**December 16, 2016**

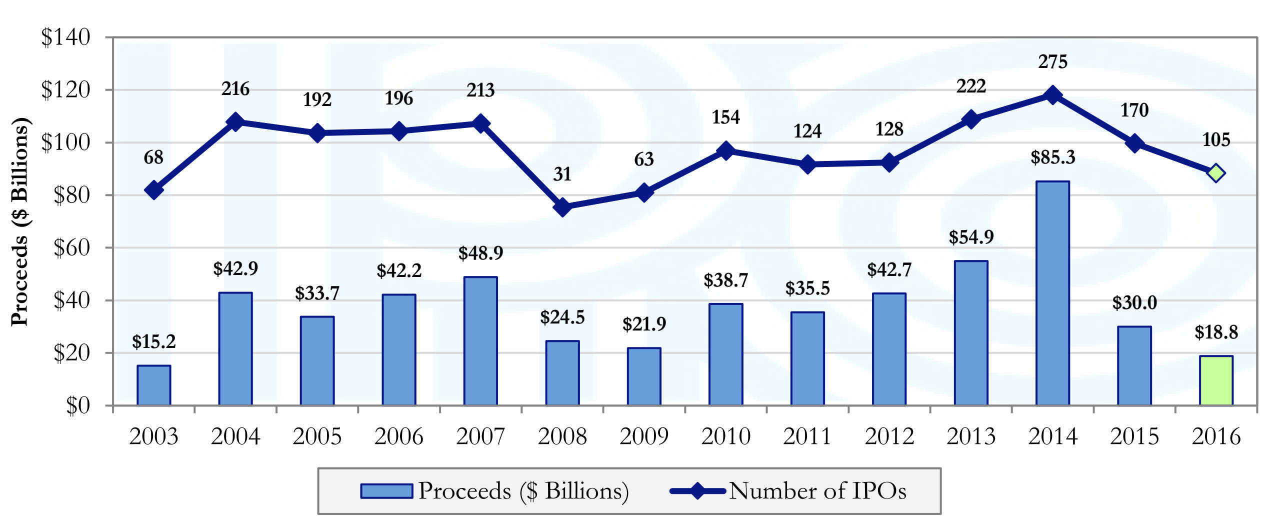
# 2016 IPO Market Drops to 7-Year Low, Gears Up for 2017 Rebound

With the S&P 500 at record highs and average IPO returns handily beating the broad market indices, the US IPO market should have produced high levels of issuance in 2016. Instead, proceeds fell to their lowest level since 2003 and activity was the worst since 2009. This seemingly contradictory year can be explained in part by the market freefall in the 1Q that resulted in numerous postponements, the Brexit vote in the 2Q and the US presidential election in the 4Q. However, that doesn't explain the 800-pound gorilla still in the room: the two-year drought in technology IPOs, the bread and butter of the IPO market. It is our long-held opinion that the primary reason for the lack of tech IPOs is the public-private disconnect on valuation, a tension that can only be remedied by VCs caving in to their growing urgency to sell aging vintages in their portfolios, or by time as companies grow enough to justify their lofty private valuations. With high-growth recent tech IPOs like Twilio and Nutanix trading very strongly, we believe that tech IPO activity will pick up significantly in 2017 and 2018, breaking the long IPO Recession of 2015-16.

## Key Takeaways:

- Annual IPO Proceeds Fall to the Lowest Level Since 2003
- 2016 IPO Returns Strongly Rebound to 23%, Best Performance in 3 Years
- Public-Private Valuation Disconnect Hits Tech Issuance
- Four IPOs Raise Over $1 Billion; Largest Deals Include Two High-Growth Asia Plays
- Technology Retakes the Lead for Best-Performing IPOs
- Snap, Spotify, and Other Mega Tech IPOs Signal Plans to Go Public
- Outlook: 2017 Looks Promising

### US IPO Activity




Includes IPOs with a market cap of at least $50 million and excludes closed-end funds and SPACs. Data through 12/15/16. Source: Renaissance Capital.

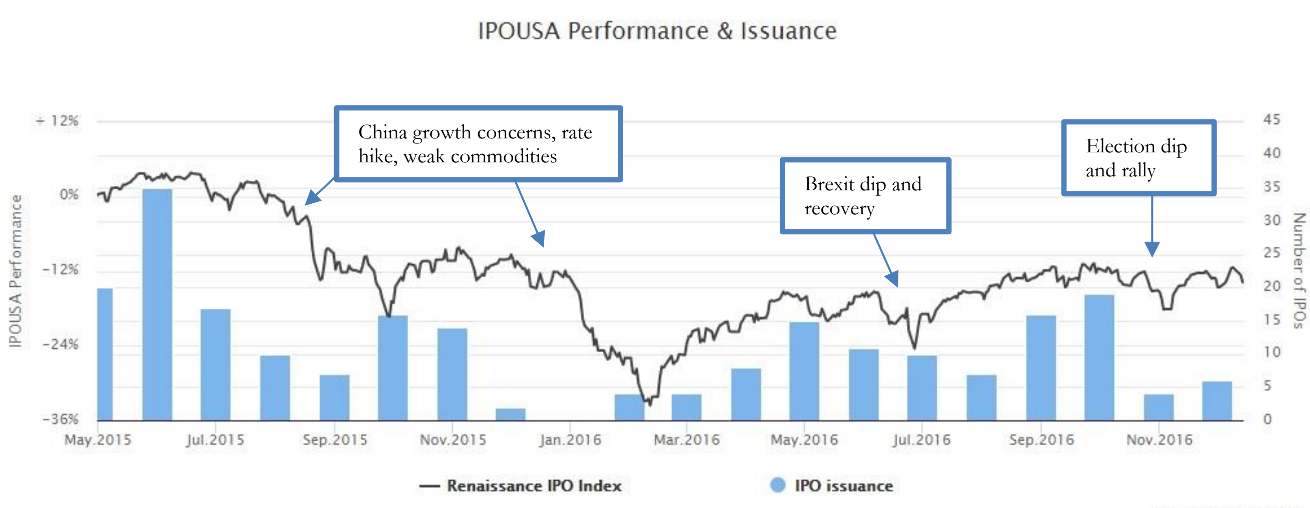
## Annual IPO Proceeds Fall to the Lowest Level Since 2003

| Key US IPO Statistics - Activity | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| IPO Volume | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Number of Deals | 63 | 154 | 124 | 128 | 222 | 275 | 170 | 105 |
| Proceeds Raised (US$ in bil) | $21.9 | $38.7 | $35.5 | $42.6 | $54.9 | $85.3 | $30.0 | $18.8 |
| Median Deal Size (US$ in mil) | $155 | $108 | $160 | $124 | $126 | $100 | $94 | $95 |
| PE-Backed Deals | 22 | 38 | 35 | 45 | 68 | 71 | 39 | 30 |
| PE-Backed Proceeds (US$ in bil) | $6.5 | $9.6 | $20.4 | $10.3 | $24.5 | $25.0 | $11.3 | $8.8 |
| VC-Backed Deals | 12 | 61 | 51 | 46 | 82 | 126 | 85 | 42 |
| VC-Backed Proceeds (US$ in bil) | $1.3 | $6.0 | $7.9 | $20.7 | $9.7 | $35.3 | $8.9 | $3.5 |

Data through 12/15/16. Source: Renaissance Capital.

IPOs raised less than $19 billion, down 37% from 2015 and the lowest level since 2003. There were no multi-billion dollar IPOs and the median deal size was under $100 million for the second year in a row, driven down by small biotech offerings. The year's deal count finished at 105, down 38% from 2015 and the lowest level since 2009. Excluding 29 biotech IPOs, the 76 companies going public in the US was only marginally above 2009. The drop in activity was indiscriminate; both VC- and PE-backed IPOs were at their lowest level by deal count and proceeds raised since 2009.

The slowdown in IPO activity began in August 2015, when markets sold off dramatically over concerns of China's growth, the impact of a Fed rate hike and a continuing decline in commodities. This caused the performance of 2015's class of IPOs to deteriorate; by the end of the year, 57% were trading below their offer price. As a result, IPO activity slowed in the last months of the year and came to an almost complete shutdown following another market selloff in January. After broader indices rebounded in February and March, the IPO market began to recover, but June's Brexit vote and November's US election contributed to equity market gyrations and further IPO delays. Issuance remained low heading into year-end, as companies set their eyes on 2017.




**About Renaissance Capital**
Renaissance Capital provides pre-IPO institutional research and management of the Renaissance IPO ETF (NYSE symbol: IPO) and the Renaissance International IPO ETF (NYSE symbol: IPOS). For more information, visit www.renaissancecapital.com.

## 2016 IPO Returns Strongly Rebound to 23%, Best Performance in 3 Years

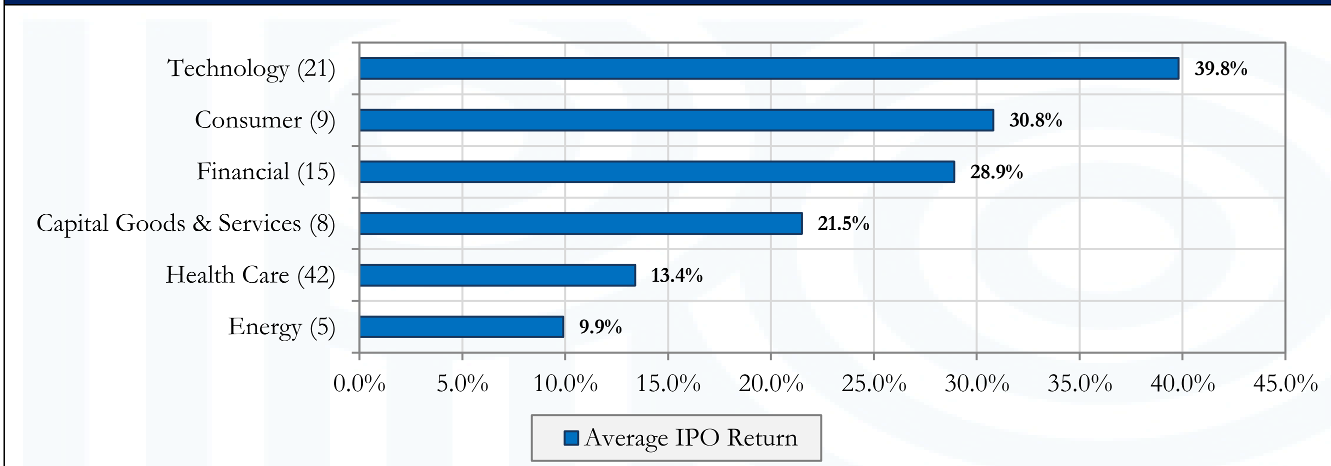
**Return Statistics**

| | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| Avg. Total Return | 20.5% | 40.8% | 21.0% | -2.1% | 23.1% |
| Avg. First-Day Return | 14.1% | 17.3% | 13.5% | 14.3% | 11.4% |
| Avg. Aftermarket Return* | 5.6% | 20.3% | 7.2% | -13.5% | 11.0% |
| Renaissance IPO Index | 18.9% | 56.1% | 8.0% | -7.5% | 0.2% |
| S&P 500 | 13.4% | 29.6% | 11.4% | -0.7% | 10.7% |
| Russell 3000 | 14.0% | 30.9% | 10.4% | -1.5% | 11.5% |
| % Trading **Above** Issue at Year-End | 61.7% | 78.4% | 59.3% | 42.9% | 70.2% |
| % Deals with **Negative** First-Day Return | 18.8% | 26.6% | 27.3% | 27.1% | 25.4% |
| % Deals Priced **Below** the Range | 39.8% | 28.8% | 40.0% | 32.9% | 32.3% |

*Return from the first-day close to year-end. Data through 12/15/16. Source: Renaissance Capital.

As we have observed in past periods of low IPO issuance, returns are strong as companies are brought public at more attractive valuations. The IPO market had its best-performing year since 2013 with the average IPO up 23% from its offer price. The +11% aftermarket return alone was in line with most major equity indices. Most IPOs finished the year above issue, compared to just 43% at the end of 2015. The average first-day pop of 11% and the number breaking issue on day one were both in line with historical averages. Average IPO performance improved in every sector in 2016; the strong double-digit returns in major sectors suggests that capital markets are largely open for a wide variety of companies heading into 2017, if priced appropriately. The tech sector captured the highest average gains at +40%, a significant reversal from the sector's -2% return in 2015. Financials benefited from the post-election rally and the energy sector was tied to higher oil prices.

**US IPO Returns by Sector***




*Excludes sectors with 2 or fewer IPOs: Business Services, Transportation, Utilities and Materials. Data through 12/15/16. Source: Renaissance Capital.

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## Public-Private Valuation Disconnect Hits Tech Issuance

Most sectors saw IPO activity decline for a second year in a row. Healthcare, technology, financial, consumer and energy all hit multi-year lows. After four quarters of very low issuance, the tech sector finally began to pick up in the second half of the year, but still remained below historical levels. VC-backed tech companies chose to avoid public-market valuations and had the luxury of remaining private due to ample cash. M&A offered quick exits for other tech deals, such as payment processor TransFirst and security software vendors BlueCoat and Optiv, all of which had filed for IPOs.

The financial sector raised the most proceeds, driven by billion-dollar offerings from insurer Athene and casino REIT MGM Growth, as well as a spate of regional banks. The consumer sector largely shifted away from high-growth brands and toward mature businesses like Titleist golf ball company Acushnet and food distributors US Foods and AdvancePierre. Six of the nine consumer IPOs had over $1 billion in sales. Healthcare, down 46% from last year in deal flow, remained the most active sector in the IPO market for the fourth year in a row due to elevated biotech activity. It was the only sector that brought companies public during the volatile first quarter thanks to substantial insider buying. Capital goods was the only sector to hold up year-over-eyar, driven by defensive names and cyclical IPOs, including building and infrastructure companies Gypsum Management, Atkore International and Forterra.

**Proceeds Ranked by Sector (US$ Billion)**

| | 2012 | | | 2013 | | | 2014 | | | 2015 | | | 2016 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sector | # | $ | % of IPOs | # | $ | % of IPOs | # | $ | % of IPOs | # | $ | % of IPOs | # | $ | % of IPOs |
| Healthcare | 12 | $0.8 | 9% | 54 | $8.6 | 24% | 102 | $9.2 | 37% | 78 | $6.7 | 46% | 42 | $3.4 | 40% |
| Technology | 39 | $20.9 | 30% | 47 | $8.1 | 21% | 56 | $32.5 | 20% | 26 | $7.1 | 15% | 21 | $3.0 | 20% |
| Financial | 20 | $7.8 | 16% | 44 | $10.0 | 20% | 35 | $18.5 | 13% | 21 | $2.3 | 12% | 15 | $4.3 | 14% |
| Consumer | 15 | $2.3 | 12% | 19 | $8.3 | 9% | 16 | $3.0 | 6% | 15 | $3.4 | 9% | 9 | $3.1 | 9% |
| Capital Goods | 5 | $1.4 | 4% | 14 | $3.7 | 6% | 10 | $2.5 | 4% | 7 | $1.8 | 4% | 8 | $1.9 | 8% |
| Energy | 25 | $7.3 | 20% | 22 | $10.7 | 10% | 30 | $12.7 | 11% | 12 | $5.5 | 7% | 5 | $1.5 | 5% |
| Materials | 7 | $1.7 | 5% | 9 | $1.5 | 4% | 7 | $2.0 | 3% | 4 | $1.1 | 2% | 2 | $0.1 | 2% |
| Transportation | 2 | $0.4 | 2% | 7 | $1.8 | 3% | 8 | $1.6 | 3% | 3 | $0.7 | 2% | 1 | $1.4 | 1% |
| Business Services | 3 | $0.2 | 2% | 3 | $1.4 | 1% | 8 | $2.9 | 3% | 3 | $1.3 | 2% | 1 | $0.2 | 1% |
| Utilities | - | - | - | - | - | - | 1 | $0.1 | 0% | - | - | - | 1 | $0.0 | 1% |
| Communications | - | - | - | 3 | $0.8 | 1% | 2 | $0.5 | 1% | 1 | $0.1 | 1% | - | - | - |

Data through 12/15/16. Source: Renaissance Capital.

## Four IPOs Raise Over $1 Billion; Largest Deals Include Two High-Growth Asia Plays

Four IPOs raised over $1 billion, up from three in 2015. Nevertheless, the top ten largest IPOs raised 17% less in collective proceeds than last year. Each of the 10 largest IPOs priced at the midpoint or above. Two of the largest US IPOs were ADR listings from Asian growth companies tied to the social networking and e-commerce sectors. Chinese logistics company ZTO Express dropped 15% on its first day, extremely rare for billion-dollar IPOs and IPOs that price above the range. Four of the 10 were spinoffs, including Japanese messaging app LINE's long-awaited US IPO. Casinos MGM Growth Properties and Red Rock Resorts benefited from a healthy Las Vegas economy. An IPO from Extraction Oil & Gas ended a two-year drought for energy E&Ps.

### Largest US IPOs

| Company | Ticker | Offer Date | Deal Size ($mm) | Sector | Ownership | Return from IPO |
|---|---|---|---|---|---|---|
| ZTO Express | ZTO | 26-Oct | $1,406 | Transportation | Founder | -33.8% |
| Athene Holding | ATH | 8-Dec | $1,080 | Financial | Private Equity | 17.3% |
| MGM Growth Properties LLC | MGP | 19-Apr | $1,050 | Financial | Spinoff | 15.1% |
| US Foods Holding | USFD | 25-May | $1,022 | Consumer | Private Equity | 13.5% |
| LINE | LN | 11-Jul | $722* | Technology | Spinoff | 3.3% |
| Valvoline | VVV | 22-Sep | $660 | Capital Goods | Spinoff | -5.8% |
| Extraction Oil & Gas | XOG | 11-Oct | $633 | Energy | Private Equity | 3.4% |
| Patheon | PTHN | 20-Jul | $625 | Healthcare | Private Equity | 33.8% |
| Red Rock Resorts | RRR | 26-Apr | $531 | Consumer | Private Equity | 16.5% |
| First Hawaiian | FHB | 3-Aug | $485 | Financial | Spinoff | 42.8% |

*Reflects US listed proceeds only; LINE's global IPO raised over $1.1 billion. Data through 12/15/16. Source: Renaissance Capital.

## Technology Retakes the Lead for Best-Performing IPOs

Optical components supplier Acacia Communications, one of the year's first tech IPOs, came at a heavily discounted valuation, and explosive growth and profitability propelled it to the top spot. Four tech IPOs made it to the top ten, compared to none in 2015. Most performance was driven by aftermarket gains rather than first-day trading. Two IPOs broke issue on their debuts, including a 10% drop from rare disease biotech AveXis; the last time an IPO fell on the first day and ended up in the final top ten was 2012.

### Best-Performing US IPOs

| Company | Ticker | Offer Date | Deal Size ($mm) | Sector | First-Day Pop | Return from IPO |
|---|---|---|---|---|---|---|
| Acacia Communications | ACIA | 12-May | $104 | Technology | 34.6% | 191.8% |
| AveXis | AVXS | 10-Feb | $95 | Healthcare | -9.8% | 159.7% |
| Novan | NOVN | 20-Sep | $45 | Healthcare | 64.5% | 143.3% |
| Impinj | PI | 20-Jul | $67 | Technology | 28.4% | 133.4% |
| Reata Pharmaceuticals | RETA | 25-May | $61 | Healthcare | 18.8% | 112.5% |
| Twilio | TWLO | 22-Jun | $150 | Technology | 91.9% | 97.7% |
| Kinsale Capital Group | KNSL | 27-Jul | $106 | Financial | 14.7% | 89.6% |
| Nutanix | NTNX | 27-Jul | $238 | Technology | 131.3% | 79.0% |
| Protagonist Therapeutics | PTGX | 25-May | $90 | Healthcare | -2.5% | 77.6% |
| Bats Global Markets | BATS | 14-Apr | $253 | Financial | 21.1% | 77.3% |

Data through 12/15/16. Source: Renaissance Capital.

The worst-performing IPOs of 2016 were mainly small biotechs, whose initial heavy insider buying was insufficient to prop them up. The year's largest IPO, ZTO Express, also made the bottom ten. Aside from NantHealth, each of the bottom performers traded down or flat on the first day, failing to receive any meaningful investor support from the onset.

### Worst-Performing US IPOs

| Company | Ticker | Offer Date | Deal Size ($mm) | Sector | First-Day Pop | Return from IPO |
|---|---|---|---|---|---|---|
| PhaseRx | PZRX | 17-May | $19 | Healthcare | 0.4% | -71.4% |
| Oncobiologics | ONS | 12-May | $35 | Healthcare | -20.0% | -67.8% |
| Kadmon Holdings | KDMN | 26-Jul | $75 | Healthcare | -19.2% | -61.2% |
| Aeglea BioTherapeutics | AGLE | 6-Apr | $50 | Healthcare | -2.3% | -47.7% |
| Obalon Therapeutics | OBLN | 5-Oct | $75 | Healthcare | 0.0% | -40.1% |
| Spring Bank Pharmaceuticals | SBPH | 6-May | $11 | Healthcare | -7.5% | -34.9% |
| ZTO Express | ZTO | 26-Oct | $1,406 | Transportation | -15.0% | -33.8% |
| NantHealth | NH | 1-Jun | $91 | Healthcare | 32.8% | -30.6% |
| Syndax Pharmaceuticals | SNDX | 2-Mar | $53 | Healthcare | 0.1% | -28.3% |
| Myovant Sciences | MYOV | 26-Oct | $218 | Healthcare | -11.6% | -28.0% |

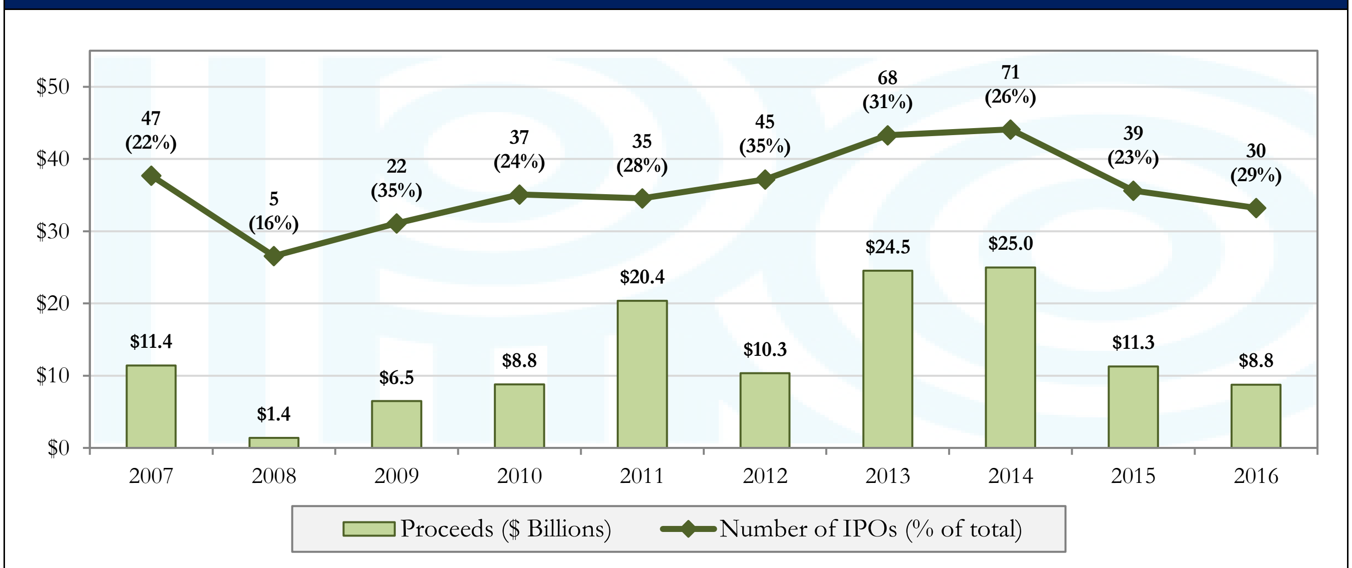
Data through 12/15/16. Source: Renaissance Capital.

## Private Equity IPOs Hold Up Better, But Still At Lowest Level Since 2009

Private equity IPO activity finished 2016 at multi-year lows in terms of deal count and proceeds. However, year-over-year, PE-backed IPOs held up better than the overall IPO market, with deal count down 23% from 2015 compared to a drop of 43% for non-PE-backed IPOs. The group averaged a gain of +29%, including a first-day pop of +9%. Only five of the 30 finished the year below issue. The two largest PE-backed IPOs, both defensive plays, were Apollo Global's annuity provider Athene Holding and KKR and CD&R-backed US Foods.

There are several reasons for the decline in private equity IPO activity. The first PE-backed IPO, Bats, didn't come until the second quarter. Outside of cosmetics brand e.l.f. Beauty, private equity-backed growth companies largely stayed private to avoid public market valuation pressure. There were 13 LBOs, just one short of last year, but activity remained below historical averages. Industry and company-specific issues caused five large LBOs to continue to delay offerings in 2016 that could have collectively raised $5 billion: Albertsons, Univision, Niemen Marcus, Laureate Education and McGraw-Hill Education. Acquisitions took numerous IPOs out of the pipeline, including BlueCoat, inVentiv Group, Playa Hotels and Vantage Energy. Weakness in the energy sector also weighed on issuance.

**US IPO Activity – Private Equity-Backed IPOs**




Source: Renaissance Capital.

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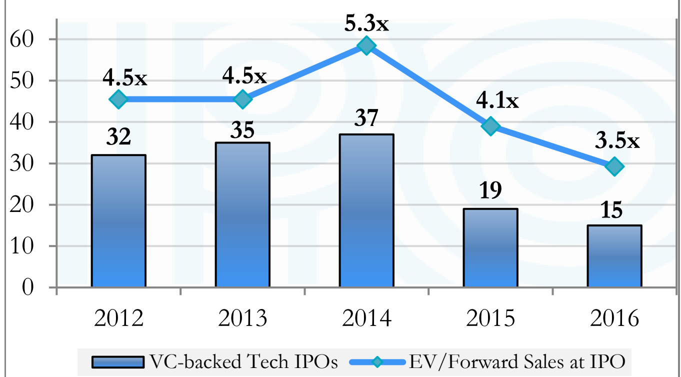
## Venture Capital IPOs Drop by Half

IPOs with venture backing fell to the lowest level of activity since 2009 both in terms of IPO count and proceeds raised. Of the 42 IPOs, nearly 50% were biotechs and only 10 deals raised over $100 million. The group averaged a return of +35%. The implications of this will be expanded upon in our conclusion.

**VC-Backed Tech Plummets, Valuations Cut**

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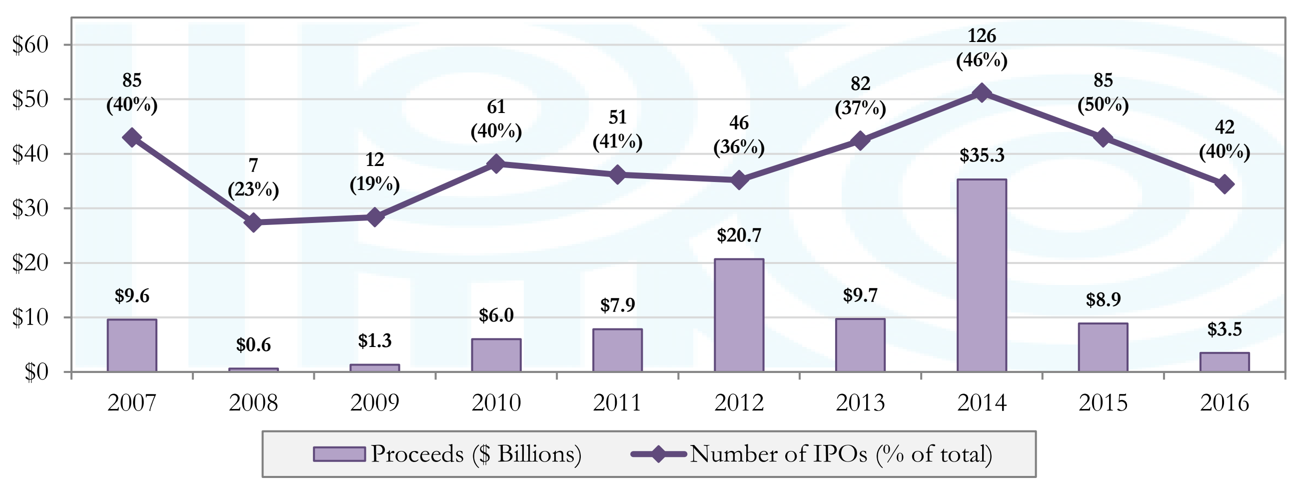
The technology sector was the main culprit for VC weakness with just 15 IPOs, down from last year's multi-year low of 20. Zero tech IPOs priced in the first quarter. The public-private valuation disconnect remained a headwind to issuance. While a select number went forward with an IPO down-round, many pre-IPO companies continued to rely on their accumulated cash piles or accepted onerous terms from new investors. VC-backed tech IPOs produced a 48% average return, mostly from first-day trading, boosted by deliberately low share offerings and valuations that were at clear gaps to public peers. The year's best first-day pops were achieved by the three VC-backed tech companies with $1+ billion IPO valuations, including hyperconverged networking company Nutanix, which popped 131% in the best debut for a tech IPO in over two years.

VC-backed biotech IPOs numbered 20, down 56% compared to last year, and averaged a return of +32%. None priced above the range, and 40% priced below it. Three prominent gene editing biotechs – Editas, Intellia and CRISPR – went public in the US this year, but initial excitement fizzled quickly. With many of the most promising biotechs already public and the Nasdaq Biotech Index down 20% for the year, biotechs relied on insiders to get done and may need to follow the same playbook for activity in 2017.

**US IPO Activity – Venture Capital-Backed IPOs**




Source: Renaissance Capital.

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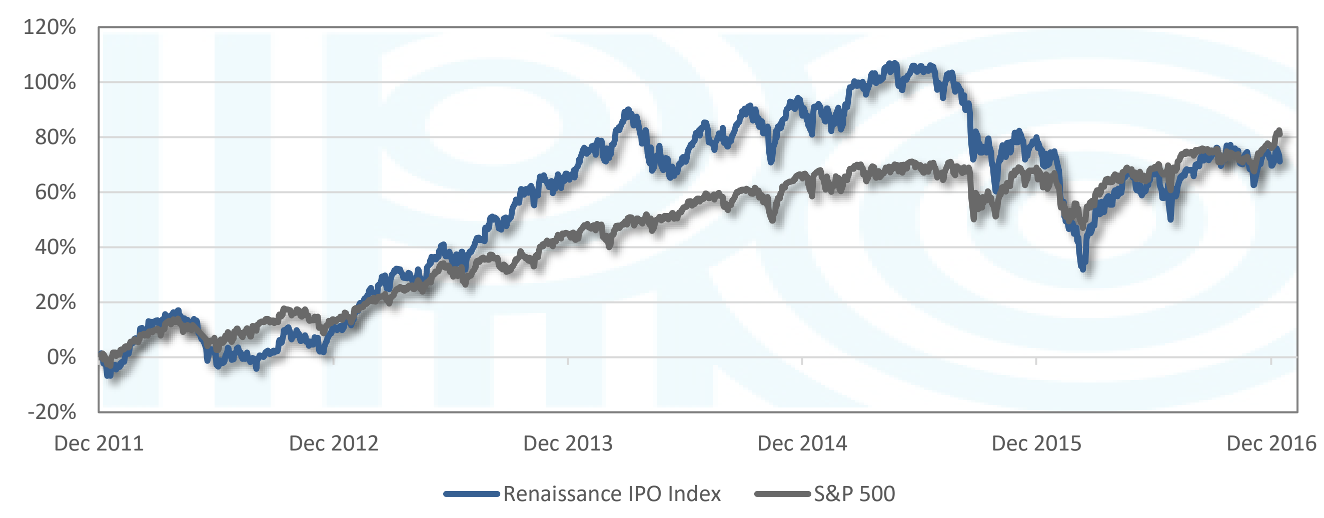
## IPO Index Lags Major Indices

The Renaissance IPO Index (IPOUSA), the underlying index for the Renaissance IPO ETF (IPO), underperformed US equity benchmarks with a -0.6% return compared to the S&P 500's 10.7% return. The IPO index sold off heavily at the beginning of the year due to weak trading from US-listed foreign companies, but has outperformed the S&P 500 by almost 7 percentage points since mid-February, when both indices hit their low point. Utilities and healthcare were the index's weakest sectors, while both the industrials and materials sectors outperformed. Notable securities to drag on index performance in 2016 included wearable fitness device company Fitbit (FIT; -73%), Belgian shipper Euronav (EURN; -51%) and healthcare analytics provider Inovalon (INOV; -50%). Partially offsetting the largest detractors were strong performances from midstream operator Tallgrass Energy (TEGP; +86%), e-commerce platform Shopify (SHOP; +65%) and oil and gas mineral interest holder Black Stone Minerals (BSM; +36%).

### US IPO Index Performance




| | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| Renaissance IPO Index | 18.9% | 56.1% | 8.0% | -7.5% | 0.2% |
| S&P 500 | 14.0% | 30.9% | 11.4% | -0.7% | 10.7% |

Note: The Renaissance IPO Index Series represents a rolling two-year population of newly public companies weighted by float adjusted market cap. Data as of December 15, 2016.

## Visible IPO Pipeline Hits a Post-JOBS Act Low

Only 120 companies filed for IPOs this year, a nearly 50% decrease from 2015 and the fewest filings since 2009. The visible IPO pipeline contains just 64 names looking to raise $18.3 billion, declines of 46% and 32%, respectively, compared to year-end 2015. While the 120 filings were sufficient to replace the year's 105 priced IPOs, 65 acquisitions and withdrawals thinned the pipeline.

The table below highlights some of the most recent filings, including Brazilian meat processor JBS Foods, Apollo-backed IT services firm Presidio and global container supplier Ardagh. Most are non-JOBS Act filers, whose filings position them for 1Q17 IPOs. However, we expect the majority of 2017 IPOs to come from our Private Company Watchlist, many of which are eligible to launch roadshows 15 days after a public filing. Of this year's 105 IPOs, only 23 companies were on file heading into the year.

**Notable IPOs on File**

| Company | Business | LTM Sales | LTM EBITDA | Est. Deal Size | Industry |
|---|---|---|---|---|---|
| JBS Foods | World's leading processor of beef, poultry and other meats. | $51,436 | 6.2% | $2,500 | Consumer |
| Ardagh Group | Global provider of metal and glass containers for CPGs. | $6,092 | 24.5% | $1,500 | Materials |
| JELD-WEN | Global manufacturer of windows, doors and composites. | $3,585 | 10.3% | $500 | Capital Goods |
| CBS Radio | Second-largest US radio station operator spun out of CBS. | $1,218 | 27.9% | $500 | Communications |
| Presidio | Provides IT infrastructure services to SMBs. | $2,761 | 7.6% | $400 | Technology |
| Mauser Group | Manufactures industrial packaging for chemicals companies. | $1,595 | 1.9% | $300 | Capital Goods |
| Keane Group | Provides well completion services for the fracking industry. | $434 | -7.6% | $288 | Energy |
| REV Group | Manufactures emergency and specialty vehicles. | $1,844 | 6.4% | $200 | Capital Goods |

All $ in million. Source: Renaissance Capital.

## Mega Tech Companies Expected to Hit in the Next 12-24 Months

Our Private Company Watchlist contains 277 companies, over 50 of which have selected banks or filed confidentially. The most highly anticipated company on our list is Snap, widely expected to file for an IPO in the 1H17 that could raise $4 billion at a valuation over $25 billion. The other is Spotify, which raised $1 billion in convertible debt financing in March 2016 that nearly guarantees an imminent IPO. The two alone stand to raise more capital than all VC-backed tech IPOs in the last two years combined.

**Mega-Tech Companies in the Private Pipeline**

| Company | Business | Funding ($mm) | Est. Valuation ($mm) |
|---|---|---|---|
| Uber | Smartphone app for on-demand transportation service. | $13,100 | $68,000 |
| Snap*** | Mobile app for ephemeral messaging and photo sharing. | $3,000 | $25,000 |
| Palantir | Government and financial data analytics platform. | $2,440 | $20,150 |
| Pinterest | Pinboard-style social photo sharing website. | $1,320 | $11,000 |
| Dropbox | Web-based cloud storage provider. | $607 | $10,000 |
| Spotify | Subscription-based music streaming service. | $1,176 | $8,530 |
| Airbnb | Provides a global network of accommodations offered by locals. | $3,000 | $30,000 |
| WeWork | Outfits and leases shared office space, primarily for startups. | $1,690 | $16,900 |
| SoFi | Peer-to-peer lending platform for student loan financing. | $1,420 | $4,000 |

*Indicates company has filed confidentially. **Indicates company has selected banks. Source: Renaissance Capital.

## Private Company Pipeline Is Well Stocked with 2017 IPO Candidates

Besides the several mega tech deals that could come public soon, there is still a large pool of VC-backed and other IPO candidates across a variety of sectors and sponsor types set to move forward in 2017. We have highlighted a sampling of companies below, which include Altice USA, the proposed spinoff of Altice's US assets; Invitation Homes, a Blackstone-backed REIT focused on single-family homes; Vice Media, which CEO Shane Smith has hinted could IPO in 2017; AppNexus, an automated ad-bidding platform; and AppDynamics, a performance management software provider.

### Notable PCW Members Expected to Seek 2017 IPOs

| Company Name | Business Description | Funding ($mm) | Est. Valuation ($mm) |
|---|---|---|---|
| Altice USA | US arm of multinational Dutch cable company Altice. | n/a | $25,000 |
| Invitation Homes*** | Blackstone REIT with largest portfolio of US single-family houses. | n/a | $7,500 |
| Schneider National | Seventh-largest US trucking company with over 11,000 vehicles. | n/a | $5,000 |
| Vice Media | Youth media company that creates and distributes content globally. | $770 | $4,500 |
| Blue Apron** | Delivers packaged ingredients and recipes for home meal prep. | $190 | $3,000 |
| AppDynamics*** | Application performance management software. | $330 | $2,500 |
| Information Resources | Data compilation, analysis and consulting for retailers. | $800 | $2,500 |
| Canada Goose** | Makes and sells trendy, handmade down-filled parkas. | $250 | $2,000 |
| Brigham Resources | Oil and gas E&P focused on fracking in the Permian Basin. | $650 | $2,000 |
| Octo Telematics*** | Captures and analyzes telematic data for the insurance industry. | n/a | $2,000 |
| AppNexus*** | Platform for automated bidding and trading of online advertisements. | $282 | $1,750 |
| Authentic Brands* | Consumer brands development and licensing company. | $500 | $1,500 |
| Avalara† | Cloud-based sales tax and compliance solutions provider | $336 | $1,000 |
| ForeScout** | Provides enterprise network access control solutions. | $80 | $1,000 |
| Warrior Met Coal** | Apollo-backed metallurgical coal producer. | n/a | $1,000 |
| J. Jill*** | Women's apparel and accessories retailer with over 260 stores. | $400 | $750 |
| Carbon Black (Bit9)*** | Provides cybersecurity solutions to large enterprises. | $175 | $600 |

*Indicates company has filed confidentially. **Indicates company has selected banks. Source: Renaissance Capital

**About Renaissance Capital**
Renaissance Capital provides pre-IPO institutional research and management of the Renaissance IPO ETF (NYSE symbol: IPO) and the Renaissance International IPO ETF (NYSE symbol: IPOS). For more information, visit www.renaissancecapital.com.

## Outlook

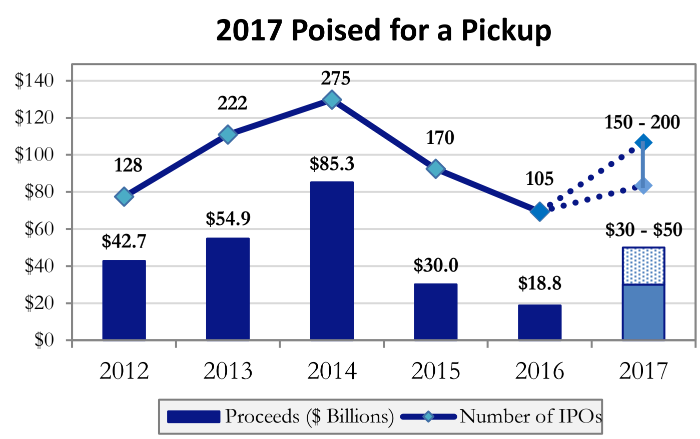
Forecasting 2016 from the perspective of December 2015 was a hard task, but a few factors were evident, most notably the public-private valuation disconnect for VC and PE-backed companies. Now looking into 2017 from December 2016, the view is much clearer. The private companies that eschewed IPOs in recent years are closer to liquidity events. As a result of the US Presidential election, there will be a 180-degree turn on fiscal policy, regulation, energy and healthcare policies that should be stimulative to equity markets, new company formation and profitability.

### Breaking the Private Company Logjam

The reasons why VC and PE-backed companies are closer to liquidity events now are several: increased investor selectivity and risk management, self-correction of valuations, a decline in capital for mega-rounds and aging VC and PE vintages.

Private investors are demanding both a path to profitability and downside protection in the event of a liquidity event. This is because investors are more cautious of high cash burn and valuations continue to drop. For example, Spotify raised $1 billion using convertible debt with investor guarantees in its forthcoming IPO. As a result, capital invested and the number of deals closed have declined since mid-2015. VC firms have redirected their venture rounds away from the mega-companies to sub $100 million rounds in late and early-stage companies. Only companies with the strongest business models have received $100 million plus rounds. New quarterly US “unicorn” creation dropped to low single digits in 2016. With private capital relatively less available and on more expensive terms, these private companies will be pushed into liquidity events.

The private-public valuation disconnect has been a major impediment to IPO issuance during 2015 and 2016, but this issue is closer to correcting itself. Many fast-growing private companies have seen their valuations flat or down in new funding rounds. As time goes on and they continue to grow, their multiples will contract to levels that are more palatable to public investors. For example, Nutanix filed in 2015 but waited until late 2016 to go public; as a result, it was able to price near its last VC round and deliver strong returns to public buyers.




### Prospective Federal Policy Changes

The major changes in policy should be positive for SMID cap companies and select industries. Reductions in tax rates will benefit smaller domestic companies that lack the ability to arbitrage tax rates globally. Lifting restrictions on advanced drilling technologies and oil production on federally controlled land has already provided a boost to the energy industry. Bank stocks have already rallied on higher interest rates and the prospect of repealing or weakening Dodd-Frank. Healthcare is a trickier call because there are many scenarios by which Obamacare could be repealed or partially dismantled. However, one call we can make with confidence: the biotech boom is over for now because the best companies of the 2013-2016 vintages have already gone public and there are an increasing number of Phase 3 trial failures.

Our forecast for 2017 is that it should be a significantly better year, both in terms of number of IPOs and proceeds raised.