is fueling demand for new Internet and software technologies, which drives investor interest, growth opportunities and the IPO outlook for these subsectors. With the wind at our back, we anticipate a strong start for 2014 IPOs and continued growth in the technology IPO pipeline.”
 – Bryan McLaughlin, Deals Partner, PwC US

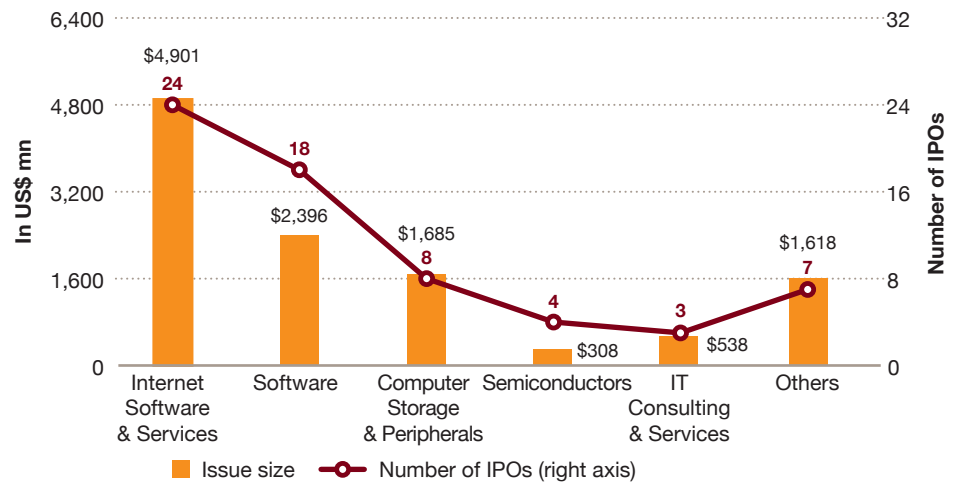
² IPO is credited to the country where the company is headquartered and not the location of the exchange.

Full-year 2013 technology IPOs – Subsector distribution

Internet Software & Services and Software remained the most active subsectors in 2013, with 66% of total deals and 64% of total proceeds as compared to 49% of total deals and 87% of total proceeds in 2012. The continued demand for innovative software tools to improve performance of products and services both within and outside the technology industry is fuelling this growth.

Computer Storage & Peripherals witnessed eight deals raising US\$1.7bn in 2013. Average deal size was over US\$200mn. Semiconductors experienced a steep decline from 15 IPOs in 2012 to just four IPOs in 2013 due primarily to the closure of the Chinese IPO market. The average Semiconductor deal size in 2013 stood at US\$77mn as compared to US\$97mn in 2012.

Figure 7: Full-year 2013 subsector distribution



Source: Dealogic with analysis by PwC.

Full-year 2013 technology IPOs – Quarterly summary by subsector

Figure 8: Full-year 2013 Internet Software & Services IPOs

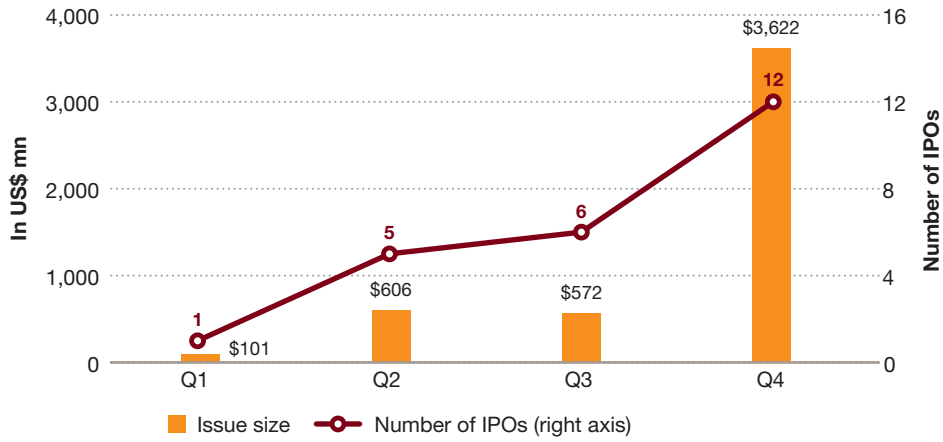


Figure 9: Full-year 2013 Software IPOs

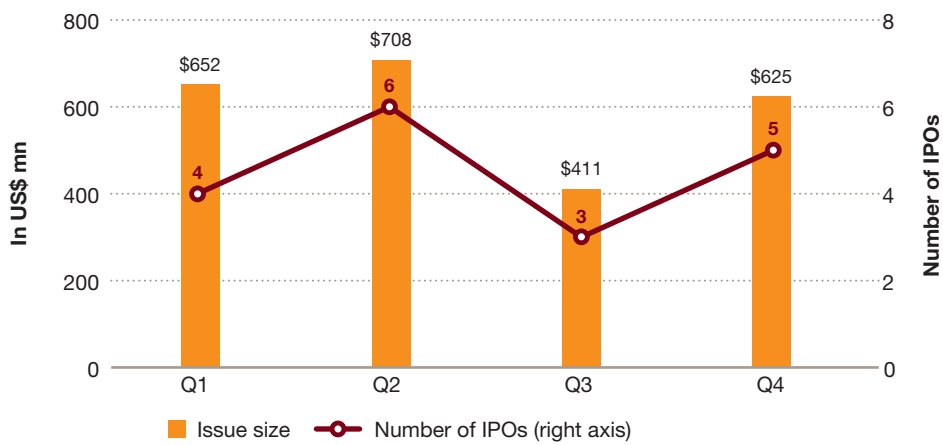


Figure 10: Full-year 2013 Computer Storage & Peripherals IPOs

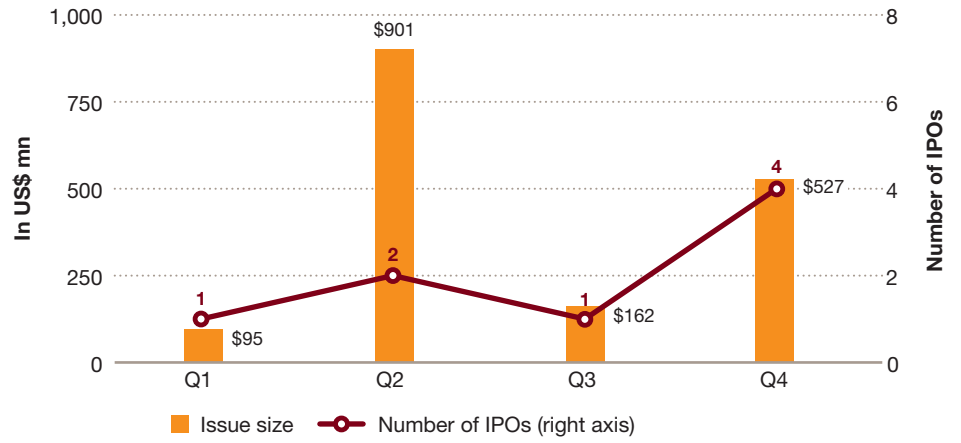


Figure 11: Full-year 2013 Semiconductor IPOs

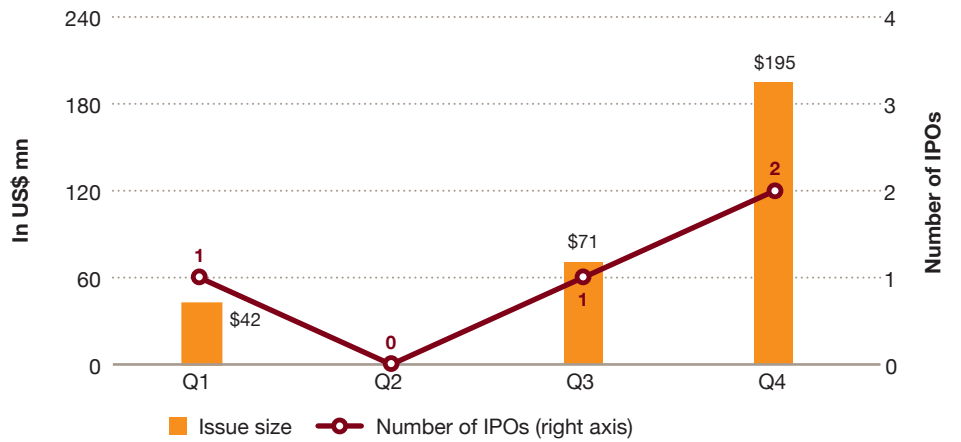


Figure 12: Full-year 2013 IT Consulting & Services IPOs

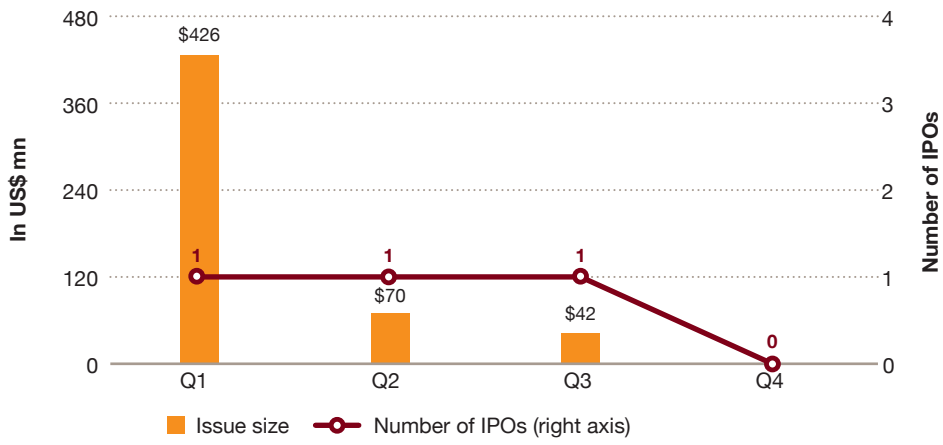
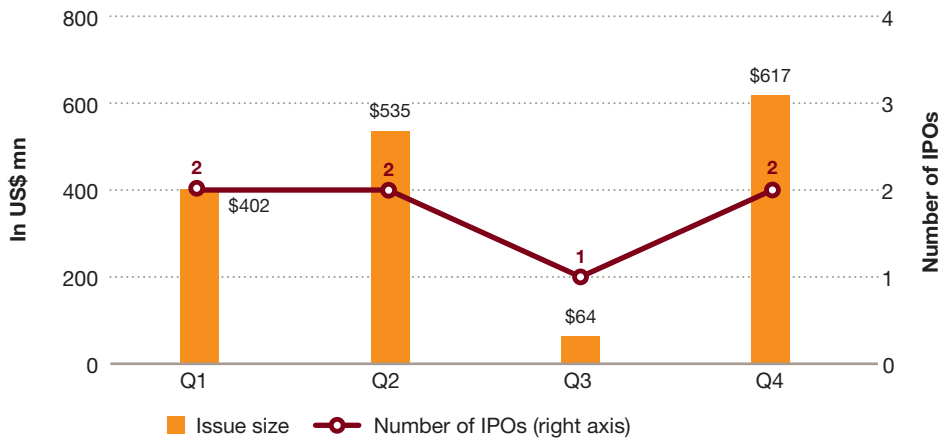


Figure 13: Full-year 2013 other sector IPOs

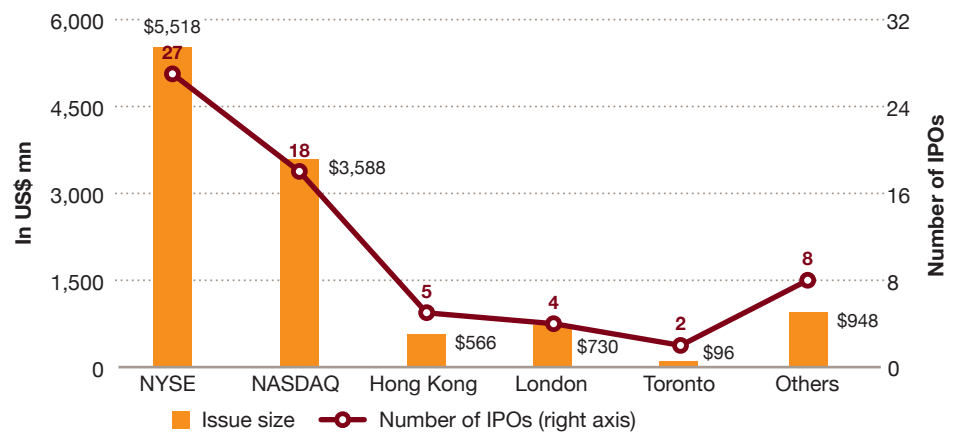


Full-year 2013 technology IPOs – Stock exchange distribution

US exchanges (NYSE and NASDAQ) contributed 80% of total proceeds and 70% of total deals in 2013 and recorded the top five deals of the year, which contributed almost 33% of total proceeds. In addition, 16% of the deals on US exchanges were from non-US companies (10) compared to 4% in 2012 (3).

NYSE was the exchange of choice, with 27 technology IPOs raising US\$5.5bn with an average deal size of US\$204mn. NASDAQ recorded 18 technology IPOs raising US\$3.6bn with an average deal size of US\$199mn. As noted, the Chinese exchanges were quiet due to the IPO freeze imposed by the Chinese authorities as part of a plan to reform the system and strengthen investor confidence. However, the recent move by the Chinese government to lift its freeze on Chinese IPOs is projected to yield about US\$41bn of total proceeds in 2014 from IPOs across all sectors including technology.³

Figure 14: Full-year 2013 stock exchange distribution



Source: Dealogic with analysis by PwC.

“China’s move toward a US-style registration system for IPOs will result in a better supervised and healthier market, which will help ensure investor confidence.”
 – Frank Lyn, PwC Markets Leader, PwC China and Hong Kong

³ <http://www.moneyweb.co.za/moneyweb-international/pwc-predicts-china-ipos-could-raise-413bn>

2013 Technology IPO listing

Table 1: 2013 IPOs—By offer date

Issue date (mm/dd/yyyy)	Company	Subsector	Proceeds (in US\$ mn)	Primary exchange	Domicile nation
Q4					
12/12/2013	Nimble Storage Inc	Computer Storage & Peripherals	168	NYSE	United States
12/12/2013	Econtext Asia Ltd	Internet Software & Services	58	Hong Kong	Japan
12/10/2013	Autohome Inc	Internet Software & Services	133	NYSE	China
12/02/2013	Servelec Group Plc	Computer Storage & Peripherals	200	London	United Kingdom
11/21/2013	Sungy Mobile Ltd	Software	79	Nasdaq	China
11/20/2013	Arria NLG Plc	Software	168	London AIM	United Kingdom
11/19/2013	Baylin Technologies Inc	Electronic Computer Manufacturing	42	Toronto	Canada
11/13/2013	ZIGEXN Co Ltd	Internet Software & Services	52	TSE (Mothers)	Japan
11/12/2013	Chegg Inc	Internet Software & Services	188	NYSE	United States
11/06/2013	Boyaa Interactive Intl Ltd	Internet Software & Services	127	Hong Kong	China
11/06/2013	Twitter Inc ⁴	Internet Software & Services	1,820	NYSE	United States
11/06/2013	Mavenir Systems Inc	Software	55	NYSE	United States
11/05/2013	Wix.com Ltd	Internet Software & Services	127	NYSE	Israel
11/05/2013	Barracuda Networks Inc	Computer Storage & Peripherals	75	NYSE	United States
11/01/2013	FocalTech Corp Ltd	Semiconductors	60	Taiwan	Taiwan
10/31/2013	Qunar Cayman Islands Ltd	Internet Software & Services	167	Nasdaq	China
10/31/2013	58.com Inc	Internet Software & Services	187	NYSE	China
10/29/2013	Criteo SA	Internet Software & Services	251	Nasdaq	France
10/24/2013	CommScope Holding Co Inc	Communications Equipment	577	Nasdaq	United States
10/24/2013	Endurance Intl Grp Hldg Inc	Internet Software & Services	253	Nasdaq	United States
10/21/2013	REC Solar ASA	Semiconductors	135	Oslo	Singapore
10/17/2013	IGG Inc	Software	118	Hong Kong	Singapore
10/17/2013	voxeljet AG	Computer Storage & Peripherals	85	NYSE	Germany
10/15/2013	Veeva Systems Inc	Internet Software & Services	261	NYSE	United States
09/26/2013	Forgame Holdings Ltd ⁵	Software	206	Hong Kong	China
Q3					
09/26/2013	Covisint Corp	Internet Software & Services	64	Nasdaq	United States
09/26/2013	Violin Memory, Inc	Computer Storage & Peripherals	162	NYSE	United States
09/26/2013	Ringcentral, Inc	Internet Software & Services	98	NYSE	United States
09/25/2013	Montage Technology Group Ltd	Semiconductors	71	Nasdaq	China
09/19/2013	FireEye, Inc	Software	304	Nasdaq	United States

⁴ Excludes US\$180mn of over-allotment option exercised by underwriters.

⁵ Deal details for Forgame Holdings were not publicly available until its listing date of October 3, 2013, therefore it has been included in Q4.

Issue date (mm/dd/yyyy)	Company	Subsector	Proceeds (in US\$ mn)	Primary exchange	Domicile nation
09/19/2013	Rocket Fuel, Inc	Internet Software & Services	116	Nasdaq	United States
09/17/2013	Benefitfocus, Inc	Internet Software & Services	131	Nasdaq	United States
08/08/2013	Cvent, Inc	Internet Software & Services	118	NYSE	United States
08/06/2013	YuMe, Inc	Internet Software & Services	46	NYSE	United States
08/01/2013	Control4 Corp	Electronic Computer Manufacturing	64	Nasdaq	United States
07/09/2013	Keywords International Ltd	IT Consulting & Services	42	London AIM	United Kingdom
07/08/2013	Sinosoft Technology Group Ltd	Software	56	Hong Kong	China
Q2					
06/26/2013	CDW Corp	Computer Storage & Peripherals	395	Nasdaq	United States
06/26/2013	Tremor Video, Inc	Internet Software & Services	75	NYSE	United States
06/25/2013	Luxoft Holding, Inc	IT Consulting & Services	70	NYSE	Switzerland
06/20/2013	Gogo, Inc	Communications Equipment	187	Nasdaq	United States
06/19/2013	Wynyard Group Ltd	Software	51	NewZealand	New Zealand
06/11/2013	Gigamon, Inc	Software	128	NYSE	United States
06/06/2013	Textura Corp	Software	75	NYSE	United States
05/27/2013	Just Dial Ltd	Internet Software & Services	165	Bombay	India
05/22/2013	ChannelAdvisor Corp	Internet Software & Services	81	NYSE	United States
05/16/2013	Marketo, Inc	Software	79	Nasdaq	United States
05/16/2013	Tableau Software, Inc	Software	254	NYSE	United States
05/09/2013	Halogen Software, Inc	Internet Software & Services	55	Toronto	Canada
05/08/2013	Cyan, Inc	Software	88	NYSE	United States
04/18/2013	Blackhawk Network Holdings, Inc	Internet Software & Services	230	Nasdaq	United States
04/17/2013	Intelsat SA	Communications Equipment	348	NYSE	Luxembourg
04/11/2013	Rally Software Development Corp	Software	84	NYSE	United States
04/11/2013	EVERTEC, Inc	Computer Storage & Peripherals	505	NYSE	United States (Puerto Rico)
Q1					
03/26/2013	HellermannTyton Group PLC	Communications Equipment	321	LSE	United Kingdom
03/21/2013	West Corp	IT Consulting & Services	426	Nasdaq	United States
03/21/2013	Marin Software, Inc	Software	105	NYSE	United States
03/19/2013	Model N, Inc	Software	105	NYSE	United States
03/12/2013	Silver Spring Networks, Inc	Communications Equipment	81	NYSE	United States
03/12/2013	Broadleaf Co. Ltd	Software	211	Tokyo	Japan
02/14/2013	Xoom Corp	Internet Software & Services	101	Nasdaq	United States

Source: Dealogic with analysis by PwC.

2010–2013 Technology IPO trends

2010-2013 Technology IPO summary

Strong technology IPO activity in Q4 lifted overall performance in 2013. Although the number of technology IPOs above US\$40mn declined over the 2010-2013 period, the current year results were much better than anticipated given the absence of IPOs on Chinese exchanges. Though total proceeds in 2013 declined by 51% from 2012, excluding the Facebook IPO of US\$16bn, proceeds increased by 60% compared to 2012.

Semiconductor and IT Consulting & Services which witnessed the most deals in 2010, with 41 and 24 IPOs, respectively, almost dried up in 2013 with four and three IPOs, respectively. In contrast, Internet Software & Services, which witnessed the least number of deals in 2010, with seven, recorded the most deals in 2013, with 24 IPOs. The on-going IPO freeze on Chinese exchanges was the major factor in the decline of the Semiconductor and the IT Consulting & Services subsectors. Of the 2012 technology IPOs in China, 31% were semiconductor companies (10) and 16% were IT Consulting & Services companies (5).

2010–2013 Technology IPO summary by subsector

Figure 15: 2010–2013 Internet Software & Services IPOs

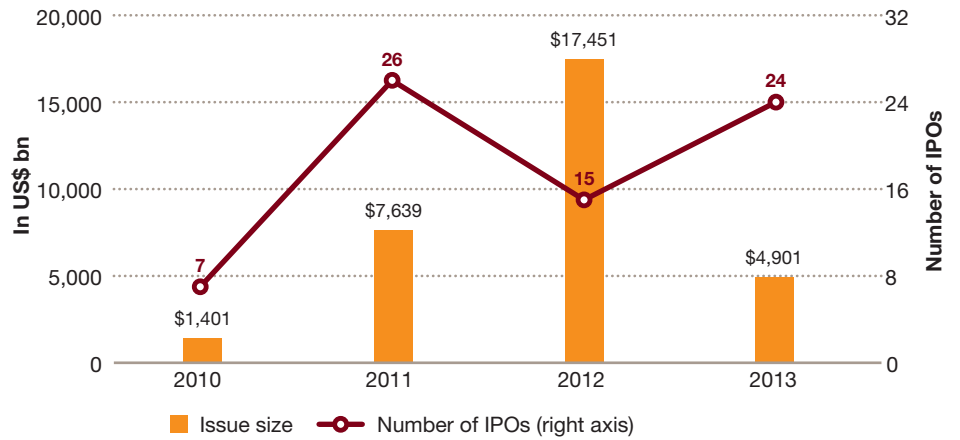


Figure 16: 2010–2013 Software IPOs

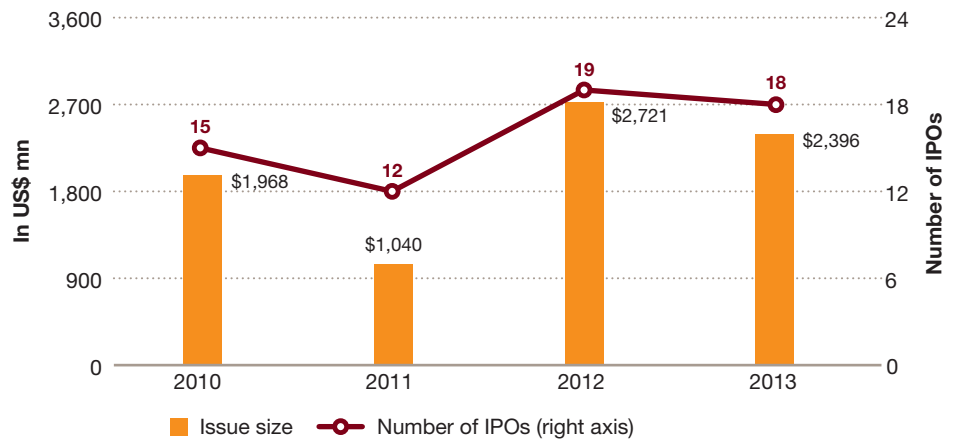


Figure 17: 2010–2013 Computer Storage & Peripherals IPOs

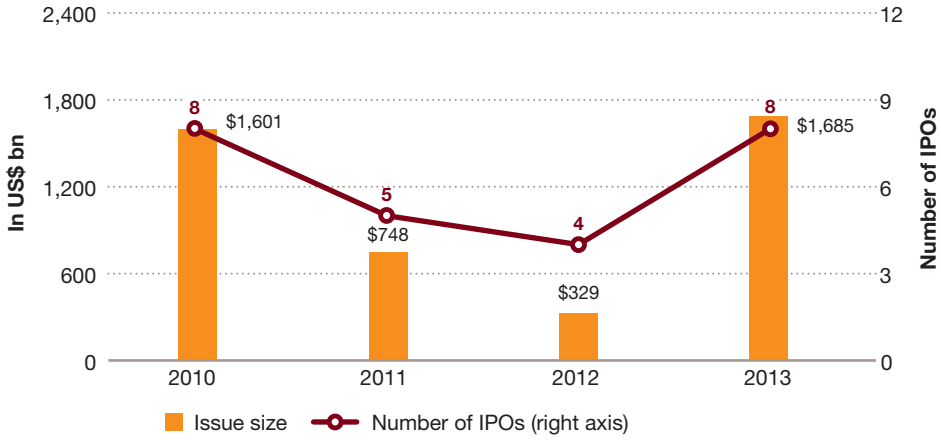


Figure 18: 2010–2013 Semiconductor IPOs

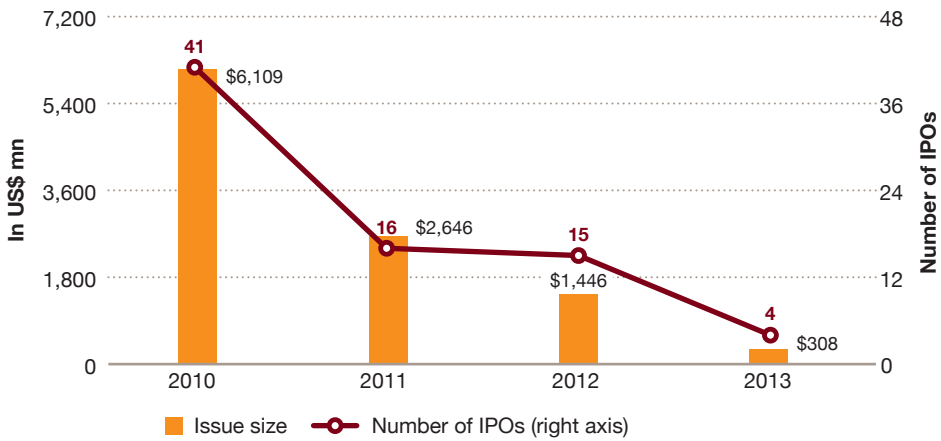


Figure 19: 2010–2013 IT Consulting & Services IPOs

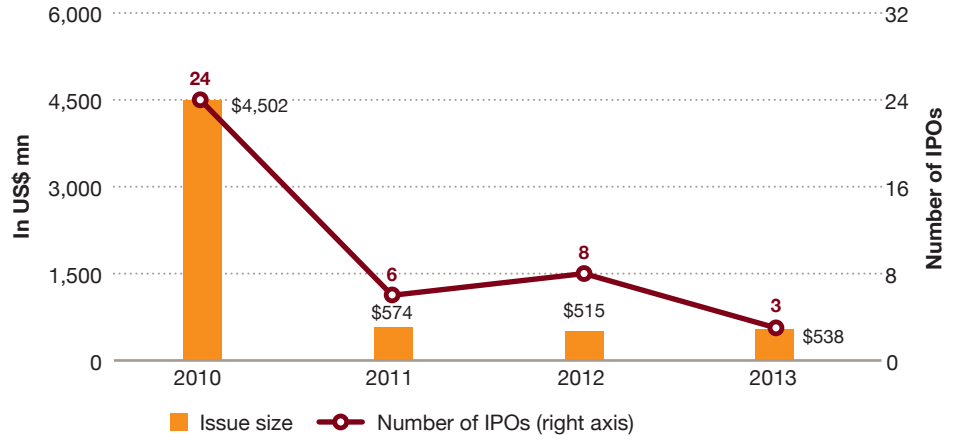
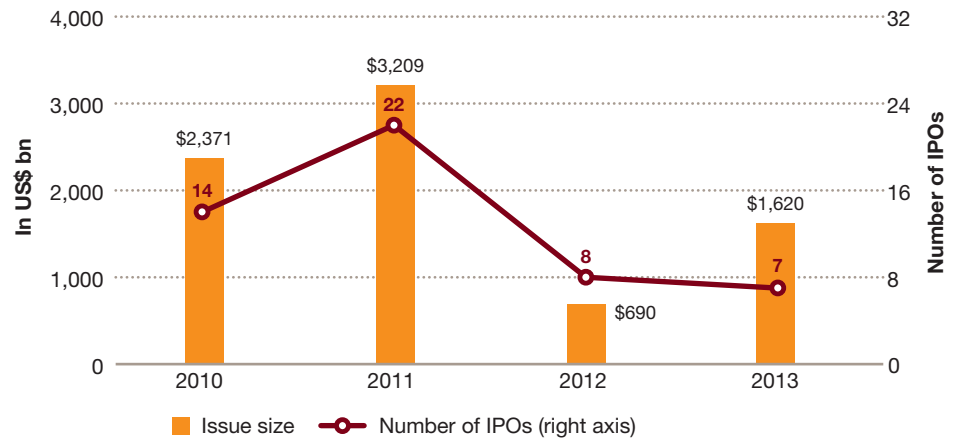


Figure 20: 2010–2013 Other sector IPOs



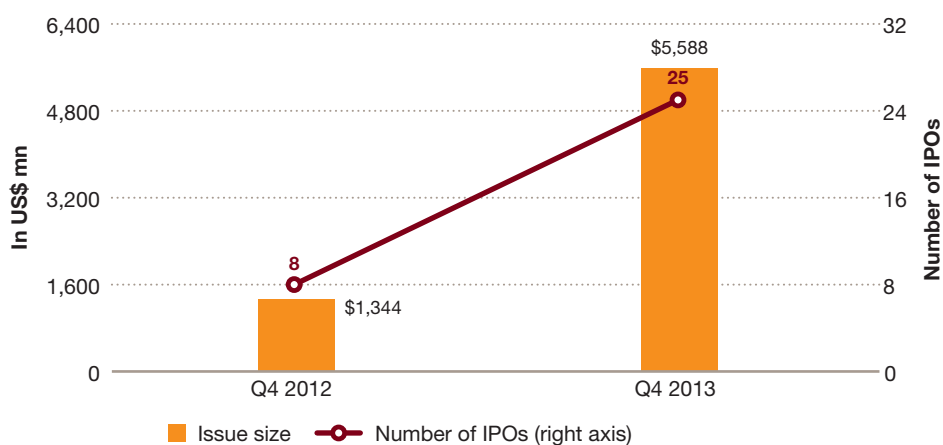
Q4 2013 Global technology IPO summary

There were 25 global technology IPOs in Q4 2013 with total proceeds of US\$5.6bn, an increase of 213% in volume and 316% in dollar value over Q4 2012. The month of October witnessed ten IPOs, November witnessed 11 IPOs, and the year ended with four technology IPOs issued in December.

China, which had a muted market owing to the freeze by the CSRC, had six technology offerings on other exchanges in Q4 2013, raising US\$899mn. Eleven technology IPOs from Europe and Asia Pacific (excluding China) were priced in the last quarter of 2013 for total proceeds of over US\$1bn.

Increasing optimism over economic conditions and highly robust capital markets in the US helped to accelerate technology IPO activity in Q4.

Figure 21: Q4 2013 versus Q4 2012 global technology IPO trends



Source: Dealogic with analysis by PwC.

Q4 Top 10 technology deals⁶

Internet Software & Services dominated the top 10 technology IPOs, comprising 72% of total proceeds and 60% of the deals in Q4 2013.

Unlike Q3, where nine of the top ten IPOs were from US-based companies with the exception of one company from China listing in the US, Q4 witnessed six US domiciled technology companies with the four others originating from France, the UK and China. Criteo SA (France) and 58.com (China) listed on NASDAQ and NYSE, respectively. Servelec Group Plc (UK) went public on the Longon Stock Exchange and Forgame Holdings Ltd (China) went public in Hong Kong.

CommScope Holding Co. Inc. was the only company from the Communications Equipment subsector to feature in the top 10 deals, with proceeds of US\$577mn. Communications Equipment was absent from the top 10 list in Q4 2012 as well as in Q3 2013.

Table 2: Q4 – Top 10 technology deals⁶

Company	Subsector	Issue size (in US\$ mn)	Primary exchange
Twitter Inc ⁷	Internet Software & Services	1,820	NYSE
CommScope Holding Co Inc	Communications Equipment	577	Nasdaq
Veeva Systems Inc	Internet Software & Services	261	NYSE
Endurance Intl Grp Hldg Inc	Internet Software & Services	253	Nasdaq
Criteo SA	Internet Software & Services	251	Nasdaq
Forgame Holdings Ltd	Software	206	Hong Kong
Servelec Group Plc	Computer Storage & Peripherals	200	London
Chegg Inc	Internet Software & Services	188	NYSE
58.com Inc	Internet Software & Services	187	NYSE
Nimble Storage Inc	Computer Storage & Peripherals	168	NYSE

⁶ Arria NLG Plc is not included in the top 10 deals since the actual deal size of the IPO was US\$167.5mn and, due to rounding, it has been presented as US\$168.

⁷ Excludes US\$180mn of over-allotment option exercised by underwriters.

Source: Dealogic with analysis by PwC.

“The UK continues to thrive in an environment where new technologies are being developed and companies are being established with good track records. This environment is underpinned by positive steps by the government to support the sector and an ever-increasing pool of entrepreneurs. The quality of companies continues to generate investor interest. I fully expect sustained momentum in the number of companies emerging and wanting to do an IPO.”

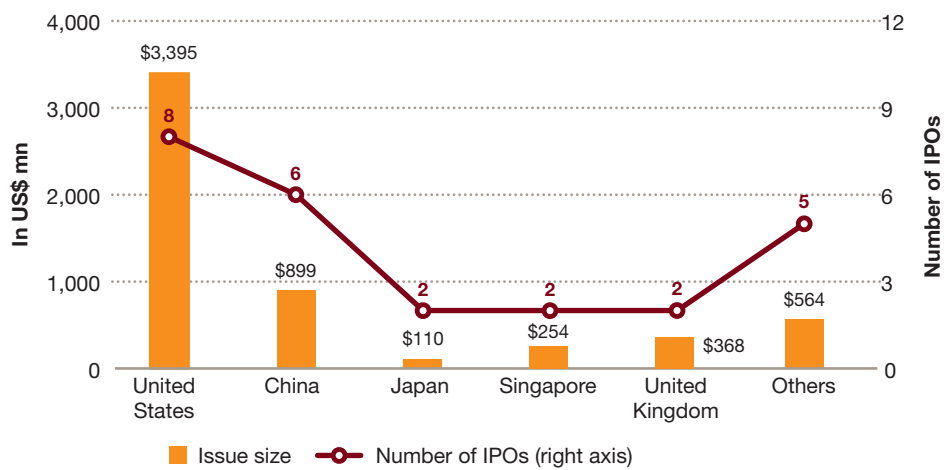
– Jass Sarai, Technology Industry Leader, PwC UK

Q4 2013 Geographic IPO trends

US companies led Q4 technology IPOs with 32% of total deal volume, contributing eight of the 25 IPOs, and also led in proceeds contributing 61% of total dollars. Non-US companies' total deal value was US\$2.2bn and amongst them China contributed the most in both volume and value by 24% and 16%, respectively.

As evidenced by the fall in the VIX (Volatility Index), investor confidence has been on the rise and this has served to motivate technology companies from a diverse group of countries to go public. In Q4, companies from Japan, Singapore, the UK, Canada, France, Germany, Israel and Taiwan contributed US\$1.3bn or 23% of proceeds. Also, 44% of the deal volume was from these geographies indicating an expanding and strengthening global technology IPO market.

Figure 22: Q4 2013 Geographic distribution



Source: Dealogic with analysis by PwC.

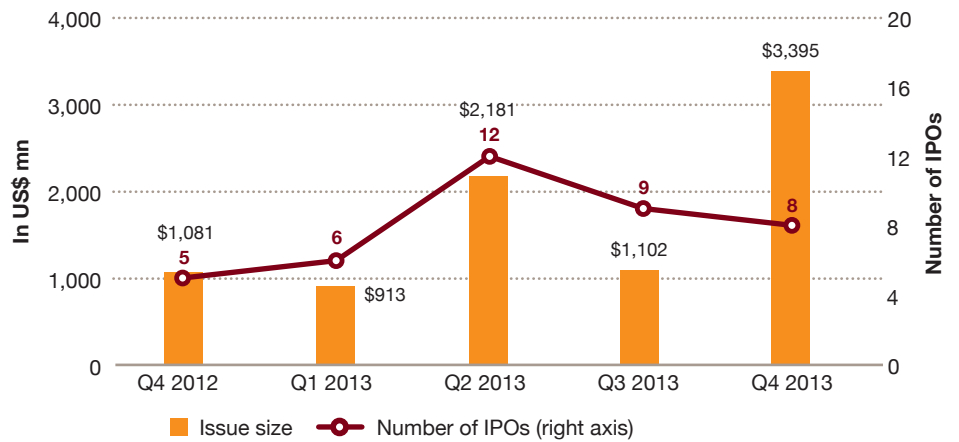
United States

In the fourth quarter, the number (8) and value (US\$3.4bn) of US IPOs increased year-over-year by 60% and 214% respectively. However, compared to Q3 2013, volume declined by 11% but proceeds increased by 208%. In addition, the US contributed US\$3.4bn or 61% of the US\$5.6bn total proceeds raised in Q4, with Twitter, Inc. alone contributing the largest deal value.

Three of the eight deals in the US were private equity backed, raising US\$904mn or 27% of total US proceeds. And seven of the eight offerings were Emerging Growth Companies, suggesting the JOBS Act has helped to re-energise IPO exits for startups.

Surging stock markets, improving employment and higher US economic growth (3.6% in the third quarter from an initial estimate of 2.8%) buoyed investor confidence.⁸

Figure 23: Q4 2013 United States technology IPOs



Source: Dealogic with analysis by PwC.

⁸ <http://www.businessspectator.com.au/news/2013/12/6/us-economy/us-q3-gdp-revised-36>.

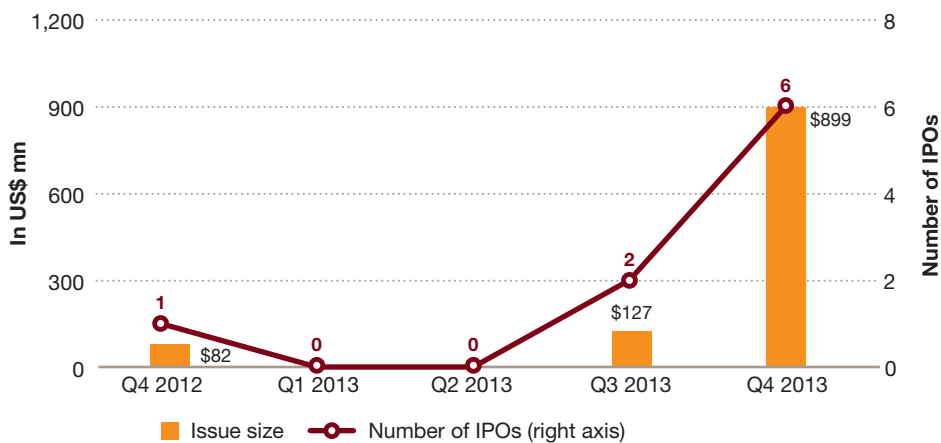
China

After a long absence of technology IPOs in the first two quarters of 2013 and just two in Q3, Chinese companies made a strong come back with six technology IPOs raising US\$899mn in the last quarter of 2013.

The Qunar Cayman Islands Ltd. IPO was the only IPO from China which was backed by private equity and raised US\$167mn. Four of the six deals from China were from the Internet Software & Services subsector whilst the remaining two belonged to Software. Owing to the continued IPO freeze in China, all six companies listed on the Hong Kong or US exchanges (NYSE and NASDAQ).

In the first week of January 2014⁹, the CSRC reopened the China IPO market with the country moving towards an IPO registration system similar to that of the US. Over 700 companies remain in the pipeline for approval from the CSRC, suggesting 2014 should be a strong year for IPOs. It is estimated Chinese IPOs could raise US\$41bn in 2014, with manufacturing, consumer and technology companies being the most active sectors.¹⁰

Figure 24: Q4 2013 China technology IPOs



Source: Dealogic with analysis by PwC.

“We are pleased to see Chinese technology company IPOs showing strength in the fourth quarter of 2013. With the high confidence in technology communities, the IPO pipeline of companies continues to grow. We anticipate the Internet & Software Services subsector to dominate the pipeline. With the reopening of the Chinese stock market in early 2014, we anticipate Chinese technology IPOs to reach a new high in 2014.”

– Jianbin Gao, Technology Industry Leader, PwC China

⁹ <http://online.wsj.com/news/articles/SB10001424052702304361604579291291904217778>

¹⁰ <http://www.moneyweb.co.za/moneyweb-international/pwc-predicts-china-ipos-could-raise-413bn>

All other geographies

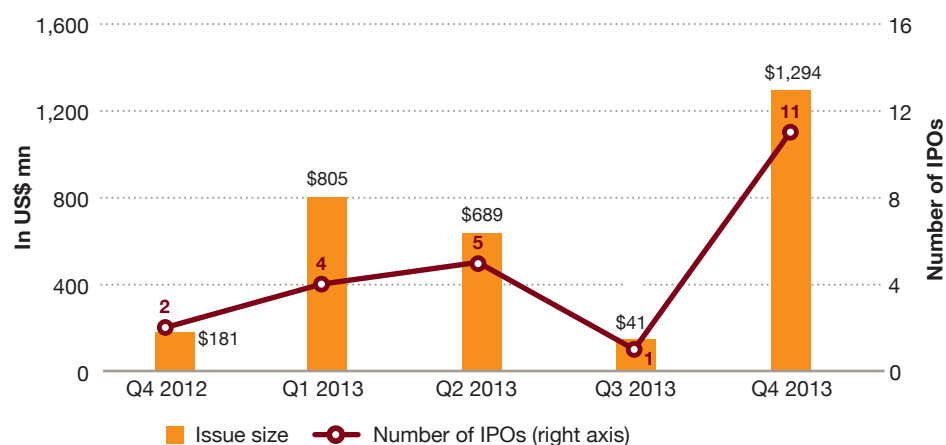
In Q4 2013, countries other than the US and China contributed US\$1.3bn in 11 deals, the highest quarter of 2013. These geographies contributed 23% of the total proceeds and 44% of the total volume of deals in Q4.

Out of the 11 deals, Japan, Singapore and the UK each recorded two, with the UK raising the most capital at US\$368mn, followed by Singapore at US\$253mn and Japan at US\$110mn. The three geographies together contributed 13% of total deal value and 24% of the volume.

The remaining five IPOs originated in Canada, France, Germany, Israel and Taiwan. These countries contributed 10% of total proceeds and 20% of volume in Q4 2013. France's Criteo SA, from the Internet Software & Services subsector, had the highest proceeds of US\$251mn.

The improving macro-economic backdrop, easing global monetary conditions, reduced political uncertainty and rising investor confidence resulted in many previously subdued markets participating in technology IPOs this quarter.

Figure 25: Q4 2013 All other geographies technology IPOs



Source: Dealogic with analysis by PwC.

“We are seeing a real renewed interest in investment and technology innovation in South East Asia as more technology companies are seeking to capitalise on the dynamic nature of these markets and the high-growth potential in this region. This can be seen through the recent IPOs of a number of Singapore headquartered companies on global markets.”
 – Greg Unsworth, PwC Technology Industry Leader, Asia-Pacific

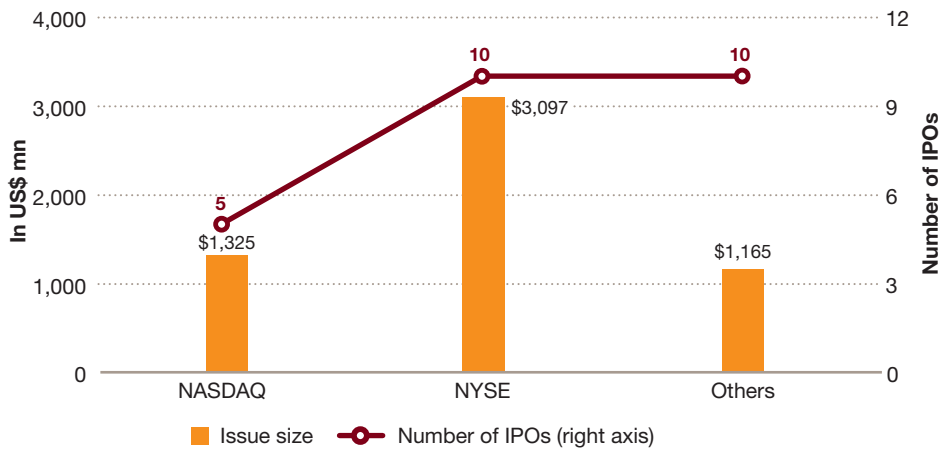
Q4 2013 Stock exchange distribution

US exchanges posted 15 of the 25 technology IPO deals raising US\$4.4bn or 79% of total proceeds in Q4. Big ticket IPOs increased significantly. There were seven technology IPOs over US\$200mn in Q4 compared to just one in Q3, and four in Q2 2013. Five of the seven big ticket IPOs were listed in the US, of which three were listed on NASDAQ.

NASDAQ witnessed a minor drop in the number of technology IPOs from six in Q3 to five this quarter. However, total proceeds jumped by 77% to US\$1.3bn. The NYSE, on the other hand, saw the number of deals increase by 150% (10) and proceeds surge 632% to US\$3.1bn. The NYSE alone raised 55% of total Q4 proceeds.

The volume of listings on other exchanges also increased, from three in Q3 to 10 in Q4 2013, whilst total proceeds increased by 682% to US\$1.2bn. Other exchanges contributed 21% of total proceeds and 40% of total volume. The on-going IPO freeze on China's exchanges shifted activity to Hong Kong which recorded four technology IPOs in Q4.

Figure 26: Q4 2013 Stock exchange distribution



Source: Dealogic with analysis by PwC.

Table 3: Q4 2013 Stock exchanges – North America (NASDAQ, NYSE)¹¹

Issue date (mm/dd/yyyy)	Company	Subsector	Proceeds (in US\$ mn)	Primary exchange	Domicile nation
11/06/2013	Twitter Inc ¹²	Internet Software & Services	\$1,820	NYSE	United States
10/24/2013	CommScope Holding Co Inc	Communications Equipment	\$577	NASDAQ	United States
10/15/2013	Veeva Systems Inc	Internet Software & Services	\$261	NYSE	United States
10/24/2013	Endurance Intl Grp Hldg Inc	Internet Software & Services	\$253	NASDAQ	United States
10/29/2013	Criteo SA	Internet Software & Services	\$251	NASDAQ	France
11/12/2013	Chegg Inc	Internet Software & Services	\$188	NYSE	United States
10/31/2013	58.com Inc	Internet Software & Services	\$187	NYSE	China
12/12/2013	Nimble Storage Inc	Computer Storage & Peripherals	\$168	NYSE	United States
10/31/2013	Qunar Cayman Islands Ltd	Internet Software & Services	\$167	NASDAQ	China
12/10/2013	Autohome Inc	Internet Software & Services	\$133	NYSE	China
11/05/2013	Wix.com Ltd	Internet Software & Services	\$127	NYSE	Israel
10/17/2013	Voxeljet AG	Computer Storage & Peripherals	\$85	NYSE	Germany
11/21/2013	Sungy Mobile Ltd	Software	\$79	NASDAQ	China
11/05/2013	Barracuda Networks Inc	Computer Storage & Peripherals	\$75	NYSE	United States
11/06/2013	Mavenir Systems Inc	Software	\$55	NYSE	United States

¹¹ Deals have been classified based on the exchange where capital was raised.

¹² Excludes US\$180mn of over-allotment option exercised by underwriters.

Source: Dealogic with analysis by PwC.

Table 4: Q4 2013 Stock exchanges – All others¹³

Issue date (mm/dd/yyyy)	Company	Subsector	Proceeds (in US\$ mn)	Primary exchange	Domicile nation
12/12/2013	Econtext Asia Ltd	Internet Software & Services	58	Hong Kong	Japan
12/2/2013	Servelec Group Plc	Computer Storage & Peripherals	200	London	United Kingdom
11/20/2013	Arria NLG Plc	Software	168	London	United Kingdom
11/19/2013	Baylin Technologies Inc	Electronic Computer Manufacturing	42	Toronto	Canada
11/13/2013	ZIGExN Co Ltd	Internet Software & Services	52	Tokyo (Mothers)	Japan
11/6/2013	Boyaa Interactive Intl Ltd	Internet Software & Services	127	Hong Kong	China
11/1/2013	FocalTech Corp Ltd	Semiconductors	60	Taiwan	Taiwan
10/21/2013	REC Solar ASA	Semiconductors	135	Oslo	Singapore
10/17/2013	IGG Inc	Software	118	Hong Kong	Singapore
9/26/2013	Forgame Holdings Ltd ¹⁴	Software	206	Hong Kong	China

¹³ Deals have been classified based on the exchange where capital was raised.

¹⁴ Deal details for Forgame Holdings were not publicly available until its listing date of October 3, 2013, therefore it has been included in Q4.

Source: Dealogic with analysis by PwC.

Q4 2013 Sector distribution

Internet Software & Services, which was the top subsector, contributed more than 48% of total deals and 65% of total proceeds in Q4. It witnessed 12 IPOs raising US\$3.6bn compared to two IPOs in Q4 2012 that contributed just 12% of total proceeds. The average IPO ticket size was US\$302mn.

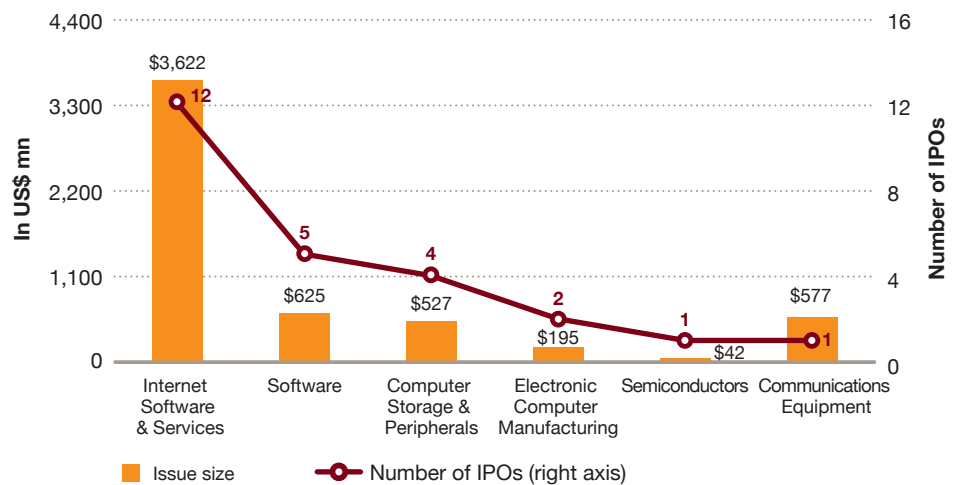
In the Software subsector, the number of deals increased from three in the last quarter to five in Q4 and raised US\$625mn, which was 52% higher than Q3 2013, but 35% lower than the four deals in Q4 2012.

Computer Storage & Peripherals witnessed four technology IPOs in Q4 compared to just one in Q3. Total proceeds in the subsector increased 318% to US\$527mn from Q4 2012 and 225% from Q3 2013. Servelec Group Plc. from the UK had the highest proceeds of US\$200mn.

Semiconductor IPOs remained quiet, similar to last quarter, with only two deals raising US\$195mn compared to just one raising US\$71mn in Q3 and no deals in Q4 2012. Both companies listed in Q4 were from Asia Pacific. REC Solar ASA from Singapore raised US\$135mn and listed in Oslo, whilst FocalTech Corp. Ltd. from Taiwan raised US\$60mn from its home country. With the reopening of China's IPO market semiconductor companies are expected to see stronger performance in 2014.

Both Electronic Computer Manufacturing and Communications Equipment witnessed one deal each. Canada-based Baylin Technologies Inc., from the Electronic Computer Manufacturing subsector, raised US\$42mn on the Toronto exchange; whilst CommScope Holding Co. Inc. from the US raised US\$577mn on NASDAQ.

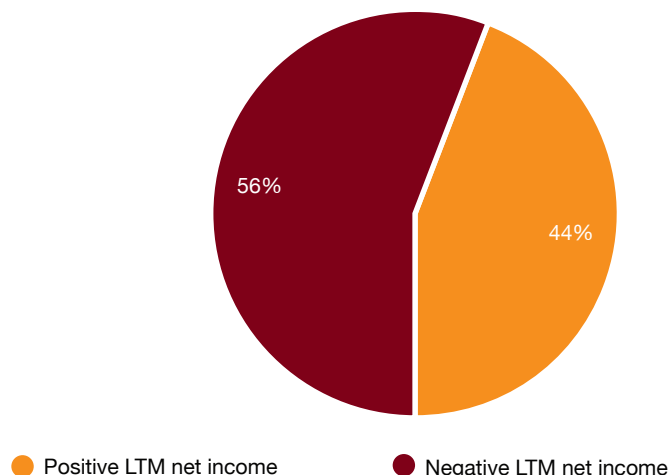
Figure 27: Q4 2013 Sector distribution



Source: Dealogic with analysis by PwC.

Q4 2013 – Key financials

Figure 28: Q4 2013 Technology IPOs – Net income



Source: Dealogic with analysis by PwC.

The average Last Twelve Months (LTM) revenue for all subsectors stood at US\$565mn and average LTM EBITDA at a positive US\$63mn. The biggest contributor to the average LTM revenue was CommScope Holding Co Inc. from the Communications Equipment subsector with LTM revenue of US\$3,482mn.

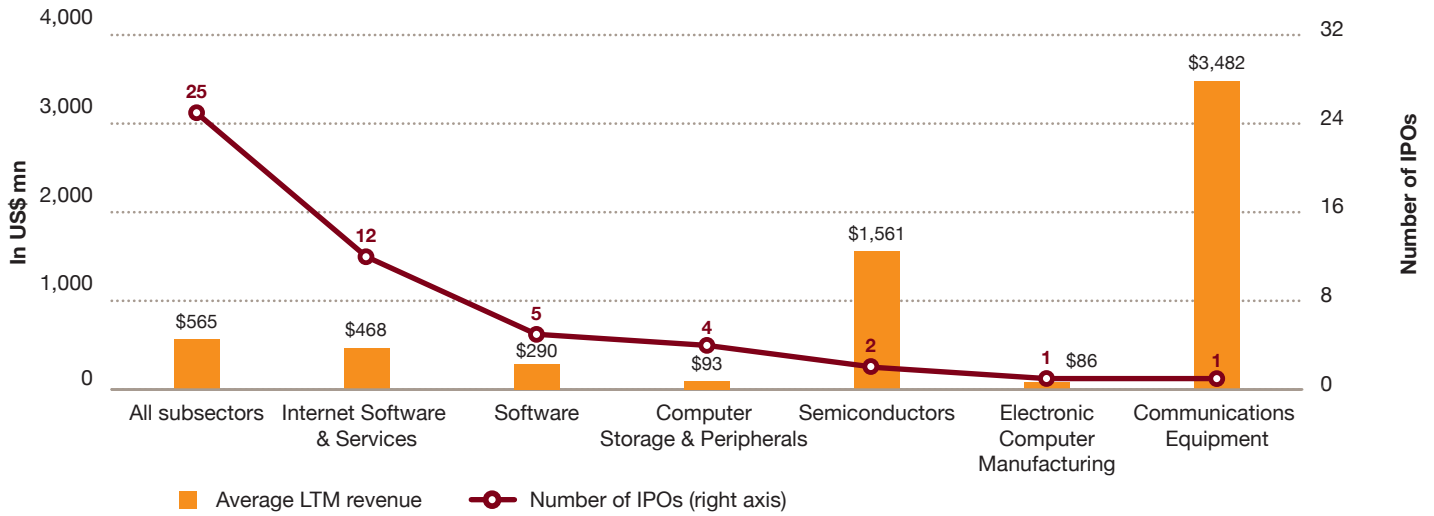
The average LTM revenue for the 25 companies in Q4 2013 was up by 471% compared to the average LTM revenue of US\$99mn in Q3 2013, which had 12 technology IPOs. The average LTM revenue for Electronic Computer Manufacturing, which had a major drop of 27% amongst all the subsectors, was at US\$86mn in Q4 compared to US\$118bn in Q3.

In the third quarter, the highest issue size was US\$304mn by FireEye Inc. with LTM revenue of US\$115mn whereas in Q4 the highest issue size was US\$1.8bn by Twitter Inc. with LTM revenue of US\$534mn.

Computer Storage & Peripherals with four IPOs and Semiconductors with two IPOs had negative average LTM EBITDA of US\$6mn and US\$195mn, respectively. In the Computer Storage & Peripherals subsector, one of the four companies, Nimble Storage Inc., had negative LTM EBITDA, whilst the two remaining companies remained positive with more than 10% average LTM EBITDA margin. Barracuda Networks Inc. recorded a 1% LTM EBITDA margin. The Semiconductors subsector had two companies REC Solar ASA with a negative LTM EBITDA of US\$454mn and FocalTech Corp Ltd. with a positive LTM EBITDA of US\$64mn.

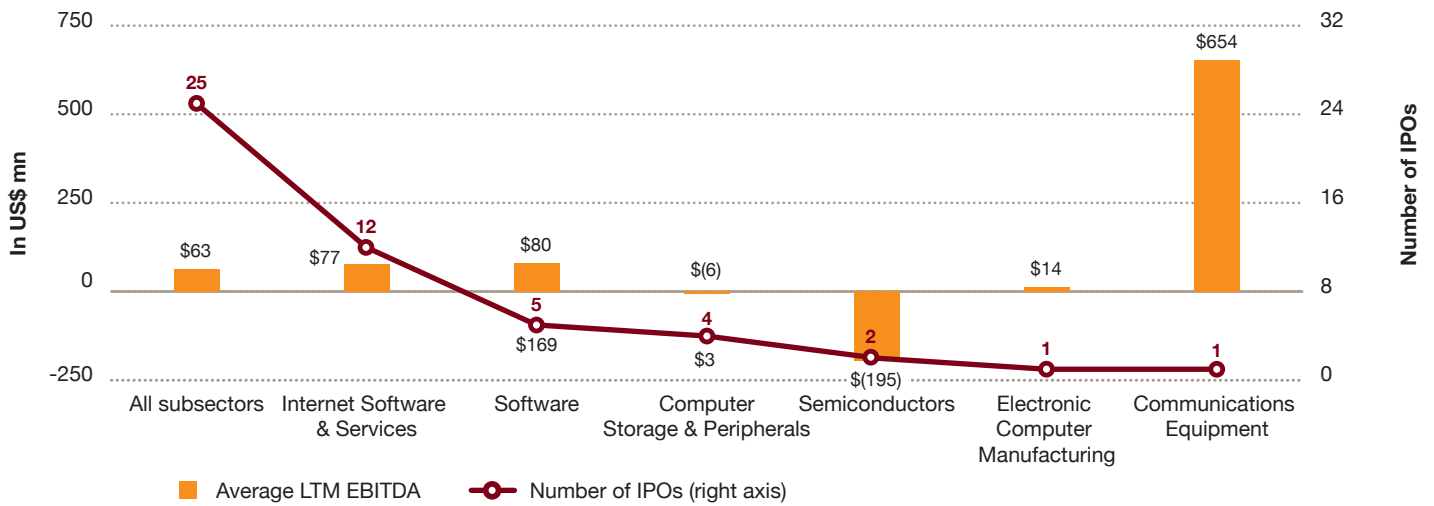
Of the 25 companies whose financials have been considered during the quarter, 14 reported LTM net losses and the remaining 11 reported LTM net income. Whilst six out of 14 companies that reported LTM net losses were from the Internet Software & Services subsector, the next highest was Software with four companies and Computer Storage & Peripherals with three companies, whilst one was from Semiconductors.

Figure 29: Q4 2013 – Average LTM revenue



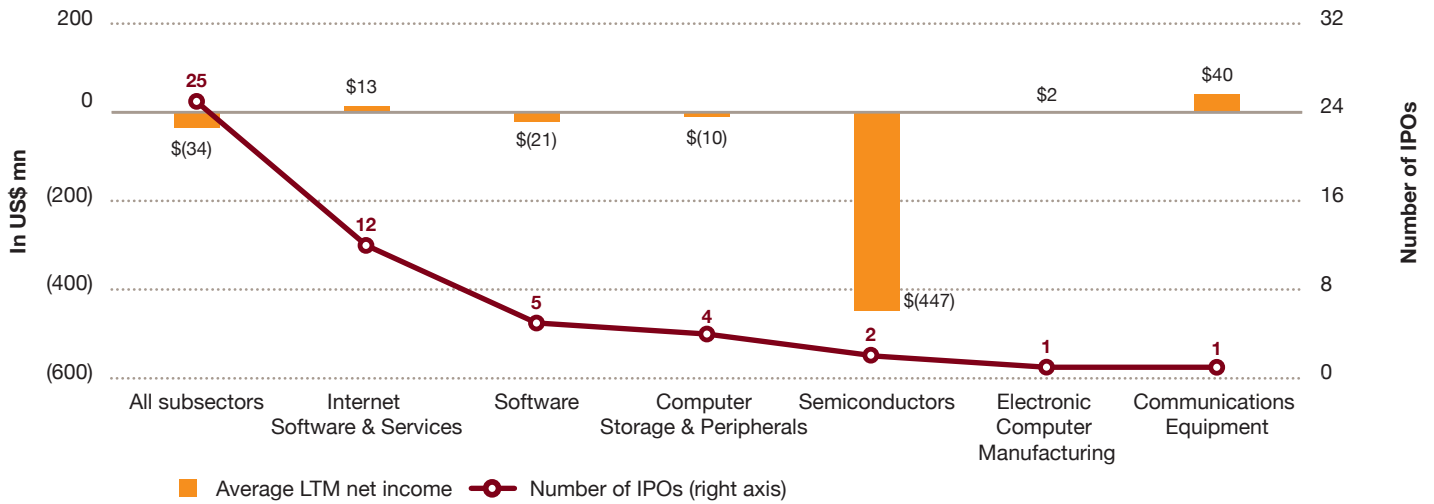
Source: Dealogic with analysis by PwC.

Figure 30: Q4 2013 – Average LTM EBITDA



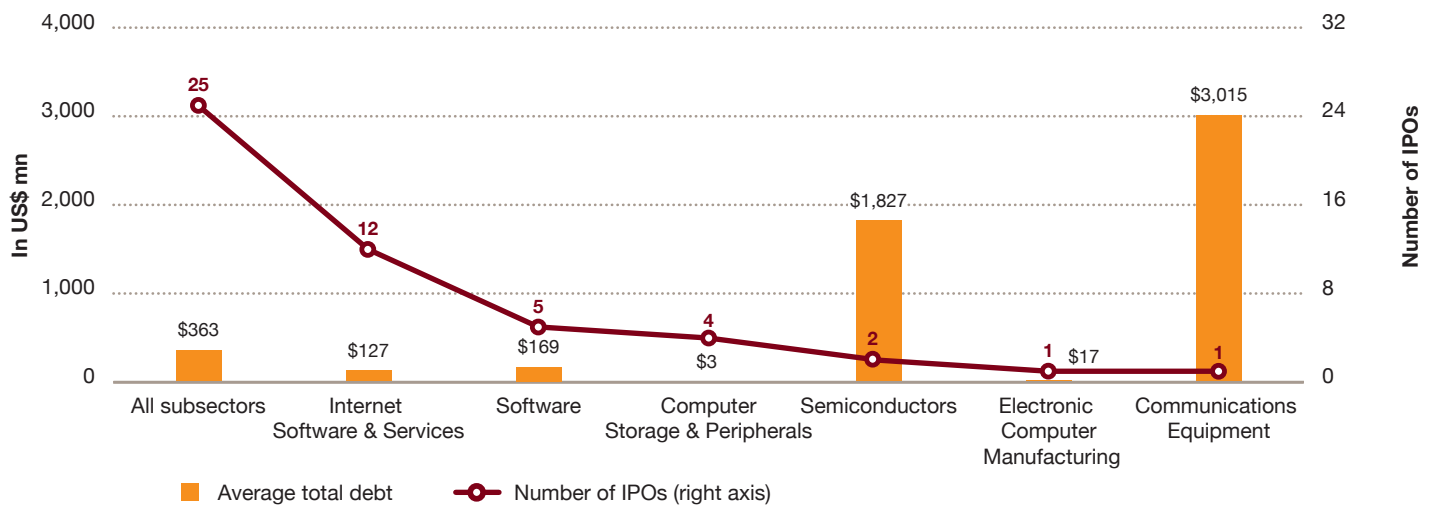
Source: Dealogic with analysis by PwC.

Figure 31: Q4 2013 – Average LTM net income



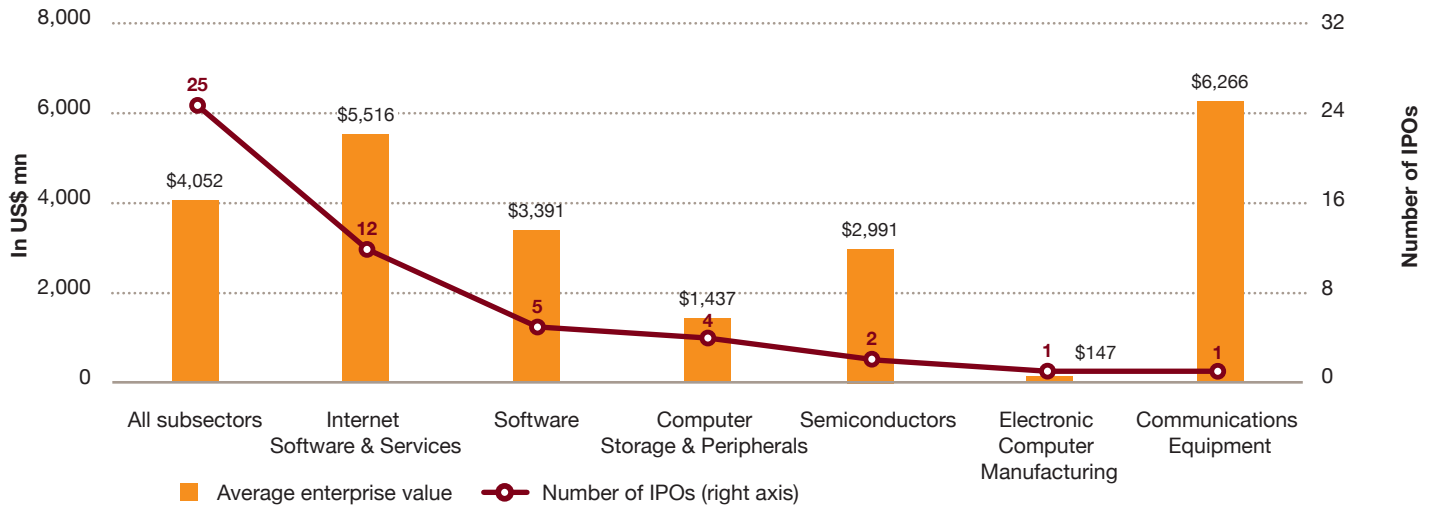
Source: Dealogic with analysis by PwC.

Figure 32: Q4 2013 – Average total debt



Source: Dealogic with analysis by PwC.

Figure 33: Q4 2013 – Average enterprise value



Source: Dealogic with analysis by PwC.

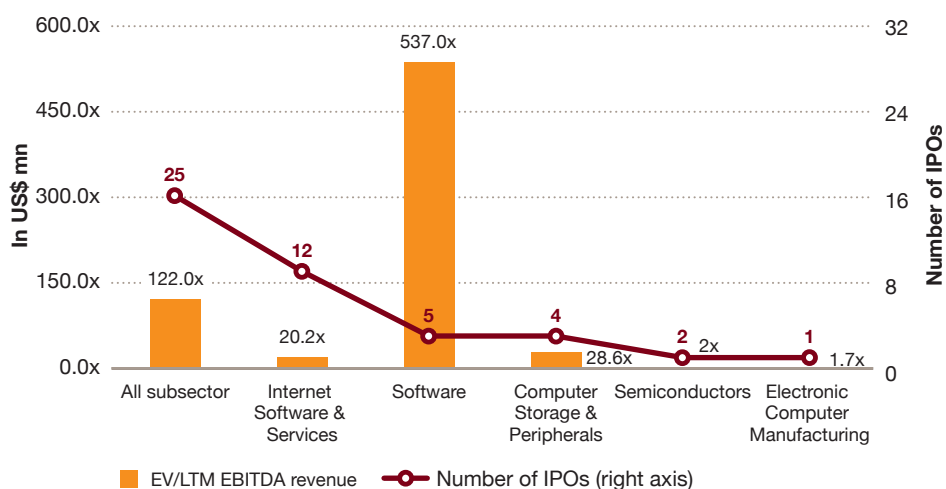
Q4 2013 Technology IPO deals: Valuation metrics

The average EV/LTM revenue and EV/LTM EBITDA multiple of all subsectors stood at 122.0x and 166.0x, respectively in the current quarter, which was significantly higher than 6.0x and 63.0x, respectively in Q3 2013. Barracuda Networks Inc. from the Computer Storage & Peripherals subsector outperformed all the others in EV/LTM EBITDA with a multiple of 769.5x; whilst Arria NLG Plc. from Software topped the EV/LTM revenue with a multiple of 2,544.4x.

The Software subsector witnessed the highest average EV/LTM revenue of 537.0x owing to the high multiple of Arria NLG Plc. of 2,544.4x in the subsector group; whilst Computer Storage & Peripherals clocked the highest average EV/LTM EBITDA multiple of 464.6x, pulled up by the multiples of Voxeljet AG and Barracuda Networks Inc. at 609.5x and 769.5x, respectively.

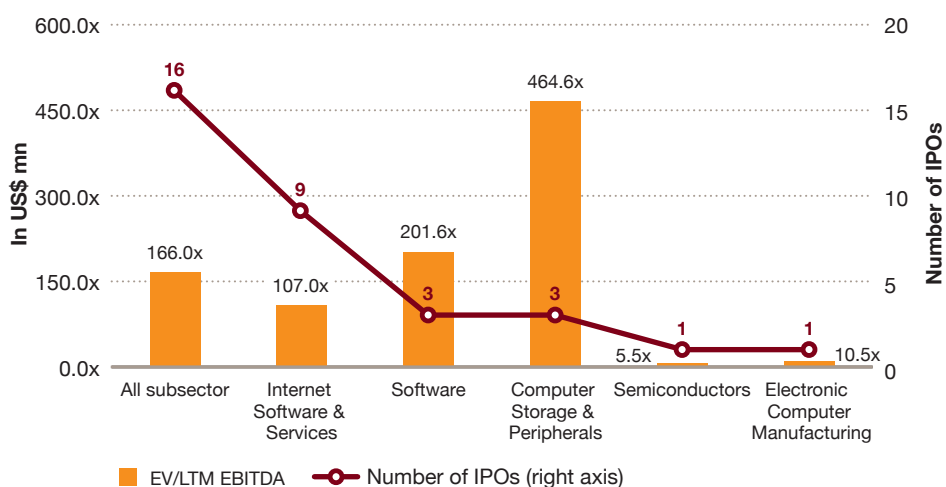
Note: The companies with negative EBITDA were ignored when calculating the valuation metrics of all subsectors and individual subsectors.

Figure 34: Q4 2013 EV/LTM revenue



Source: Dealogic with analysis by PwC.

Figure 35: Q4 2013 EV/LTM EBITDA



Source: Dealogic with analysis by PwC.

Methodology

The Global Technology IPO Review for Q4 and full-year 2013 is based on PwC's analysis of transaction data extracted from Dealogic. The analysis considers IPOs across all countries worldwide during the period 1 October 2013 to 31 December 2013 (Q4) and 1 January 2013 to 31 December 2013 (full-year). Financial data was also obtained from Dealogic.

The definition of the Technology sector is based on the Dealogic database industry classifications and includes the following subsectors:

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

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

All monetary amounts are in US dollars unless otherwise indicated.

LTM—Last twelve months

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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