

Online Appendix A

Gratton, Holden, and Kolotilin (2017) "When to Drop a Bombshell"

1 Scandals Assessment

Name	Pres.	Date	ASSESS.	SUMMARY
GSA corruption	Carter	27-Jul-78	NOT RELEV.	Widespread corruption at GSA. Carter run with the promise of looking into it. The 1978 scandal was the exposure of widespread corruption in the Agency. No article at the time mentions any involvement of Carter's administration. http://www.nytimes.com/1978/07/27/archives/around-the-nation-carter-asks-bells-help-in-an-agency-inquiry.html?_r=0
Billy Carter	Carter	10-Sep-80	FAKE	<p>In late 1978 and early 1979, Billy Carter visited Libya three times with a contingent from Georgia. He eventually registered as a foreign agent of the Libyan government and received a \$220,000 loan. (Edwin P. Wilson claimed he had seen a telegram showing that Libya paid Billy Carter \$2 million.) This led to a Senate hearing on alleged influence peddling which the press named Billygate. A Senate sub-committee was called To Investigate Activities of Individuals Representing Interests of Foreign Governments (Billy Carter—Libya Investigation). On August 4, 1980, President Jimmy Carter wrote: "I am deeply concerned that Billy has received funds from Libya and that he may be under obligation to Libya. These facts will govern my relationship with Billy as long as I am president. Billy has had no influence on U.S. policy or actions concerning Libya in the past, and he will have no influence in the future."</p> <p>A 1985 Wall Street Journal investigation suggested that a series of Billygate articles written by Michael Ledeen and published in The New Republic in October 1980 were part of a disinformation campaign intended to influence the outcome of that year's presidential election. According to the reporting, Francesco Pazienza, an officer of the Italian intelligence agency SISMI, alleged that Ledeen was paid \$120,000 for his work on Billygate and other projects. Pazienza was later tried and convicted in absentia for using "extortion and fraud to obtain embarrassing facts about Billy Carter".</p> <p>http://pqasb.pqarchiver.com/washingtonpost_historical/doc/147178991.html?FMT=ABS&FMTS=AI&type=historic&date=Oct%2029,%201980&author=&pub=The%20Washington%20Post%20(1974-Current%20file)&edition=&startpage=&desc=Billy%20Source%20Described</p> <p>Jonathan Kwitny, "Tale of Intrigue: How an Italian Ex-Spy Who Also Helped U.S. Landed in Prison Here," The Wall Street Journal, Aug 7, 1985.</p> <p>Craig Unger (2008) "American Armageddon: How the Delusions of the Neoconservatives and the Christian Right Triggered the Descent of America--and Still Imperil Our Future," New York, NY: Scribner, p. 233-234.</p>

Hugel Finances	Reagan	24-Jul-81	FAKE	Max Hugel, CIA chief of operations in charge of covert activity, is forced to resign after he is accused by two former business associates of SEC violations. Hugel later sued the two accusers for libel and won. Sources: https://www.washingtonpost.com/archive/politics/1981/07/24/goldwater-citing-hugel-scandal-says-cias-casey-should-resign/a336352a-a8d7-4c55-b116-76ad6655aee7/?utm_term=.b705609ae525 , http://www.upi.com/Archives/1981/07/14/Max-Hugel-resigned-as-head-of-the-CIAs-covert/5660363931200/ , http://www.washingtonpost.com/wp-dyn/content/article/2007/02/22/AR2007022201960.html .
EPA document controversy	Reagan	2-Dec-83	REAL	Rita Lavelle, an EPA official in charge of a "Superfund" dedicated to toxic waste cleanup, was accused and convicted of lying to Congress about when she found out that her previous employer, Aerojet, was dumping toxic waste at a site she was overseeing in her EPA role. Sources: http://www.nytimes.com/1983/12/03/opinion/the-lesson-behind-the-lies.html , http://articles.latimes.com/1985-04-20/news/mn-21740_1_rita-lavelle , https://www.washingtonpost.com/archive/lifestyle/1983/03/05/rita-lavelle-dumped/45256854-7ca3-4df4-8031-5a56793be499/?utm_term=.4956a9ac6ff7 .
Donovan charges	Reagan	3-Oct-84	FAKE	Labor Secretary Raymond Donovan is indicted (along with alleged co-conspirators) for defrauding the New York City Transit Authority by helping a subcontractor submit fraudulent bills and inflate costs. He and other accused execs are eventually acquitted. Sources: http://www.nytimes.com/1984/10/03/us/donovan-submits-a-not-guilty-plea-to-bronx-charges.html , http://www.nytimes.com/1987/05/26/nyregion/donovan-cleared-of-fraud-charges-by-jury-in-bronx.html?pagewanted=all
S&L failures/bailout	G.H.W. Bush	15-May-89	REAL	G. H. W. Bush's son, Neil Bush, is named (among others) as a defendant in a lawsuit filed by the FDIC, which alleged that under his directorship, Silverado Banking, Savings and Loan Association made improper and in some cases illegal loans. Neil Bush is also personally accused of failing to avoid a conflict of interest or the appearance of one while fulfilling his duties, as Bush was accused of concealing that the recipients of a loan being made by Silverado were his business partners. The failure of Silverado cost taxpayers more than \$1 billion. In 1991, the federal Office of Thrift Supervision found that Bush's conduct while in charge of Silverado constituted "multiple conflicts of interest". Bush eventually settled for \$50,000, and didn't contest restrictions placed on him by federal regulators if he were ever to direct another bank or S&L association again. Sources: https://www.washingtonpost.com/archive/lifestyle/2003/12/28/the-relatively-charmed-life-of-neil-bush/388db316-f6b9-456e-8720-b4b2bf60a8ab/?utm_term=.d74f53df1fdf , http://www.nytimes.com/1990/09/22/business/fdic-sues-neil-bush-and-others-at-silverado.html .
HUD corruption	G.H.W. Bush	8-Jul-89	REAL	HUD officials are accused of allocating contracts based on favoritism, specifically to well-connected Republican former housing officials. Several HUD officials are convicted, and an investigation of HUD Secretary Samuel Pierce ends when he admits that his "own conduct failed to set the proper standard" for the agency. Sources: http://www.nytimes.com/2000/11/03/nyregion/samuel-r-pierce-jr-ex-housing-secretary-dies-at-78.html?pagewanted=all , http://www.nytimes.com/1989/07/14/us/hud-grants-under-reagan-a-case-study-in-connections.html

FDA generic drugs	G.H.W. Bush	1-Sep-89	REAL	FDA officials and drug companies are accused of corruption in the approval procedure for generic drugs. Several FDA officials plead guilty to accepting bribes from drug companies seeking approval to produce generic drugs, and several drug companies admit to giving false data to the FDA. Sources: http://www.nytimes.com/1989/08/13/business/a-scandal-raises-serious-questions-at-the-fda.html?pagewanted=all , http://www.nytimes.com/1989/09/10/business/exposing-the-fda.html?pagewanted=all .
Banca Nazionale del Lavoro	G.H.W. Bush	22-Mar-92	REAL	An Atlanta branch of the Italian bank Banca Nazionale del Lavoro is found to have made illicit loans to Iraq. Suspicion falls on the Bush administration of having been involved or aware of the loans and tacitly approved of them in an effort to arm Iraq in the war against Iran. While several employees at the bank branch are convicted of criminal activity, a 1995 investigation by the Attorney General's office finds no evidence of any criminal activity by any members of the Bush administration. Sources: https://pqasb.pqarchiver.com/washingtonpost/doc/307490676.html?FM T=ABS&FMTS=ABS:FT&date=Mar+22%2C+1992&author=Lardner%2C+George%2C+Jr&pub=The+Washington+Post+%28pre-1997+Fulltext%29&edition=&startpage=a.01&desc=Gonzalez%27s+Iraq+Expose%27%3B+Hill+Chairman+Details+U.S.+Prewar+Courtship , http://articles.latimes.com/1995-01-24/news/mn-23830_1_bush-administration-officials , Karabell, Z. (1995), Backfire: US Policy toward Iraq, 1988-2 August 1990. <i>Middle East Journal</i> , 49(1), 28-47.
Tailhook controversy	G.H.W. Bush	27-Jun-92	REAL	Investigations reveal multiple incidents of sexual assault committed by members of the Navy during a conference in 1991. The internal investigation by the Navy bumps into roadblocks due to a lack of cooperation on the part of some naval officers. Navy Secretary H. Lawrence Garrett eventually resigns in 1992, stating "I accepted full responsibility for the handling of the Tailhook incident and the leadership failure which allowed such misconduct to occur." Sources: http://www.nytimes.com/1992/06/27/us/navy-chief-quits-amid-questions-over-role-in-sex-assault-inquiry.html .
Whitewater	Clinton	1-Jul-94	REAL	The controversy concerns an investigation into Whitewater Development Corporation, a failed real estate investment venture invested in by the Clintons and their business associates, Jim and Susan McDougal, in 1979. The controversy involved suspicions of conflicts of interest. The Clintons were never indicted nor convicted, but Clinton's gubernatorial aide, Stephen Smith, was convicted of conspiracy and the Clintons' business associates, the McDougals, were also convicted of multiple crimes. The Clintons also admitted to claiming a deduction on their personal tax returns for interest payments that had actually been made by Whitewater, claiming that they had made a simple tax mistake. Sources: http://www.nytimes.com/1994/07/01/us/first-whitewater-report-pleases-clinton-advisers.html , http://www.nytimes.com/1995/08/06/us/whitewater-papers-cast-doubt-on-clinton-account-of-a-tax-underpayment.html , http://www.washingtonpost.com/wp-srv/politics/special/whitewater/stories/wwtr950828.htm .

Travel Office firings	Clinton	5-Jan-96	FAKE	The firing in 1993 of seven White House Travel Office staffers resurfaces as a controversy when in 1996, a two year old memo from White House director of administration David Watkins surfaces. The Watkins memo suggests that the firings were instigated by Hillary Clinton personally. Republicans and other critics of the administration accuse the Clintons of wanting to replace the travel staff with their own associates. Bill Clinton is investigated and cleared by Independent Counsel Kenneth Starr in 1998. Hillary Clinton is similarly investigated and cleared in 2000. Sources: http://www.nytimes.com/1996/01/05/us/memo-places-hillary-clinton-at-core-of-travel-office-case.html , http://www.nytimes.com/2000/06/23/us/the-first-lady-is-chided-but-not-charged.html , http://www.washingtonpost.com/wp-srv/politics/special/clinton/stories/impeach111998.htm .
Dick Morris	Clinton	30-Aug-96	REAL	Dick Morris, Clinton's chief campaign advisor, resigns from the role after a tabloid runs a story and publishes photos detailing Morris's visits to a sex worker. Sources: http://www.nytimes.com/1996/08/30/us/call-girl-story-costs-president-a-key-strategist.html .
Filegate	Clinton	26-Oct-96	FAKE	Clinton White House staff are revealed to have improperly acquired access to FBI files on hundreds of individuals, including many former White House staff from previous Republican administrations. Initially, the Clintons are suspected of having orchestrated this acquisition of files on Republicans for political reasons. Craig Livingstone, the White House Office of Personnel Security director, resigns, but denies any malign intent. In 2000, Independent Counsel Robert Ray issues a final report on the Filegate controversy, which exonerates the Clintons, stating that there was "no substantial and credible evidence that any senior White House official, or First Lady Hillary Rodham Clinton, was involved in seeking confidential Federal Bureau of Investigation background reports." The report also states that there is no evidence that Hillary Clinton was involved in the hiring of Livingstone, and no evidence that the Clintons or any senior White House official had read the files. A separate lawsuit against Livingstone and others is dismissed in 2010, with the judge stating the plaintiffs failed to provide adequate evidence that there was anything more than a "bureaucratic snafu" to the scandal. Sources: http://www.nytimes.com/1996/10/26/us/further-whitewater-inquiry-is-authorized.html?mtrref=query.nytimes.com&gwh=738BAA59546B9D8391E1F9127655AEDF&gwt=pay , http://www.nytimes.com/2000/03/17/us/report-clears-white-house-inquiry-over-fbi-files.html , http://voices.washingtonpost.com/44/2010/03/clinton-era-filegate-case-toss.html , http://www.washingtonpost.com/wp-srv/politics/special/whitewater/stories/wwtr960627.htm .
Valerie Plame	G. W. Bush	5-Oct-03	REAL	In 2003, journalist Robert Novak publishes an article in which he publicly identifies covert CIA operative Valerie Plame by name. Suspicions fall on White House staff: it is suggested that someone from within the administration might have leaked Plame's name and employment status to Novak as political retribution, since her husband had recently published an op-ed casting doubt on Bush's claims about Iraq's weapons of mass destruction program. In the subsequent criminal investigation, Vice President Cheney's chief of staff Scooter Libby is indicted and convicted on multiple counts, including obstruction of the probe and lying to the FBI. In 2006, Richard Armitage, the then-deputy secretary of state, admits he was the primary source of the leak. Sources: http://www.washingtonpost.com/wp-

				dyn/content/article/2007/03/06/AR2007030600648.html , http://www.nytimes.com/2006/09/07/washington/07cnd-armitage.html
Abu Ghraib	G. W. Bush	6-May-04	REAL	<p>In 2004, photographs surface of abuse and torture of detainees by US troops at Abu Ghraib prison in Iraq. Multiple soldiers and officers were charged and convicted. The US was accused of having violated international law regarding torture and treatment of prisoners of war. There were also revelations about the roles of high-level officials in the administration. Organisations including the International Committee of the Red Cross, Human Rights Watch and Amnesty International claimed they tried to alert US officials about the ongoing abuses, but the issue was not taken seriously or addressed. Within months of the publishing of the Abu Ghraib photos, memos written by Justice Department officials to the White House were made public: these were authored by various members of the cabinet and justified the use of torture in the war on terror, and suggested that international law on torture may not apply to interrogations executed as part of the war on terror. Sources: http://www.nytimes.com/2004/05/07/world/struggle-for-iraq-outcry-red-cross-says-that-for-months-it-complained-iraq.html?_r=0, http://www.nytimes.com/2004/05/04/world/struggle-for-iraq-punishment-army-punishes-7-with-reprimands-for-prison-abuse.html, http://www.nytimes.com/2004/05/07/world/the-struggle-for-iraq-prisoners-photos-of-dead-may-indicate-graver-abuse.html, http://www.washingtonpost.com/wp-dyn/articles/A23373-2004Jun7.html.</p>

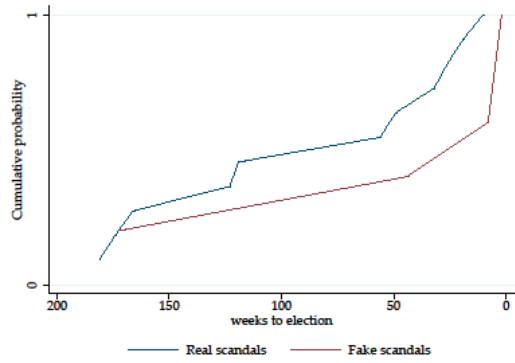
2 Alternative Specifications

We replicate the figures in the paper, but including the GSA Corruption Scandal, coded as *real*. We replicate Figures 3 and 4 in the main text of the paper in Figures A.1 and A.2, respectively. The Dardanoni and Forcina test p-values are 0.091 and 0.831, respectively.

Next, we replicate the figures in the paper with the Banca Nazionale del Lavoro scandal (“Iraq-gate”) coded as *fake*. We replicate Figures 3 and 4 in the main text of the paper in Figures A.3 and A.4, respectively. The Dardanoni and Forcina test p-values are 0.166 and 0.831, respectively.

Figure A.1: US presidential scandals and weeks to election. Distribution of real and fake scandals.

(a) Whole term.



(b) Last 60 weeks only.

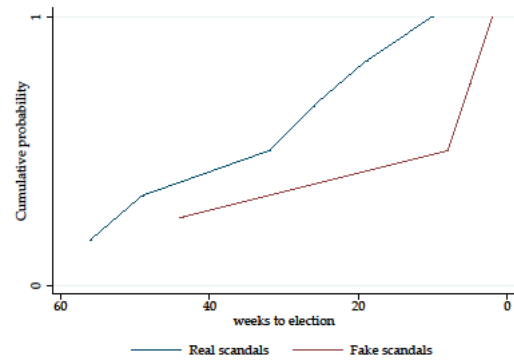


Figure A.2: Distribution of real and fake scandals.

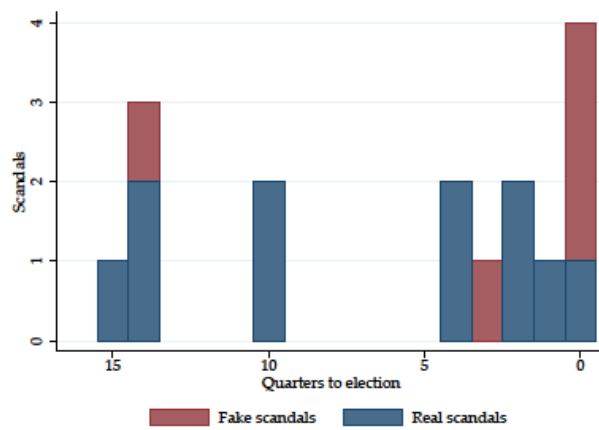


Figure A.3: US presidential scandals and weeks to election. Distribution of real and fake scandals.

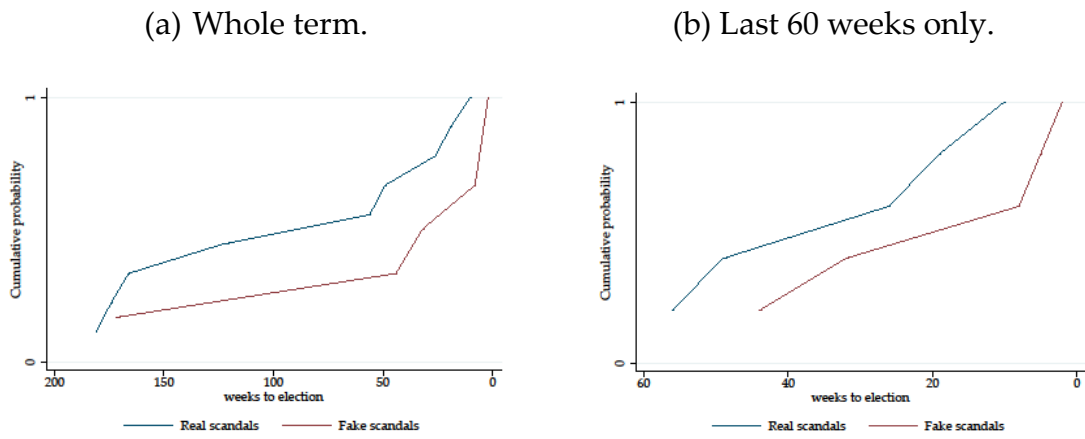
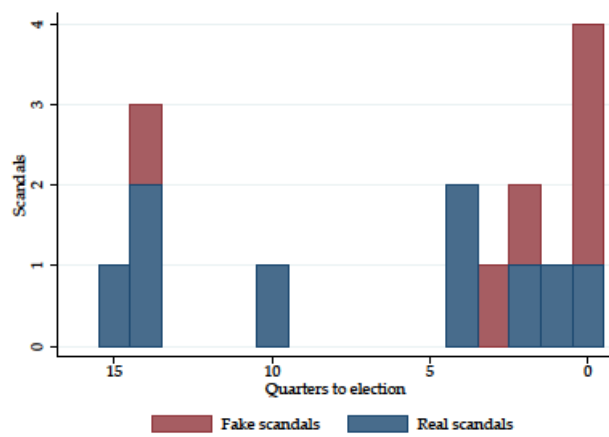


Figure A.4: Distribution of real and fake scandals.



Online Appendix B

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1 Description of Data

We gather data on all original initial public offerings (IPOs) from the Thomson Reuters SDC Platinum database, during 1983 to 2016, and match them with stocks in the Wharton Research Data Service (WRDS). The initial total number of observations is 963. For each IPO i , the SDC Platinum database reports $launch\ date_i$ and $trade\ date_i$, which we use to calculate $time\ gap_i = trade\ date_i - launch\ date_i$. For 244 IPOs, the variable $time\ gap$ is zero and we drop these observation.¹ We also drop 6 observations for which $time\ gap$ is greater than 365 days and 20 observations for which the WRDS price variable runs for less than 12 months. As a result, we remain with 693 observations with time gaps ranging from 1 to 353. The average $time\ gap$ is 79.7 days, the median is 70, and the standard deviation is 52.5.

We use the WRDS price variable to calculate IPO returns, and we use Ken French Data Library to calculate CRSP daily market returns. For each IPO i and year $y \in \{3, 5\}$, we calculate $return_i^y$ from the trade date closing price until the y -year anniversary of the IPO. We then compare each $return_i^y$ with $market\ return_i^y$ calculated as the value-weight return of all CRSP firms over the same period. We define the dummy variable $good_i^y = 1$ if $return_i^y \geq market\ return_i^y$ and $good_i^y = 0$ otherwise.

¹We verified that, for the 10 most recent of these 244 IPOs, the actual launch date preceded $trade\ date$; so it appears that the database replaces $launch\ date$ with $trade\ date$ when $launch\ date$ value is missing. In any case, we run our test on the whole sample including these 244 observations. Due to the large number of observations for which $time\ gap = 0$, we can form only $k \leq 3$ equiprobable intervals. So we run the test with $k = 3$ equiprobable intervals, and the results are qualitatively similar to those in Table 1. In particular, for both 3 and 5 years performance, we reject H_0 in favor of H_1 at the 1 percent significance and we cannot reject H_1 in favor of H_2 at all standard significance levels. We also run the test with $k = 7$ intervals, out of which only the last 6 are equiprobable, and the results are qualitatively the same to those in Table 1.

2 The Test

We test our main prediction using an approach developed by Dardanoni and Forcina (1998), comparing the distributions of *time gap* conditional on $good = 1$ and $good = 0$. We now briefly summarize this approach. For a given number of intervals k , we express the distributions as a two-way contingency table with ordered margins. Dardanoni and Forcina consider three hypothesis.

H_0 : The conditional distributions are identical.

H_1 : The distribution conditional on $good = 1$ dominates the distribution conditional on $good = 0$ in the likelihood ratio order.

H_2 : The conditional distributions are unrestricted.

For each hypothesis H_0 , H_1 , and H_2 , the test computes the maximum likelihood estimates under multinomial sampling, subject to the hypothesis. It then computes log-likelihood ratio statistics for H_0 vs. H_1 and H_1 vs. H_2 . Dardanoni and Forcina derive asymptotic distributions of these statistics and use a simulation method to compute p-values. In the paper, as well as in here, we report these p-values. The test accepts the hypothesis of interest H_1 if it rejects H_0 in favor of H_1 and fails to reject H_1 in favor of H_2 .

For an asymptotic distribution to be a good approximation of our finite sample distribution, the number of intervals k should be sufficiently small. Following Roosen and Hennessy (2004), we divide *time gap* into k intervals that are equiprobable according to the empirical unconditional distribution of *time gap*. In our benchmark specification, we use $k = 7$.

3 Alternative Specifications

We now explore how our results change or do not change under alternative specifications. First, not all stocks are listed for $y \in \{3, 5\}$ years. Instead of omitting delisted stocks from the analysis, following Ritter (2003), we define $good_i^y$ by comparing the return of IPO i with the market return at the earlier of the delisting date or the y -year anniversary of the IPO. We then run the Dardanoni and Forcina test on this modified dataset. We report our results in row S1 in Table 1. The results are in line with our main specification.

Second, we explore a different way to tell good from bad firms, namely defining good (bad) firms as those with $y \in \{3, 5\}$ years performance relative to market $return_i^y / market\ return_i^y$ above (below) the median IPO over the whole sample from 1983 to 2016. We report our

Table 1: Dardanoni and Forcina test for likelihood ratio order. Alternative specifications.

		3 years	5 years
S1	H_0 vs H_1	0.045	0.003
	H_1 vs H_2	0.002	0.315
obs.		693	693
S2	H_0 vs H_1	0.029	0.001
	H_1 vs H_2	0.000	0.000
obs.		529	403
$k = 5$	H_0 vs H_1	0.001	0.000
	H_1 vs H_2	0.001	0.549
obs.		529	403
$k = 9$	H_0 vs H_1	0.003	0.000
	H_1 vs H_2	0.000	0.319
obs.		529	403

results in row S2 in Table 1. In this case, while the test continues to reject the hypothesis H_0 in favor of H_1 , it also rejects the hypothesis H_1 in favor of the unrestricted hypothesis H_2 .

Finally, we check whether our results are robust to different choices of the number of equiprobable intervals k . We report our results in rows $k = 5$ and $k = 9$ in Table 1.

References

- Dardanoni, Valentino and Antonio Forcina**, "A unified approach to likelihood inference on stochastic orderings in a nonparametric context," *Journal of the American Statistical Association*, 1998, 93 (443), 1112–1123.
- Ritter, Jay R.**, "Investment Banking and Securities Issuance," in George M. Constantinides, Milton Harris, and Rene M. Stulz, eds., *Handbook of the Economics of Finance*, Vol. 1A: Corporate Finance, Elsevier, 2003, chapter 5, pp. 255–306.

Roosen, Jutta and David A Hennessy, "Testing for the monotone likelihood ratio assumption," *Journal of Business & Economic Statistics*, 2004, 22 (3), 358–366.