Internet Appendix to **"Do Hedge Fund Managers Misreport Returns? Evidence from the Pooled Distribution"***

This supplement contains figures showing results that are discussed in the paper. Figure IA.1 shows histograms of pooled mutual fund returns constructed annually from 1994 through 2005. Figure IA.2 shows histograms of pooled NYSE and NASDAQ stock returns constructed during three tick size regimes. Figure IA.3 shows two histograms of pooled hedge fund returns for January and December, respectively. Figure IA.4 shows histograms of hedge fund returns pooled by the age of a fund when a return was recorded. Figure IA.5 shows the statistical significance of discontinuities in the histograms of hedge fund returns pooled by fund age. Figure IA.6 shows the histogram of bimonthly returns using the optimal bin width of monthly returns. Figure IA.7 compares the small sample properties of the discontinuity test based on a kernel density to the small sample properties of the Burgstahler and Dichev (1997) test.

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References

Burgstahler, David and Ilia Dichev, 1997, Earnings management to avoid earnings decreases and losses, *Journal of Accounting and Economics* 24, 99-126.

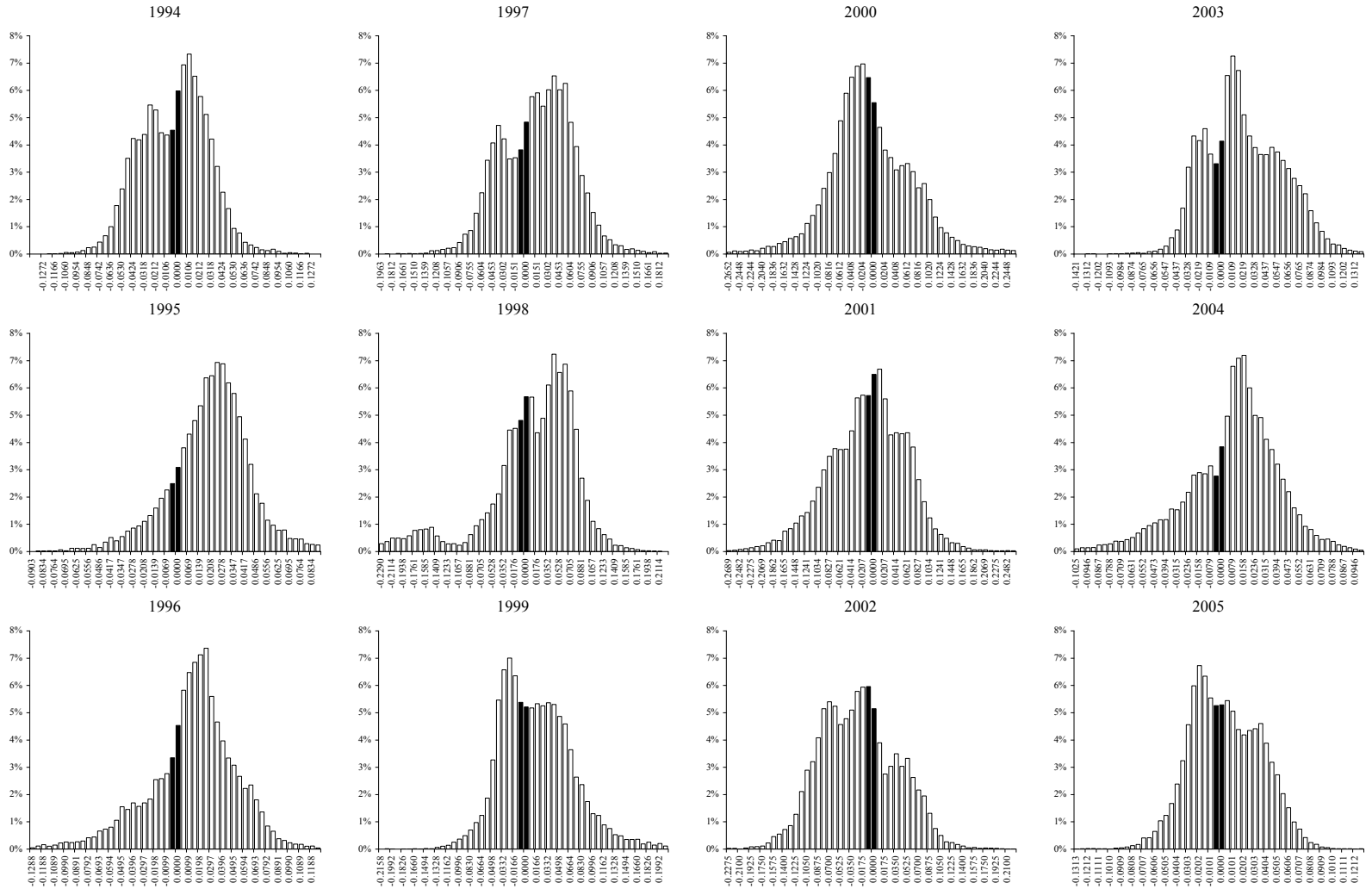

Figure IA.1. Mutual fund returns. Histograms of monthly returns of all equity mutual funds in the CRSP database. Bold vertical bars indicate returns bracketing zero.

Figure IA.2a. January 1994 - May 1997: tick size 1/8

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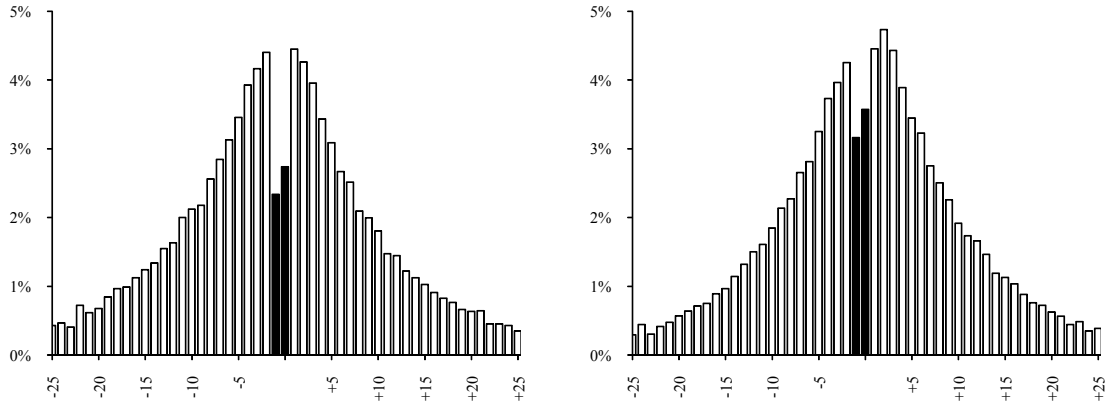

Figure IA.2b. July 1997 - August 2000: tick size 1/16

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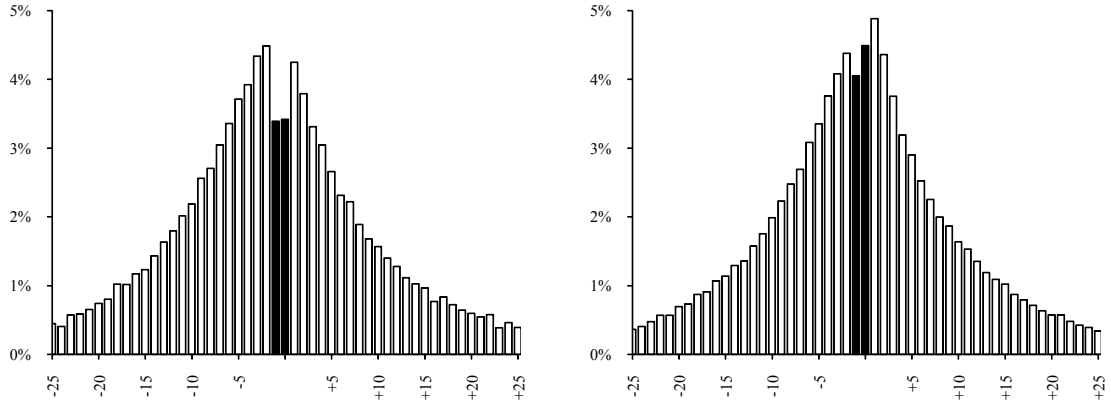

Figure IA.2c. April 2001 - December 2005: tick size 1/100

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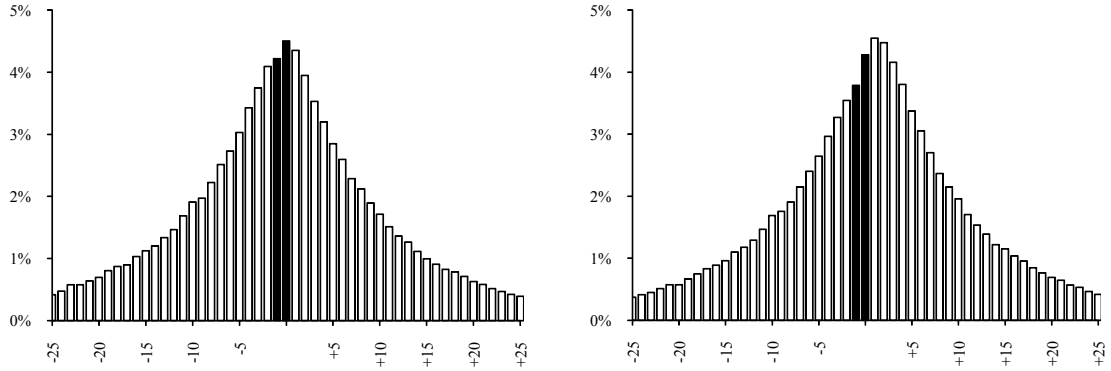

Figure IA.2. Stock returns. Figures IA.2a, IA.2b, and IA.2c show histograms of monthly returns of individual NASDAQ and NYSE/Amex stocks over three periods defined by tick size regime: eighths, sixteenths, and decimals, respectively. Bold vertical bars indicate returns bracketing zero. For NASDAQ stocks, bin sizes are 115bp, 146bp, and 110bp. For NYSE/Amex stocks, bin sizes are 72bp, 94bp, and 66bp.

Figure IA.3a. December Returns

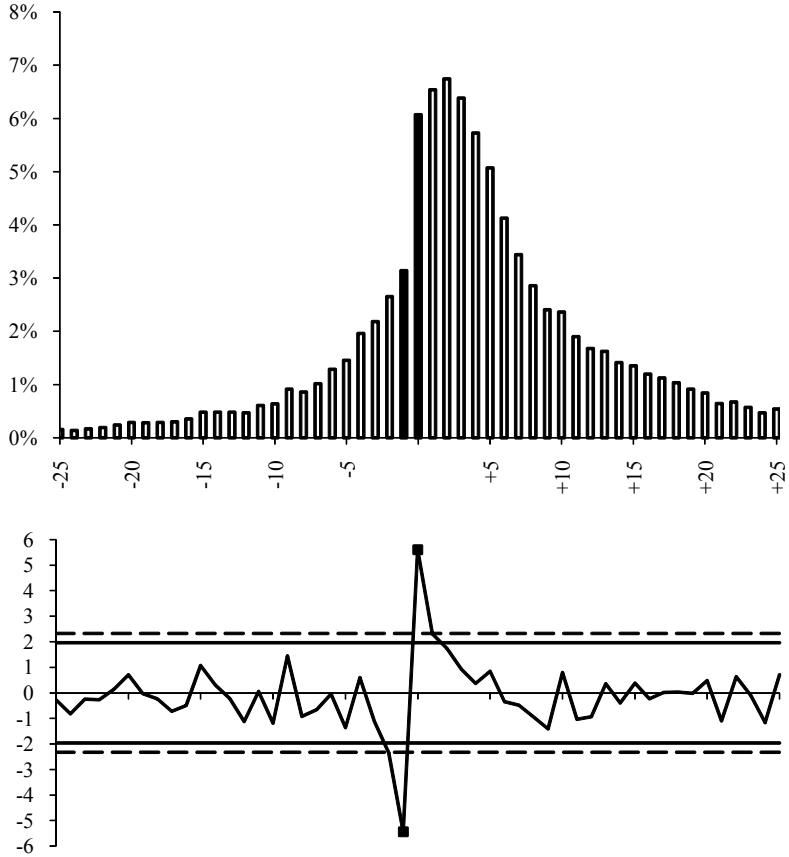

Figure IA.3b. January Returns

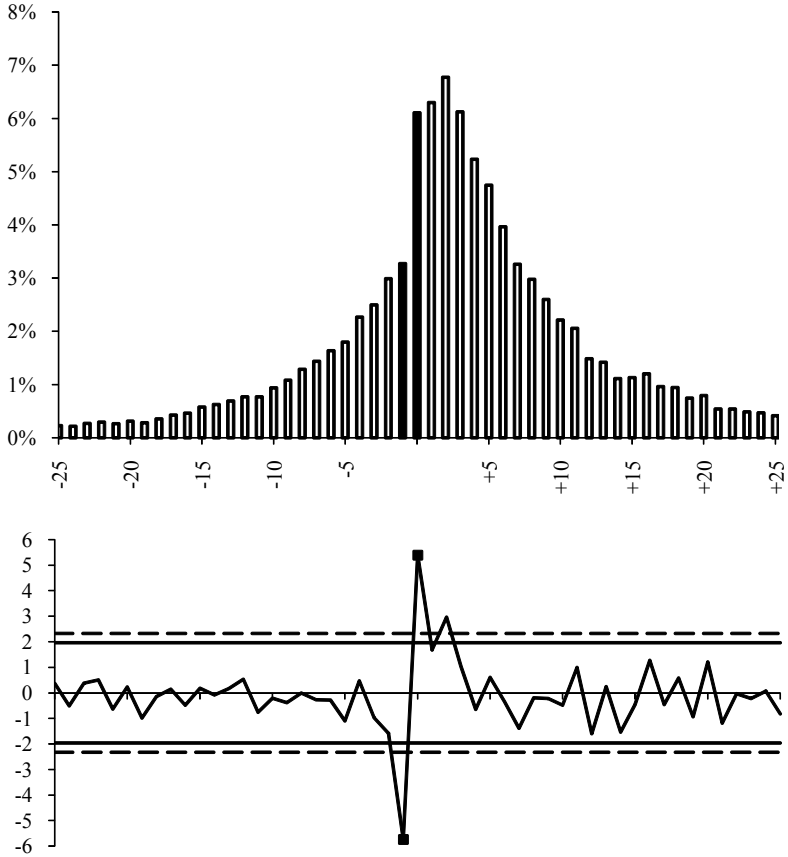

Figure IA.3. December versus January returns. Figures IA.3a and IA.3b include returns from December and January, with n = 18,590 and n = 17,411, respectively. The top graph is a histogram of returns. Bold vertical bars indicate returns bracketing zero. The bottom graph shows the value of a test statistic measuring the smoothness of the histogram. The test statistics are distributed independent standard normal under the null hypothesis of no discontinuities in the histogram.

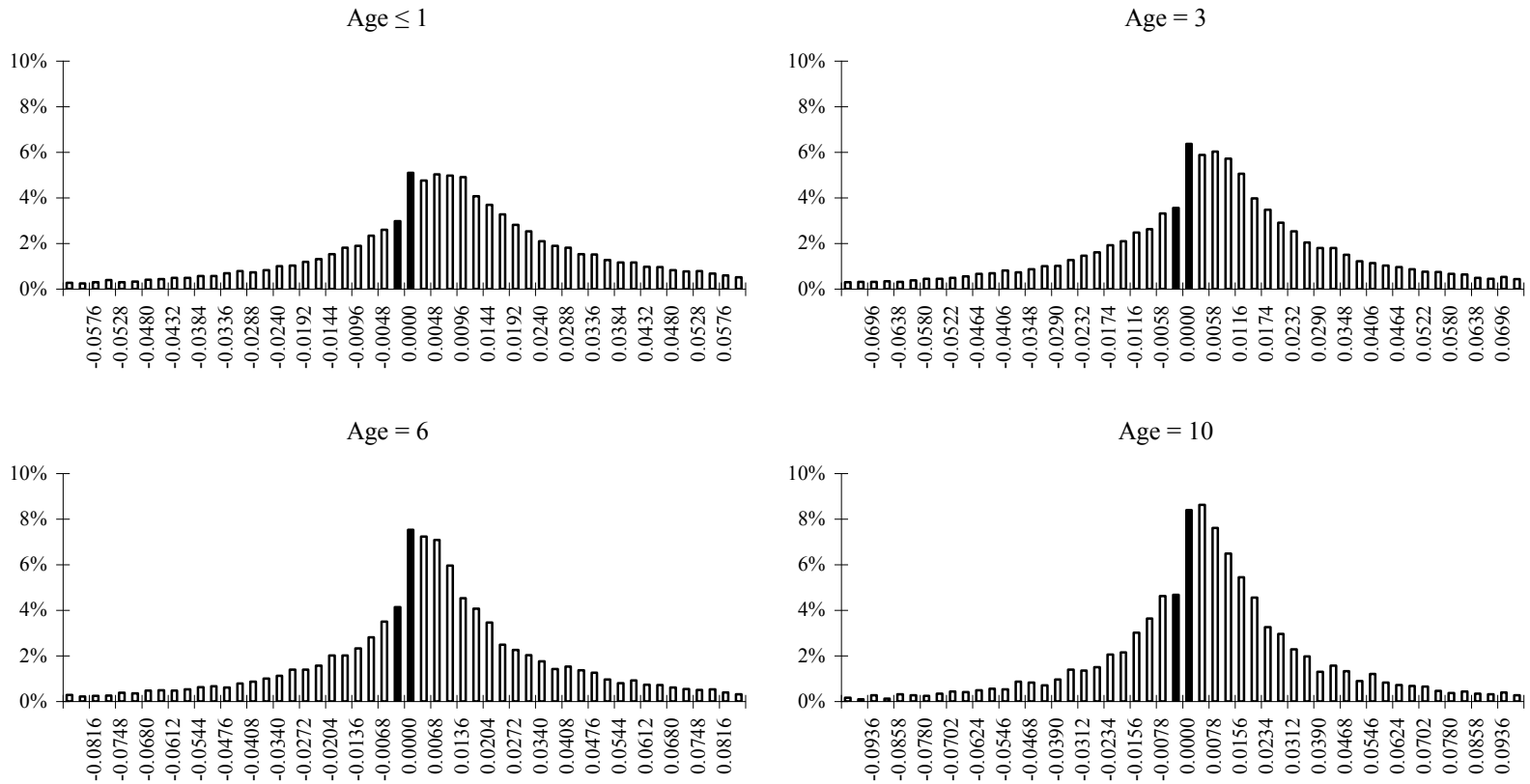

Figure IA.4. The relation between fund age and discontinuity. Histograms of monthly fund returns. Bold vertical bars indicate returns bracketing zero. The figures are constructed using observations of all funds during their first two years of reporting history (Age ≤ 1), their fourth year (Age = 3), their seventh year (Age = 6), and their eleventh year (Age = 10), with n = 64,951, n = 26,998, n = 12,955, and n = 4,150, respectively.

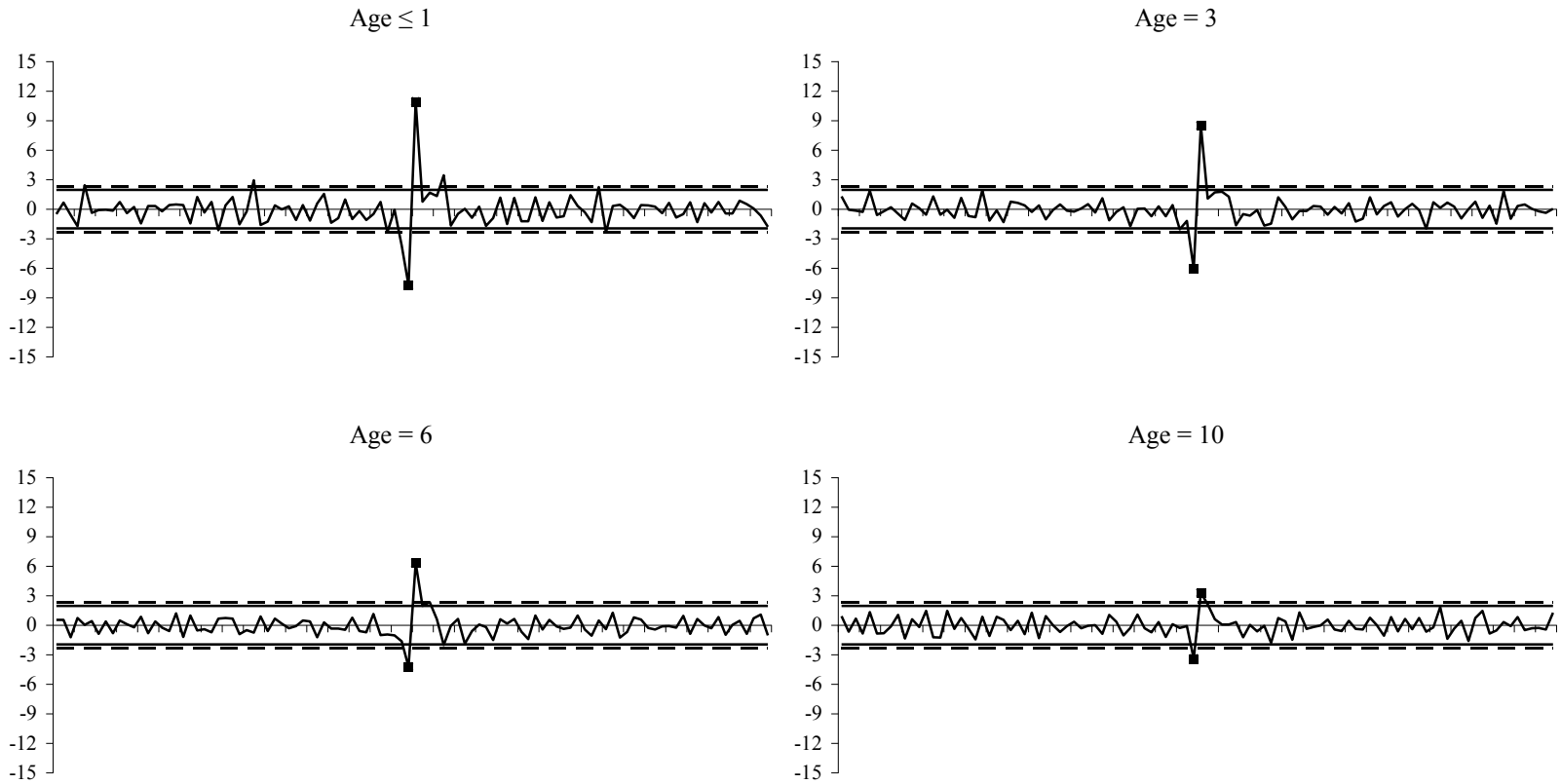

Figure IA.5. The significance of the relation between fund age and discontinuity. The figures show the value of a test statistic measuring the smoothness of the histograms of monthly fund returns. The test statistic is distributed standard normal under the null hypothesis of no discontinuities in the histogram. The two values to the left and right of a zero return are indicated by solid squares. The figures are constructed using observations of all funds during their first two years of reporting history (Age ≤ 1), their fourth year (Age = 3), their seventh year (Age = 6), and their eleventh year (Age = 10), with $n = 64{,}951$, $n = 26{,}998$, $n = 12{,}955$, and $n = 4{,}150$, respectively.

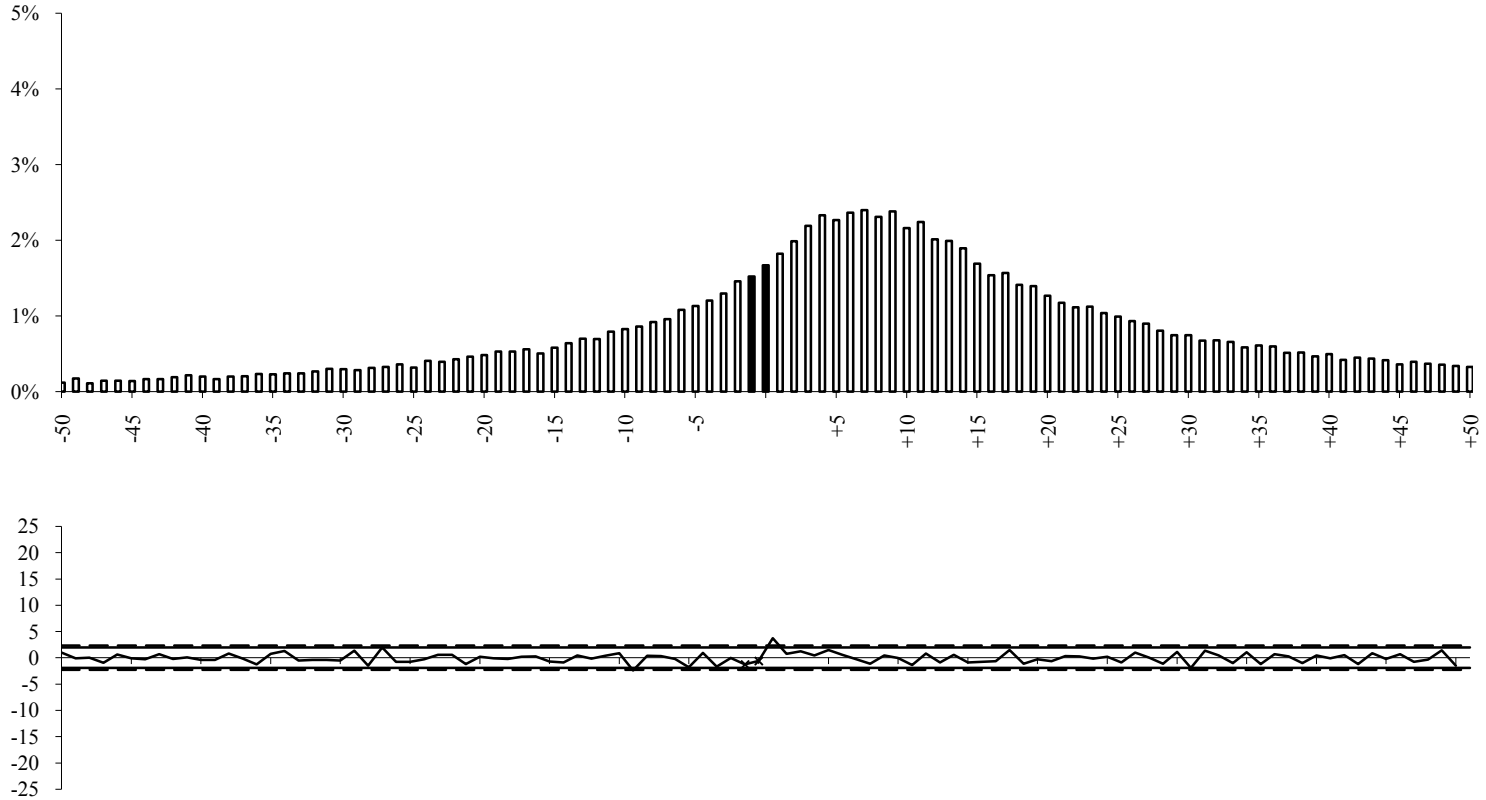

Figure IA.6. Bimonthly returns. The figure includes bimonthly returns of all hedge funds in the 2005 CISDM database, $n = 211{,}908$. The top graph is a histogram of returns. Bold vertical bars indicate returns bracketing zero. Bins are 19 basis points wide with 101 bins displayed, centered on the first bin to the right of zero. The bottom graph shows the value of the following standard normal test statistic measuring the smoothness of the histogram

$$(x - np) \Big/ \sqrt{np(1-p)},$$

where x is the number of observations in the bin, n is the total number of observations, and p is the probability that a given observation resides in a bin as estimated by a kernel estimate of a smooth distribution matched to the empirical distribution. Horizontal lines indicate 95% and 99% critical values.

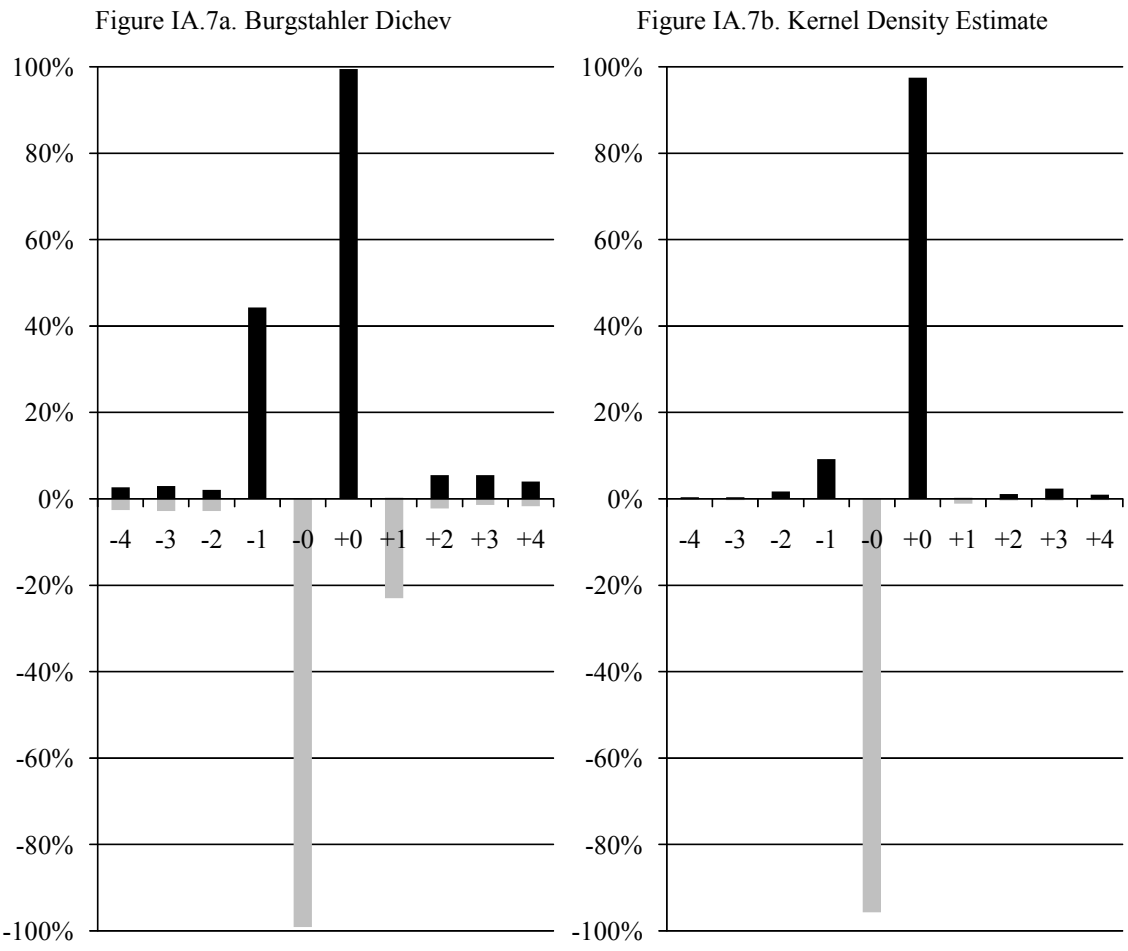

Figure IA.7. Small sample properties. Figure IA.7a displays the percentage of 1,000 simulations that reject the Burgstahler and Dichev (1997) test at ten bins centered at zero. Dark bars indicate the percentage that reject because the number of observations in the bin is too many. Light bars indicate the percentage that reject because the number of observations in the bin is too few. Each simulation consists of 10,000 observations drawn from a normal distribution with mean 1% and standard deviation 3%. For each simulation, a histogram is formed with bin size of 50 basis points. The Burgstahler and Dichev test compares the actual number of observations in a bin to the average of the two adjacent bins. Figure IA.7b displays the percentage of the 1,000 simulations that reject the test for smoothness based on the kernel density estimate. For each histogram, a kernel density estimate is used to compute the probability that an observation falls into each bin. A binomial test compares the actual number of observations that fall into a bin to the expected number given the kernel density estimate.