

## Returns on IPOs during the five years after issuing, for IPOs from 1970-2008

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These tables show that IPOs have underperformed other firms of the same size (market cap) by an average of 3.5% 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 2.3% per year. Returns are through Dec. 31, 2009, updated by Xiaoding Liu.

**Table 1**

**Percentage returns on IPOs from 1970-2008 during the first five years after issuing**

|                       | First<br>six<br>months | Second<br>six<br>months | First<br>Year | Second<br>year | Third<br>year | Fourth<br>year | Fifth<br>Year | Geometric<br>Mean<br>years 1-5 |
|-----------------------|------------------------|-------------------------|---------------|----------------|---------------|----------------|---------------|--------------------------------|
| IPO firms             | 5.9%                   | 0.3%                    | 6.6%          | 5.1%           | 9.8%          | 17.6%          | 12.1%         | 10.2%                          |
| Size-matched          | 5.2%                   | 5.6%                    | 11.4%         | 13.3%          | 13.8%         | 16.3%          | 13.6%         | 13.7%                          |
| Difference            | 0.7%                   | -5.3%                   | -4.8%         | -8.3%          | -4.0%         | 1.3%           | -1.5%         | -3.5%                          |
| No of IPOs            | 8,252                  | 8,225                   | 8,252         | 8,364          | 7,591         | 6,687          | 5,815         |                                |
| IPO firms             | 6.2%                   | 0.6%                    | 7.2%          | 7.0%           | 10.5%         | 17.1%          | 10.3%         | 10.4%                          |
| Size & BM-<br>Matched | 3.9%                   | 4.7%                    | 8.9%          | 12.6%          | 10.9%         | 17.9%          | 13.0%         | 12.6%                          |
| Difference            | 2.3%                   | -4.1%                   | -1.8%         | -5.6%          | -0.4%         | -0.8%          | -2.6%         | -2.3%                          |
| No. of IPOs           | 7,986                  | 7,946                   | 7,988         | 7,895          | 7,105         | 6,190          | 5,365         |                                |

The returns are measured from the closing market price on the first day of issue until the sixth-month or one-year anniversary. All returns are equally weighted average returns for all IPOs that are traded on Nasdaq, the Amex, or the NYSE at the start of a period. 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 based 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 8,625 IPOs from 1970-2008, excluding IPOs with an offer price of less than \$5.00, ADRs, REITs, acquisition funds, closed-end funds, and unit offers. For the 1980s and later, IPOs that are not listed on CRSP within six months of the IPO are excluded. Returns are measured through December 31, 2009. 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, 2008, its first-year return is included, but not the second-year return.

**Table 2****Percentage returns on IPOs from 1970-1979 during the first five years after issuing**

|                       | First<br>six<br>months | Second<br>six<br>months | First<br>year | Second<br>Year | Third<br>year | Fourth<br>Year | Fifth<br>Year | Geometric<br>mean<br>years 1-5 |
|-----------------------|------------------------|-------------------------|---------------|----------------|---------------|----------------|---------------|--------------------------------|
| IPO firms             | -8.4%                  | -6.6%                   | -13.7%        | -20.1%         | -0.1%         | 25.1%          | 29.4%         | 2.2%                           |
| Size-matched          | -2.6%                  | -2.6%                   | -5.0%         | -6.0%          | 11.9%         | 30.2%          | 22.6%         | 9.8%                           |
| Difference            | -5.8%                  | -4.0%                   | -8.7%         | -14.1%         | -12.0%        | -5.1%          | 6.8%          | -7.6%                          |
| No. of IPOs           | 376                    | 376                     | 376           | 655            | 677           | 672            | 633           |                                |
| IPO firms             | -2.6%                  | 1.6%                    | 0.1%          | -2.0%          | 9.2%          | 26.4%          | 23.5%         | 10.8%                          |
| Size & BM-<br>Matched | 2.1%                   | 5.6%                    | 12.2%         | -0.1%          | 10.3%         | 30.5%          | 22.1%         | 14.5%                          |
| Difference            | -4.7%                  | -4.0%                   | -12.1%        | -1.9%          | -0.9%         | -4.1%          | 1.4%          | -3.7%                          |
| No. of IPOs           | 190                    | 190                     | 190           | 272            | 282           | 279            | 263           |                                |

Nasdaq did not start until February 1971, and CRSP did not carry Nasdaq firms until mid-December 1972.

Consequently, for IPOs from before mid-December 1970 that were subsequently listed on Nasdaq, their returns are not included in the averages for event years 1, 2, and 3, but they are included in years 4 and 5 (If they survived to start one or both of these event years). IPOs from mid-December 1970 to mid-December 1971 are not included for years 1 and 2 if they were Nasdaq-listed. IPOs from mid-December 1971 to mid-December 1972 are not included for year 1 if they were Nasdaq-listed.

**Table 3****Percentage returns on IPOs from 1980-1989 during the first five years after issuing**

|                       | First<br>six<br>months | Second<br>six<br>months | First<br>year | Second<br>year | Third<br>Year | Fourth<br>year | Fifth<br>year | Geometric<br>mean<br>years 1-5 |
|-----------------------|------------------------|-------------------------|---------------|----------------|---------------|----------------|---------------|--------------------------------|
| IPO firms             | 4.4%                   | 0.1%                    | 5.1%          | 11.3%          | 12.0%         | -0.1%          | 7.4%          | 7.0%                           |
| Size-matched          | 4.4%                   | 3.6%                    | 8.0%          | 15.8%          | 14.6%         | 6.7%           | 11.0%         | 11.2%                          |
| Difference            | 0.0%                   | -3.5%                   | -2.9%         | -4.5%          | -2.6%         | -6.8%          | -3.6%         | -4.1%                          |
| No. of IPOs           | 2,395                  | 2,383                   | 2,395         | 2,351          | 2,196         | 1,999          | 1,808         |                                |
| IPO firms             | 4.1%                   | 0.3%                    | 4.8%          | 11.4%          | 11.5%         | -0.1%          | 6.9%          | 6.8%                           |
| Size & BM-<br>Matched | 0.4%                   | 2.0%                    | 1.8%          | 14.0%          | 10.3%         | 4.6%           | 11.5%         | 8.3%                           |
| Difference            | 3.7%                   | -1.7%                   | 3.0%          | -2.6%          | 1.2%          | -4.7%          | -4.6%         | -1.5%                          |
| No. of IPOs           | 2,357                  | 2,336                   | 2,359         | 2,314          | 2,161         | 1,962          | 1,780         |                                |

**Table 4**  
**Percentage returns on IPOs from 1990-1999 during the first five years after issuing**

|                       | First<br>six<br>months | Second<br>six<br>months | First<br>year | Second<br>year | Third<br>Year | Fourth<br>year | Fifth<br>year | Geometric<br>mean<br>years 1-5 |
|-----------------------|------------------------|-------------------------|---------------|----------------|---------------|----------------|---------------|--------------------------------|
| IPO firms             | 12.6%                  | 3.8%                    | 14.9%         | 8.1%           | 9.3%          | 25.5%          | 13.5%         | 14.1%                          |
| Size-matched          | 6.5%                   | 8.6%                    | 15.7%         | 18.2%          | 16.0%         | 20.0%          | 15.8%         | 17.1%                          |
| Difference            | 6.1%                   | -4.8%                   | -0.8%         | -10.1%         | -6.7%         | 5.5%           | -2.3%         | -3.0%                          |
| No. of IPOs           | 4,187                  | 4,181                   | 4,187         | 4,114          | 3,730         | 3,282          | 2,840         |                                |
| IPO firms             | 12.5%                  | 3.5%                    | 14.6%         | 8.3%           | 9.2%          | 25.3%          | 13.3%         | 14.0%                          |
| Size & BM-<br>matched | 7.2%                   | 7.6%                    | 15.2%         | 15.8%          | 12.1%         | 24.6%          | 14.0%         | 16.3%                          |
| Difference            | 5.3%                   | -4.1%                   | -0.6%         | -7.5%          | -2.9%         | 0.7%           | -0.7%         | -2.3%                          |
| No. of IPOs           | 4,148                  | 4,137                   | 4,148         | 4,068          | 3,681         | 3,224          | 2,790         |                                |

**Table 5**  
**Percentage returns on IPOs from 2000-2008 during the first five years after issuing**

|                       | First<br>six<br>months | Second<br>six<br>months | First<br>year | Second<br>year | Third<br>year | Fourth<br>year | Fifth<br>year | Geometric<br>mean<br>years 1-5 |
|-----------------------|------------------------|-------------------------|---------------|----------------|---------------|----------------|---------------|--------------------------------|
| IPO firms             | -8.8%                  | -8.4%                   | -11.4%        | -3.5%          | 13.8%         | 23.5%          | 0.0%          | 3.7%                           |
| Size-matched          | 5.0%                   | 2.2%                    | 8.5%          | 2.7%           | 5.4%          | 12.8%          | 0.3%          | 5.8%                           |
| Difference            | -13.8%                 | -10.6%                  | -19.9%        | -6.2%          | 8.4%          | 10.7%          | -0.3%         | -2.1%                          |
| No. of IPOs           | 1,294                  | 1,285                   | 1,294         | 1,244          | 988           | 734            | 534           |                                |
| IPO firms             | -8.9%                  | -8.4%                   | -11.4%        | -3.4%          | 13.2%         | 23.4%          | -0.1%         | 3.6%                           |
| Size & BM-<br>matched | -0.1%                  | 0.3%                    | 1.3%          | 2.3%           | 7.8%          | 19.4%          | 7.8%          | 7.5%                           |
| Difference            | -8.8%                  | -8.7%                   | -12.7%        | -5.7%          | 5.4%          | 4.0%           | -7.9%         | -3.9%                          |
| No. of IPOs           | 1,291                  | 1,283                   | 1,291         | 1,241          | 981           | 725            | 532           |                                |

Returns are through December 31, 2009. Thus, the fifth year returns are only for those IPOs from 2000 to 2004, and the fourth year returns are only for those IPOs from 2000 to 2005. Note that the fifth year returns are available only for those IPOs that survived for at least four years.