

Initial Public Offerings: Updated Statistics on Long-run Performance

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Long-run Returns on IPOs Categorized by the Pre-issue Sales of the Firm, 1980-2016

All Last Twelve Months (LTM) sales figures for the firms going public have been converted into dollars of 2015 purchasing power using the Consumer Price Index. 8,252 IPOs from 1980-2016 are used, with returns calculated through the end of December, 2017. IPOs with an offer price below \$5.00 per share, unit offers, ADRs, REITs, closed end funds, natural resource partnerships, banks and S&Ls, small best efforts offers, and IPOs not listed on CRSP within six months of the offer date are excluded. Mm is millions of dollars. Buy-and-hold returns are calculated until the earlier of the three-year anniversary or the delisting date (no later than Dec. 29 of 2017 for IPOs from 2015 and 2016). Market-adjusted returns use the CRSP value-weighted index. Style adjustments use firms matched by market cap and book-to-market ratio with at least five years of CRSP listing and no follow-on equity issues in the prior five years. For post-issue book value of equity numbers, I use the post-issue common equity numbers from SDC with corrections by checking the prospectus, and for the remaining missing numbers I use the equity book values reported for the nearest quarter after the IPO on COMPUSTAT, and further missing numbers are calculated using the reported pre-IPO equity book values plus the amount of the proceeds (assuming that overallotment option shares and costs of issuing offset each other) times the fraction of the primary shares. For dual-class shares, the post-issue book-to-market ratio is calculated using the larger of the post-issue number of shares reported from SDC (with corrections to account for all share classes) and the total shares outstanding reported from CRSP at end of the IPO date. Market capitalization (size) is calculated using the first closing market price after the IPO and the post-issue number of shares outstanding. All returns include dividends and capital gains, including the index returns.

Sales (in 2015\$)	Number of IPOs	Average First-day Return	Average 3-year Buy-and-hold Return		
			IPOs	Market-adjusted	Style-adjusted
0-9.999 mm	1,573	22.2%	-10.2%	-46.1%	-30.1%
10-19.999 mm	706	28.1%	8.4%	-31.3%	-8.8%
20-49.999 mm	1,493	22.5%	20.0%	-23.2%	-6.9%
50-99.999 mm	1,368	17.6%	30.1%	-12.7%	-4.3%
100-499.999 mm	2,081	12.4%	39.0%	-3.5%	3.6%
500 mm and up	1,031	9.4%	37.1%	1.7%	-0.9%
0-99.999 mm	5,140	21.9%	11.9%	-28.5%	-13.5%
100 mm and up	3,112	11.4%	38.4%	-1.8%	2.1%
1980-2016	8,252	17.9%	21.9%	-18.4%	-7.6%

Table 16a (updated April 25, 2018)

Long-run Returns on IPOs Categorized by the Pre-issue Sales of the Firm, 1980-2016

All Last Twelve Months (LTM) sales figures for the firms going public have been converted into dollars of 2015 purchasing power using the Consumer Price Index. 8,252 IPOs from 1980-2016 are used, with returns calculated through the end of December, 29 2017. IPOs with an offer price below \$5.00 per share, unit offers, ADRs, REITs, closed end funds, natural resource partnerships, banks and S&Ls, small best efforts offers, and IPOs not listed on CRSP within six months of the offer date are excluded. Mm is millions of dollars. Buy-and-hold returns are calculated from the first closing market price until the earlier of the three-year anniversary or the delisting date (Dec. 29 of 2017 for IPOs from 2015 and 2016). Market-adjusted returns use the CRSP value-weighted index. Style adjustments use firms matched by market cap and book-to-market ratio with at least five years of CRSP listing and no follow-on equity issues in the prior five years. The market-adjusted and style-adjusted returns are the average buy-and-hold return on the IPOs minus the average compounded return on the benchmark. For post-issue book value of equity numbers, I use the post-issue common equity numbers from SDC with corrections by checking the prospectus, and for the remaining missing numbers I use the equity book values reported for the nearest quarter after the IPO on COMPUSTAT, and further missing numbers are calculated using the reported pre-IPO equity book values plus the amount of the proceeds (assuming that overallotment option shares and costs of issuing offset each other) times the fraction of the primary shares. For dual-class shares, the post-issue book-to-market ratio is calculated using the larger of the post-issue number of shares reported from SDC (with corrections to account for all share classes) and the total shares outstanding reported from CRSP at end of the IPO date. Market capitalization (size) is calculated using the first closing market price after the IPO and the post-issue number of shares outstanding. All returns include dividends and capital gains, including the index returns.

Sales (in 2015\$)	Number of IPOs	Average First-day Return	Average 3-year Buy-and-hold Return		
			IPOs	Market-adjusted	Style-adjusted
Less than \$1 billion	7,654	18.6%	20.2%	-20.6%	-8.9%
\$1 billion and up	598	8.6%	42.7%	9.0%	8.4%
1980-2016	8,252	17.9%	21.9%	-18.4%	-7.6%

Note: The 8.7% 3-year market-adjusted buy-and-hold return corresponds to an annualized market-adjusted return of 2.2% per year, with an average holding period of 2.9 years for the large companies, because $1.413/1.326=1.066$, and $1.066^{0.34}=1.022$. The 1.326 is 8.7% below the 41.3% average buy-and-hold return, and 0.34 is equal to $\frac{1}{2} \cdot 0.9$. The -20.7% 3-year market-adjusted buy-and-hold return, with an average holding period of 2.8 years, corresponds to an annualized market-adjusted return of -5.5% per year, since the wealth relative (public market equivalent) is $1.197/1.404=0.853$.

Table 16b (July 14, 2017)**Distribution of 5-year Buy-and-Hold Returns on IPOs, 1975-2011**

7,713 IPOs from 1975-2011 are used, with buy-and-hold returns calculated until the earlier of the five-year anniversary or the delisting date. All returns include dividends and capital gains. IPOs with an offer price below \$5.00 per share, unit offers, ADRs, REITs, closed end funds, natural resource partnerships, banks and S&Ls, small best efforts offers, and IPOs not listed on CRSP within six months of the offer date are excluded. The average first-day return in Panel A is 17.8%, with an average 5-year buy-and-hold return (BHR) of 38.8%, measured from the first close. In Panel B, the average first-day return is 10.3%, with a subsequent average 5-year buy-and-hold return of 59.2%. Sales is inflation-adjusted sales for the last twelve months (LTM) prior to the IPO, in dollars of 2016 purchasing power using the CPI.

Panel A: All 7,713 IPOs

5-year buy-and-hold return	From the first close		From the offer price	
	Number of IPOs	Percentage	Number of IPOs	Percentage
BHR<50%	3,246	42.1%	3,028	39.3%
-50%<BHR≤0%	1,397	18.1%	1,355	17.6%
0%<BHR≤50%	965	12.5%	973	12.6%
50%<BHR≤100%	627	8.1%	667	8.7%
100%<BHR≤200%	698	9.1%	749	9.7%
200%<BHR≤300%	284	3.7%	349	4.5%
300%<BHR≤400%	168	2.2%	196	2.5%
400%<BHR≤500%	90	1.2%	105	1.4%
500%<BHR≤1,000%	154	2.0%	181	2.3%
1,000%<BHR≤2,000%	64	0.8%	77	1.0%
2,000%<BHR≤3,000%	11	0.1%	22	0.3%
3,000%<BHR	9	0.1%	11	0.1%
1975-2011	7,713	100.0%	7,713	100.0%

Panel B: 2,814 IPOs with LTM Sales of \$100 million or more (\$2016)

5-year buy-and-hold return	From the first close		From the offer price	
	Number of IPOs	Percentage	Number of IPOs	Percentage
BHR<50%	804	28.6%	742	26.4%
-50%<BHR≤0%	532	18.9%	517	18.4%
0%<BHR≤50%	451	16.0%	439	15.6%
50%<BHR≤100%	326	11.6%	329	11.7%
100%<BHR≤200%	367	13.1%	378	13.4%
200%<BHR≤300%	128	4.5%	175	6.2%
300%<BHR≤400%	83	3.0%	83	2.9%
400%<BHR≤500%	37	1.3%	47	1.7%
500%<BHR≤1,000%	57	2.0%	67	2.4%
1,000%<BHR≤2,000%	26	0.9%	31	1.1%
2,000%<BHR≤3,000%	3	0.1%	6	0.2%
3,000%<BHR	0	0.0%	0	0.0%
1975-2011	2,814	100.0%	2,814	100.0%

Table 17 (updated April 25, 2018)**Long-run Returns on IPOs Categorized by VC-backing or Buyout Fund-backing**

All Last Twelve Months (LTM) sales figures for the firms going public have been converted into dollars of 2005 purchasing power using the Consumer Price Index. IPOs from 1980-2016 are used, with returns calculated through the end of December, 2017. In Panel A, the sample size is 8,252 firms. Growth capital-backed IPOs are included in the VC-backed category. IPOs with an offer price below \$5.00 per share, unit offers, small best efforts offerings, ADRs, REITs, closed-end funds, natural resource limited partnerships, banks and S&Ls, and IPOs not listed on CRSP within six months of the offer date are excluded. In Panel B, one additional screen is implemented, reducing the sample size. This additional screen is that the last twelve months (LTM) sales of the issuing firm is at least \$50 million (2005 purchasing power). Buy-and-hold returns are calculated until the earlier of the three-year anniversary or the delisting date (Dec. 29 of 2017 for IPOs from 2015 and 2016). Market-adjusted returns use the CRSP value-weighted index. All returns include dividends and capital gains. Style adjustments use firms matched by market cap and book-to-market ratio with at least five years of CRSP listing and no follow-on equity issues in the prior five years. All returns include dividends and capital gains, including the index returns. Jerry Cao of Sun Yat-sen University has assisted in providing data on the classification of IPOs as buyout-backed. Growth capital-backed IPOs are classified as VC-backed.

Panel A: IPOs from 1980-2016 categorized by venture capital backing

VC-backed or not	Number of IPOs	Average First-day Return	Average 3-year Buy-and-hold Return		
			IPOs	Market-adjusted	Style-adjusted
VC-backed	3,091	26.8%	24.7%	-10.9%	-1.6%
NonVC-backed	5,161	12.6%	20.2%	-23.0%	-11.3%
NonVC and nonBuyout	4,048	13.5%	16.6%	-29.7%	-14.7%
All	8,252	17.9%	21.9%	-18.4%	-7.6%

Note: The nonVC- and nonBuyout-backed IPOs do not include a minimum sales screen, unlike in Panel B.

Panel B: IPOs with at least \$50 million in LTM sales (2005 purchasing power) from 1980-2016 categorized by private equity (buyout fund) backing

Buyout-backed or not	Number of IPOs	Average First-day Return	Average 3-year Buy-and-hold Return		
			IPOs	Market-adjusted	Style-adjusted
Buyout-backed	994	8.9%	35.3%	4.5%	3.1%
NonBuyout-backed	3,004	13.8%	39.7%	-4.1%	2.6%
All	3,998	12.6%	38.6%	-2.0%	2.7%

Table 17a (updated April 25, 2018)

Long-run Returns on IPOs Categorized by VC-, Growth Capital-, or Buyout Fund-backing

8,252 IPOs from 1980-2016 are used, with returns calculated through the end of December, 2017. Buy-and-hold returns are calculated from the first closing price until the earlier of the three-year anniversary or the delisting date (Dec. 29 of 2017 for IPOs from 2015 and 2016). Market-adjusted returns use the CRSP value-weighted index. All returns include dividends and capital gains. Style adjustments use firms matched by market cap and book-to-market ratio with at least five years of CRSP listing and no follow-on equity issues in the prior five years. This table is an updated version of Table 3 of my “Growth Capital-backed IPOs” published in the 2015 *Financial Review*. Growth capital-backed IPOs are defined to be IPOs with a financial sponsor that is financing investments in tangible assets and/or acquisitions are a major part of its growth strategy. Buyouts involve the financial sponsor taking control by buying out prior shareholders. Corporate venture capital and angel investors are not included as financial sponsors.

	Number of IPOs	Average First-day Return	Average 3-year Buy-and-hold Return		
			IPOs	Market-adjusted	Style-adjusted
VC-backed	2,703	28.6%	20.3%	-14.0%	-3.0%
Growth capital-backed	387	14.3%	55.4%	11.3%	15.5%
Buyout-backed-backed	1,096	9.2%	33.5%	3.0%	0.1%
Financial Sponsored	4,186	22.2%	26.9%	-7.3%	-1.2%
Non-Financial Sponsored	4,066	13.5%	16.6%	-29.9%	-14.3%
All	8,252	17.9%	21.9%	-18.4%	-7.6%

Note: The high average 3-year buy-and-hold return for growth capital-backed IPOs is partly attributable, in a mechanical sense, to the five IPOs with the highest buy-and-hold returns in this subsample: The May 10, 1984 IPO of restaurant chain This Can't Be Yogurt (4,076.6%); the April 10, 1997 IPO of middleware software developer and distributor BEA Systems (2,562.2%); the November 15, 1989 IPO of original equipment manufacturer Solelectron (944.0%); the April 24, 1996 IPO of outdoor advertising (billboards) operator Outdoor Systems (935.1%); the February 9, 1983 IPO of health care provider United States Health Care (636.6%); and the September 19, 1989 IPO of health care provider Vencor (635.8%).

Table 18 (updated April 25, 2018)

Long-run Returns on IPOs Categorized by VC-backing, by Subperiod

The sample is composed of 8,252 IPOs from 1980-2016, with returns calculated through the end of December, 2017. Growth capital-backed IPOs are classified as venture capital (VC)-backed in all panels. IPOs with an offer price below \$5.00 per share, unit offers, small best efforts offerings, ADRs, REITs, closed end funds, SPACs, natural resource limited partnerships, banks and S&Ls, and IPOs not listed on CRSP within six months of the offer date are excluded. Buy-and-hold returns are calculated from the first closing market price until the earlier of the three-year anniversary or the delisting date (Dec. 29 of 2017 for IPOs from 2015 and 2016). Market-adjusted returns use the CRSP value-weighted index. All returns include dividends and capital gains. Style adjustments use firms matched by market cap and book-to-market ratio with at least five years of CRSP listing and no follow-on equity issues in the prior five years. Market capitalization (size) is calculated using the first closing market price after the IPO. All returns include dividends and capital gains, including the index returns.

Panel A: IPOs from 1980-2016 categorized by venture capital backing

VC-backed or not	Number of IPOs	Average First-day Return	Average 3-year Buy-and-hold Return		
			IPOs	Market-adjusted	Style-adjusted
VC-backed	3,091	26.8%	24.7%	-10.9%	-1.6%
NonVC-backed	5,161	12.6%	20.2%	-23.0%	-11.3%
All	8,252	17.9%	21.9%	-18.4%	-7.6%

Panel B: IPOs from 1980-1989

VC-backed or not	Number of IPOs	Average First-day Return	Average 3-year Buy-and-hold Return		
			IPOs	Market-adjusted	Style-adjusted
VC-backed	513	8.5%	31.9%	-14.0%	13.9%
NonVC-backed	1,535	6.8%	19.3%	-25.5%	-1.7%
All	2,048	7.2%	22.5%	-22.6%	2.2%

Panel C: IPOs from 1990-1998

VC-backed or not	Number of IPOs	Average First-day Return	Average 3-year Buy-and-hold Return		
			IPOs	Market-adjusted	Style-adjusted
VC-backed	1,258	17.3%	60.0%	-1.9%	24.1%
NonVC-backed	2,355	13.5%	29.0%	-31.2%	-13.2%
All	3,613	14.8%	39.8%	-21.0%	-0.2%

Panel D: IPOs from 1999-2000

VC-backed or not	Number of IPOs	Average First-day Return	Average 3-year Buy-and-hold Return		
			IPOs	Market-adjusted	Style-adjusted
VC-backed	517	81.3%	-62.1%	-40.4%	-62.5%
NonVC-backed	339	39.1%	-39.4%	-18.6%	-53.4%
All	856	64.6%	-53.1%	-31.8%	-58.9%

Panel E: IPOs from 2001-2016

VC-backed or not	Number of IPOs	Average First-day Return	Average 3-year Buy-and-hold Return		
			IPOs	Market-adjusted	Style-adjusted
VC-backed	803	18.3%	20.6%	-3.9%	-12.6%
NonVC-backed	931	10.3%	20.9%	0.5%	-6.7%
All	1,734	14.0%	20.8%	-1.6%	-9.4%

Table 19: Updated Table I of Ritter and Welch 2002 *Journal of Finance* article

Number of IPOs, First-day Returns, and Long Run Performance, IPOs from 1980-2016

The equally weighted (EW) average first-day return is measured from the offer price to the first CRSP-listed closing price. EW average three-year buy-and-hold percentage returns (capital gains plus dividends) are calculated from the first closing market price to the earlier of the three-year anniversary price, the delisting price, or December 29, 2017. Buy-and-hold returns for initial public offerings (IPOs) occurring after Dec. 31, 2016 are not calculated. Market-adjusted returns are calculated as the buy-and-hold return on an IPO minus the compounded daily return on the CRSP value-weighted index of Amex, Nasdaq, and NYSE firms. Style-adjusted buy-and-hold returns are calculated as the difference between the return on an IPO and a style-matched firm. For each IPO, a non-IPO matching firm that has been CRSP-listed for at least five years with the closest market capitalization (size) and book-to-market ratio as the IPO is used. Market capitalization is calculated using the first closing market price after the IPO. If this stock is delisted prior to the IPO return's ending date, or if it conducts a follow-on stock offering, a replacement matching firm is spliced in on a point-forward basis. IPOs with an offer price below \$5.00 per share, unit offers, small best efforts offers, natural resource limited partnerships, REITs, closed-end funds, banks and S&Ls, ADRs, and IPOs not listed on CRSP within six months of issuing have been excluded. Data is from Thomson Financial Securities Data, with supplements from Dealogic and other sources, and corrections by the authors. The number of IPOs per year is much lower than in the 1995 *Journal of Finance* article "The New Issues Puzzle" by Loughran and Ritter because that paper used a \$1.00 offer price screen. The number is larger than in the 2002 *Journal of Finance* article "A Review of IPO Activity, Pricing, and Allocations" due to various data corrections and the back-filling of Nasdaq-listed foreign issuers by CRSP. (Updated April 25, 2018)

Year	Number of IPOs	Average First-day Return	Average 3-year Buy-and-hold Return		
			IPOs	Market-adjusted	Style-adjusted
1980	71	14.3%	89.8%	37.0%	18.5%
1981	193	5.9%	12.0%	-27.2%	11.1%
1982	77	11.0%	37.5%	-31.5%	-12.0%
1983	451	9.9%	15.9%	-37.7%	-4.4%
1984	171	3.7%	50.2%	-28.5%	29.0%
1985	186	6.4%	5.6%	-41.3%	-12.3%
1986	393	6.2%	16.9%	-22.6%	-1.3%
1987	285	5.6%	-2.6%	-19.1%	-11.2%
1988	105	5.5%	58.0%	9.7%	38.7%
1989	116	8.0%	48.1%	13.2%	7.2%
1990	110	10.8%	9.7%	-35.9%	-38.4%
1991	286	11.9%	31.2%	-1.8%	5.8%
1992	412	10.3%	37.4%	-0.2%	11.1%
1993	510	12.7%	44.1%	-8.7%	-9.5%
1994	402	9.6%	78.0%	-5.7%	-0.9%
1995	461	21.2%	28.9%	-57.8%	-24.6%
1996	677	17.2%	25.2%	-56.8%	7.0%
1997	474	14.0%	58.3%	-2.0%	22.0%
1998	281	21.9%	23.4%	5.7%	-5.2%
1999	476	71.2%	-47.6%	-32.5%	-60.6%
2000	380	56.3%	-60.1%	-30.9%	-56.9%
2001	79	14.2%	17.8%	14.4%	-28.1%
2002	66	9.1%	68.6%	39.0%	-0.4%
2003	63	11.7%	34.0%	-7.7%	-11.2%
2004	173	12.3%	51.4%	6.9%	-7.0%
2005	159	10.3%	14.6%	3.1%	-2.5%
2006	157	12.1%	-28.8%	-11.1%	-4.5%
2007	159	14.0%	-16.5%	-0.4%	0.5%
2008	21	5.7%	11.4%	8.1%	5.1%
2009	41	9.8%	37.0%	-5.1%	-18.3%
2010	91	9.4%	36.4%	-9.6%	-18.5%
2011	81	13.9%	38.6%	-8.7%	-11.7%
2012	93	17.8%	81.9%	31.8%	33.4%
2013	157	21.1%	12.4%	-14.1%	-14.0%
2014	206	15.1%	17.1%	-9.7%	-11.9%
2015	115	18.7%	6.9%	-23.3%	-43.4%
2016	74	14.6%	25.3%	-3.3%	-13.4%
1980-1989	2,049	7.2%	22.5%	-22.6%	2.2%
1990-1994	1,720	11.2%	46.1%	-6.6%	-1.9%
1995-1998	1,893	18.1%	34.1%	-34.1%	1.3%
1999-2000	856	64.6%	-53.1%	-31.8%	-59.1%
2001-2016	1,735	14.0%	20.8%	-1.6%	-9.4%
1980-2016	8,252	17.9%	21.9%	-18.4%	-7.6%

Table 20
Returns on IPOs during the five years after issuing, for IPOs from 1980-2016

These tables show that IPOs have underperformed other firms of the same size (market cap) by an average of 3.3% per year during the five years after issuing, not including the first-day return. The underperformance relative to other firms of the same size and book-to-market ratio has averaged 2.1% per year. Returns are through Dec. 29, 2017.

Table 20-1
Percentage returns on IPOs from 1980-2016 during the first five years after issuing

	First six months	Second six months	First Year	Second year	Third year	Fourth year	Fifth Year	Geometric Mean years 1-5
IPO firms	6.6%	0.6%	7.6%	6.5%	11.9%	19.0%	10.3%	11.0%
Size-matched	5.6%	5.9%	12.0%	14.5%	15.3%	16.3%	12.9%	14.2%
Difference	1.0%	-5.3%	-4.4%	-8.0%	-3.4%	2.7%	-2.6%	-3.2%
No of IPOs	8,251	8,225	8,251	8,099	7,360	6,444	5,540	
IPO firms	6.6%	0.7%	7.6%	6.5%	11.8%	18.7%	10.1%	10.9%
Size & BM- Matched	4.0%	4.5%	8.8%	13.4%	12.0%	17.6%	12.6%	12.8%
Difference	2.6%	-3.9%	-1.3%	-6.9%	-0.2%	1.0%	-2.5%	-2.0%
No. of IPOs	8,247	8,210	8,249	8,090	7,336	6,404	5,517	

All returns are equally weighted average returns for all IPOs that are traded on Nasdaq, the Amex (now NYSE MKT), or the NYSE at the start of a period. For the first and third columns, the returns are measured from the closing market price on the first day of CRSP-reported trading until the sixth-month or one-year anniversary. For years 2-5, each year the portfolios are rebalanced to equal weights. If an issuing firm is delisted within a year, its return for that year is calculated by compounding the CRSP value-weighted market index for the rest of the year. For the size-matched returns, each IPO is matched with the nonissuing firm having the same or next higher market capitalization (using the closing market price on the first day of trading for the IPO, and the market capitalization at the end of the previous month for the matching firms). For the size & BM-matched returns, each IPO with a book-to-market ratio higher than zero is matched with a nonissuing firm in the same size decile (using NYSE firms only for determining the decile breakpoints) having the closest book-to-market ratio. Each IPO with a zero or smaller book-to-market ratio is matched with a nonissuing firm of a book-to-market ratio of zero or smaller having the closest market capitalization. For the IPOs, book-to-market ratios are calculated using the first recorded post-issue book value and the post-issue market cap calculated using the closing market price on the first CRSP-listed day of trading. For nonissuing firms, the Compustat-listed book value of equity for the most recent fiscal year ending at least four months prior to the IPO date is used, along with the market cap at the close of trading at month-end prior to the month of the IPO with which it is matched. Nonissuing firms are those that have been listed on the Amex-Nasdaq-NYSE for at least five years, without issuing equity for cash during that time. If a nonissuer subsequently issues equity, it is still used as the matching firm. If a nonissuer gets delisted prior to the delisting (or the fifth anniversary), the second-closest matching firm on the original IPO date is substituted, on a point-forward basis. For firms with multiple classes of stock outstanding, market cap is calculated using the offer price and the total number of shares outstanding across all classes of stock as reported in Compustat. Firms with multiple classes of stock are excluded as potential matching candidates. The sample size is 8,252 IPOs from 1980-2016, excluding IPOs with an offer price of less than \$5.00, ADRs, REITs, acquisition funds, closed-end funds, banks and S&Ls, unit offers, small best efforts deals, and oil & gas limited partnerships. For the 1980s and later, IPOs that are not listed on CRSP within six months of the IPO are excluded. For IPOs from 1980 and later, if book value numbers are missing so that no style-matched firm is available as a benchmark, the value-weighted market return is used for the matching firm return. Returns are measured through December 29, 2017. For partial event-years that end on this date, the last partial year is deleted from the computations. For example, for an IPO on March 15, 2015, its first-year return is included, but not the second-year return.

Table 20-2
Percentage returns on IPOs from 1980-1989 during the first five years after issuing

	First six months	Second six months	First year	Second year	Third Year	Fourth year	Fifth year	Geometric mean years 1-5
IPO firms	3.6%	-0.9%	3.5%	9.5%	12.1%	2.4%	8.1%	6.0%
Size-matched	3.7%	3.4%	7.0%	16.5%	16.7%	7.4%	10.2%	10.8%
Difference	-0.1%	-4.2%	-3.5%	-7.0%	-4.6%	-5.0%	-2.1%	-4.8%
No. of IPOs	2,048	2,039	2,048	2,010	1,866	1,701	1,546	
IPO firms	3.6%	-0.8%	3.4%	9.5%	11.8%	2.2%	7.6%	5.8%
Size & BM- Matched	-0.1%	1.4%	0.8%	14.5%	9.3%	4.4%	10.9%	5.5%
Difference	3.7%	-2.2%	2.6%	-4.9%	2.5%	-2.1%	-3.3%	0.3%
No. of IPOs	2,044	2,029	2,046	2,009	1,859	1,688	1,542	

Table 20-3
Percentage returns on IPOs from 1990-1999 during the first five years after issuing

	First six months	Second six months	First year	Second year	Third Year	Fourth year	Fifth year	Geometric mean years 1-5
IPO firms	12.9%	3.7%	15.1%	7.8%	9.1%	25.6%	13.0%	12.9%
Size-matched	6.6%	8.6%	15.8%	17.8%	16.4%	20.4%	15.9%	17.2%
Difference	6.3%	-4.9%	-0.7%	-10.0%	-7.3%	5.2%	-3.0%	-4.3%
No. of IPOs	4,090	4,084	4,090	4,015	3,630	3,184	2,752	
IPO firms	12.9%	3.6%	15.0%	7.9%	9.2%	25.1%	12.9%	12.8%
Size & BM- matched	7.1%	7.4%	14.9%	15.7%	12.3%	24.3%	13.6%	15.7%
Difference	5.8%	-3.8%	0.1%	-7.9%	-3.1%	0.8%	-0.8%	-2.9%
No. of IPOs	4,089	4,078	4,089	4,008	3,620	3,164	2,733	

Table 20-4
Percentage returns on IPOs from 2000-2016 during the first five years after issuing

	First six months	Second six months	First year	Second year	Third year	Fourth year	Fifth year	Geometric mean years 1-5
IPO firms	-2.8%	-3.7%	-2.8%	1.0%	17.3%	23.6%	7.2%	6.1%
Size-matched	5.5%	3.2%	9.5%	6.2%	11.8%	17.8%	9.4%	10.3%
Difference	-8.4%	-6.9%	-12.3%	-5.1%	5.5%	5.9%	-2.2%	-4.2%
No. of IPOs	2,114	2,103	2,114	2,075	1,865	1,560	1,242	
IPO firms	-2.8%	-3.7%	-2.8%	0.9%	16.8%	23.3%	7.2%	5.9%
Size & BM- matched	1.8%	2.4%	4.8%	7.8%	14.0%	18.6%	12.3%	10.4%
Difference	-4.7%	-6.1%	-7.6%	-6.9%	2.7%	4.8%	-4.5%	-4.5%
No. of IPOs	2,114	2,103	2,114	2,073	1,857	1,551	1,242	

Returns are through December 29, 2017. Thus, the fifth-year returns are only for those IPOs from 2000 to 2012, and the fourth-year returns are only for those IPOs from 2000 to 2013, etc. Note that the fifth-year returns are available only for those IPOs that survived for at least four years.