## Internet Appendix for "Lazy Prices"

Table A-1: Post Sarbanes Oxley (2003-2014) for the Risk Factors Section.
This Table reports the calendar-time portfolio returns and the risk factors post Sarbanes Oxley (2003-2014). For each of the four similarity measures, we compute quintiles based on the prior year's distribution of similarity scores across all stocks. Stocks then enter the quintile portfolio in the month after the public release of one of their 10K or $10-\mathrm{Q}$ reports. Firms are held in the portfolio for 3 months. We report Excess Return (return minus risk free rate), Fama-French 3 -factor Alphas (market, size, and value), and 5-factor Alphas (market, size, value, momentum, and liquidity) and risk-factor loadings of the top minus bottom quintile portfolio (Q5 - Q1). $t$-statistics are shown below the estimates, and statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels is indicated by ${ }^{* * *}$, ${ }^{* *}$, and ${ }^{*}$, respectively

|  | Equally Weighted |  |  |  | Value Weighted |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sim_Cosine | Sim_Jaccard | Sim_MinEdit | Sim_Simple | Sim_Cosine | Sim_Jaccard | Sim_MinEdit | Sim_Simple |
|  | Excess Return |  |  |  |  |  | Return |  |
| Constant | $\begin{aligned} & 0.0044 \\ & (1.2723) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0111^{* * *} \\ & (3.1530) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0062^{*} \\ & (1.7965) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0060^{* *} \\ & (1.9816) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0091^{* *} \\ & (2.3904) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0086^{* *} \\ & (2.1179) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0064 \\ & (1.6268) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0041 \\ & (1.1600) \\ & \hline \end{aligned}$ |
|  | 3-Factor |  |  |  | 3-Factor |  |  |  |
| Constant | $\begin{aligned} & 0.0054 \\ & (1.5554) \end{aligned}$ | $\begin{aligned} & 0.0115^{* * *} \\ & (3.2078) \end{aligned}$ | $\begin{aligned} & 0.0073^{* *} \\ & (2.0967) \end{aligned}$ | $\begin{aligned} & 0.0070^{* *} \\ & (2.3317) \end{aligned}$ | $\begin{aligned} & 0.0101^{* *} \\ & (2.6119) \end{aligned}$ | $\begin{aligned} & 0.0096^{* *} \\ & (2.3857) \end{aligned}$ | $\begin{aligned} & 0.0080^{* *} \\ & (2.0484) \end{aligned}$ | $\begin{aligned} & \hline 0.0059^{*} \\ & (1.7184) \end{aligned}$ |
| MKTRF | $\begin{aligned} & -0.1217 \\ & (-1.3195) \end{aligned}$ | $\begin{aligned} & -0.0552 \\ & (-0.5811) \end{aligned}$ | $\begin{aligned} & -0.1596^{*} \\ & (-1.6960) \end{aligned}$ | $\begin{aligned} & -0.1439^{*} \\ & (-1.7807) \end{aligned}$ | $\begin{aligned} & -0.1512 \\ & (-1.4511) \end{aligned}$ | $\begin{aligned} & -0.1808 \\ & (-1.6497) \end{aligned}$ | $\begin{aligned} & -0.2621^{* *} \\ & (-2.4622) \end{aligned}$ | $\begin{aligned} & -0.2637^{* * *} \\ & (-2.8154) \end{aligned}$ |
| SMB | $\begin{aligned} & -0.0973 \\ & (-0.5783) \end{aligned}$ | $\begin{aligned} & -0.0918 \\ & (-0.5155) \end{aligned}$ | $\begin{aligned} & -0.0763 \\ & (-0.4510) \end{aligned}$ | $\begin{aligned} & -0.1073 \\ & (-0.7380) \end{aligned}$ | $\begin{aligned} & 0.0615 \\ & (0.3236) \end{aligned}$ | $\begin{aligned} & 0.0426 \\ & (0.2170) \end{aligned}$ | $\begin{aligned} & 0.0529 \\ & (0.2777) \end{aligned}$ | $\begin{aligned} & 0.0350 \\ & (0.2092) \end{aligned}$ |
| HML | $\begin{aligned} & -0.0674 \\ & (-0.4443) \end{aligned}$ | $\begin{aligned} & -0.0256 \\ & (-0.1634) \end{aligned}$ | $\begin{aligned} & 0.0887 \\ & (0.5736) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0474 \\ & (0.3567) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0621 \\ & (-0.3640) \end{aligned}$ | $\begin{aligned} & -0.0886 \\ & (-0.4931) \end{aligned}$ | $\begin{aligned} & 0.0161 \\ & (0.0925) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.1338 \\ & (-0.8694) \end{aligned}$ |
|  | 5-Factor |  |  |  | 5-Factor |  |  |  |
| Constant | $\begin{aligned} & 0.0056 \\ & (1.5894) \end{aligned}$ | $\begin{aligned} & 0.0111^{* * *} \\ & (3.0614) \end{aligned}$ | $\begin{aligned} & 0.0071^{* *} \\ & (1.9960) \end{aligned}$ | $\begin{aligned} & 0.0071^{* *} \\ & (2.3269) \end{aligned}$ | $\begin{aligned} & 0.0092^{* *} \\ & (2.3817) \end{aligned}$ | $\begin{aligned} & 0.0101^{*} \\ & (2.4599) \end{aligned}$ | $\begin{aligned} & 0.0075^{*} \\ & (1.9307) \end{aligned}$ | $\begin{aligned} & 0.0056 \\ & (1.6511) \end{aligned}$ |
| MKTRF | $\begin{aligned} & -0.1293 \\ & (-1.3461) \end{aligned}$ | $\begin{aligned} & -0.0652 \\ & (-0.6623) \end{aligned}$ | $\begin{aligned} & -0.1497 \\ & (-1.5284) \end{aligned}$ | $\begin{aligned} & -0.1291 \\ & (-1.5368) \end{aligned}$ | $\begin{aligned} & -0.1414 \\ & (-1.3164) \end{aligned}$ | $\begin{aligned} & -0.1923^{*} \\ & (-1.6849) \end{aligned}$ | $\begin{aligned} & -0.1863^{*} \\ & (-1.7289) \end{aligned}$ | $\begin{aligned} & -0.1876 * * \\ & (-1.9978) \end{aligned}$ |
| SMB | $\begin{aligned} & -0.0859 \\ & (-0.5013) \end{aligned}$ | $\begin{aligned} & -0.1090 \\ & (-0.6057) \end{aligned}$ | $\begin{aligned} & -0.0912 \\ & (-0.5284) \end{aligned}$ | $\begin{aligned} & -0.1041 \\ & (-0.7030) \end{aligned}$ | $\begin{aligned} & 0.0177 \\ & (0.0923) \end{aligned}$ | $\begin{aligned} & 0.0274 \\ & (0.1372) \end{aligned}$ | $\begin{aligned} & 0.0138 \\ & (0.0733) \end{aligned}$ | $\begin{aligned} & 0.0056 \\ & (0.0340) \end{aligned}$ |
| HML | $\begin{aligned} & -0.0984 \\ & (-0.5935) \end{aligned}$ | $\begin{aligned} & 0.0208 \\ & (0.1206) \end{aligned}$ | $\begin{aligned} & 0.1263 \\ & (0.7500) \end{aligned}$ | $\begin{aligned} & 0.0509 \\ & (0.3523) \end{aligned}$ | $\begin{aligned} & 0.0498 \\ & (0.2699) \end{aligned}$ | $\begin{aligned} & -0.1129 \\ & (-0.5770) \end{aligned}$ | $\begin{aligned} & 0.1349 \\ & (0.7301) \end{aligned}$ | $\begin{aligned} & -0.0351 \\ & (-0.2172) \end{aligned}$ |
| UMD | $\begin{aligned} & -0.0257 \\ & (-0.3176) \end{aligned}$ | $\begin{aligned} & -0.0271 \\ & (-0.3270) \end{aligned}$ | $\begin{aligned} & 0.0331 \\ & (0.4001) \end{aligned}$ | $\begin{aligned} & 0.0489 \\ & (0.6893) \end{aligned}$ | $\begin{aligned} & 0.0355 \\ & (0.3937) \end{aligned}$ | $\begin{aligned} & 0.0831 \\ & (0.8680) \end{aligned}$ | $\begin{aligned} & 0.2472^{* * *} \\ & (2.7340) \end{aligned}$ | $\begin{aligned} & 0.2488^{* * *} \\ & (3.1614) \end{aligned}$ |
| PS_VWF | $\begin{aligned} & -0.0282 \\ & (-0.3161) \end{aligned}$ | $\begin{aligned} & 0.0939 \\ & (1.0185) \end{aligned}$ | $\begin{aligned} & 0.0332 \\ & (0.3670) \end{aligned}$ | $\begin{aligned} & -0.0363 \\ & (-0.4680) \end{aligned}$ | $\begin{aligned} & 0.1526 \\ & (1.5348) \end{aligned}$ | $\begin{aligned} & -0.0414 \\ & (-0.3932) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0169 \\ & (-0.1704) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0520 \\ & (-0.6009) \end{aligned}$ |

## Table A-2: Portfolio Sort - Document Characteristics

This Table reports calendar-time portfolio 5 -factor alphas (market, size, value, momentum, and liquidity) for samples of high and low levels of Sentiment, Uncertainty, and Litigiousness, where "low" and "high" are defined as less than the median and higher than the median, respectively. For each of the four similarity measures, we compute quintiles based on the prior year's distribution of similarity scores across all stocks. Stocks then enter the quintile portfolio in the month after the public release of one of their $10-\mathrm{K}$ or $10-\mathrm{Q}$ reports. Firms are held in the portfolio for 3 months. Sentiment is the number of positive words in the Change minus the number of negative words in the Change normalized by the size of the Change. Uncertainty and Litigiousness are the number of words categorized as uncertainty and litigiousness, respectively, normalized by the size of the Change. Sentiment category identifiers (e.g., negative, positive, uncertainty, litigious) are taken from Loughran and McDonald (2011)'s Master Dictionary. $t$-statistics are shown below the estimates, and statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels is indicated by ${ }^{* * *}$, ${ }^{* *}$, and ${ }^{*}$, respectively.


|  |  | Sim_MinEdit |  |  |  |  |  | Sim_Simple |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |
| Sentiment | Low | $\begin{aligned} & -0.0036^{* *} \\ & (-2.3516) \end{aligned}$ | $\begin{aligned} & -0.0022 \\ & (-1.5372) \end{aligned}$ | $\begin{aligned} & 0.0016 \\ & (1.1200) \end{aligned}$ | $\begin{aligned} & -0.0008 \\ & (-0.6059) \end{aligned}$ | $\begin{aligned} & 0.0013 \\ & (0.9551) \end{aligned}$ | $\begin{aligned} & 0.0048^{* *} \\ & (2.1460) \end{aligned}$ | $\begin{aligned} & -0.0047^{* *} \\ & (-3.3643) \end{aligned}$ | $\begin{aligned} & -0.0024 \\ & (-1.5296) \end{aligned}$ | $\begin{aligned} & -0.0001 \\ & (-0.1041) \end{aligned}$ | $\begin{aligned} & 0.0027^{* *} \\ & (2.0023) \end{aligned}$ | $\begin{aligned} & 0.0010 \\ & (0.7035) \end{aligned}$ | $\begin{aligned} & 0.0057^{* * *} \\ & (2.6567) \end{aligned}$ |
|  | High | $\begin{aligned} & -0.0002 \\ & (-0.1464) \end{aligned}$ | $\begin{aligned} & -0.0002 \\ & (-0.1844) \end{aligned}$ | $\begin{aligned} & 0.0006 \\ & (0.4199) \end{aligned}$ | $\begin{aligned} & 0.0004 \\ & (0.2755) \end{aligned}$ | $\begin{aligned} & 0.0026^{*} \\ & (1.6932) \end{aligned}$ | $\begin{aligned} & 0.0032 \\ & (1.5618) \end{aligned}$ | $\begin{aligned} & 0.0011 \\ & (0.8134) \end{aligned}$ | $\begin{aligned} & 0.0006 \\ & (0.6002) \end{aligned}$ | $\begin{aligned} & 0.0008 \\ & (0.5391) \end{aligned}$ | $\begin{aligned} & 0.0009 \\ & (0.5091) \end{aligned}$ | $\begin{aligned} & 0.0020 \\ & (1.1541) \end{aligned}$ | $\begin{aligned} & 0.0012 \\ & (0.5032) \end{aligned}$ |
| Uncertainty | Low | $\begin{aligned} & -0.0033^{* *} \\ & (-2.0092) \end{aligned}$ | $\begin{aligned} & 0.0004 \\ & (0.2767) \end{aligned}$ | $\begin{aligned} & -0.0015 \\ & (-1.1442) \end{aligned}$ | $\begin{aligned} & 0.0014 \\ & (0.8347) \end{aligned}$ | $\begin{aligned} & -0.0003 \\ & (-0.1981) \end{aligned}$ | $\begin{aligned} & 0.0033^{*} \\ & (1.6723) \end{aligned}$ | $\begin{aligned} & -0.0017 \\ & (-1.1747) \end{aligned}$ | $\begin{aligned} & -0.0013 \\ & (-1.0097) \end{aligned}$ | $\begin{aligned} & -0.0001 \\ & (-0.0768) \end{aligned}$ | $\begin{aligned} & 0.0017 \\ & (1.3819) \end{aligned}$ | $\begin{aligned} & 0.0022 \\ & (1.4079) \end{aligned}$ | $\begin{aligned} & 0.0038^{*} \\ & (1.8473) \end{aligned}$ |
|  | High | $\begin{aligned} & -0.0014 \\ & (-1.0799) \end{aligned}$ | $\begin{aligned} & -0.0021 \\ & (-1.5031) \end{aligned}$ | $\begin{aligned} & 0.0012 \\ & (0.9572) \end{aligned}$ | $\begin{aligned} & 0.0017 \\ & (1.2670) \end{aligned}$ | $\begin{aligned} & 0.0026^{*} \\ & (1.7718) \end{aligned}$ | $\begin{aligned} & 0.0041^{* *} \\ & (2.0624) \end{aligned}$ | $\begin{aligned} & -0.0041^{* *} \\ & (-2.2905) \end{aligned}$ | $\begin{aligned} & -0.0008 \\ & (-0.6771) \end{aligned}$ | $\begin{aligned} & 0.0030^{* * *} \\ & (2.6108) \end{aligned}$ | $\begin{aligned} & 0.0012 \\ & (0.6432) \end{aligned}$ | $\begin{aligned} & 0.0007 \\ & (0.3959) \end{aligned}$ | $\begin{aligned} & 0.0051^{* *} \\ & (2.1409) \end{aligned}$ |
| Litigiousness | Low | $\begin{aligned} & -0.0005 \\ & (-0.4520) \end{aligned}$ | $\begin{aligned} & -0.0022 \\ & (-1.3860) \end{aligned}$ | $\begin{aligned} & -0.0005 \\ & (-0.3590) \end{aligned}$ | $\begin{aligned} & -0.0008 \\ & (-0.5422) \end{aligned}$ | $\begin{aligned} & 0.0032^{* *} \\ & (2.0016) \end{aligned}$ | $\begin{aligned} & 0.0038^{*} \\ & (1.9562) \end{aligned}$ | $\begin{aligned} & -0.0023 \\ & (-1.6448) \end{aligned}$ | $\begin{aligned} & -0.0030^{* *} \\ & (-2.2771) \end{aligned}$ | 0.0019 (1.6493) | $\begin{aligned} & -0.0007 \\ & (- \\ & 0.5575) \end{aligned}$ | $\begin{aligned} & 0.0016 \\ & (1.0031) \end{aligned}$ | $\begin{aligned} & 0.0039^{*} \\ & (1.8726) \end{aligned}$ |
|  | High | $\begin{aligned} & -0.0032^{*} \\ & (-1.9640) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0001 \\ & (0.0807) \end{aligned}$ | $\begin{aligned} & -0.0004 \\ & (-0.3698) \end{aligned}$ | $\begin{aligned} & 0.0027^{* *} \\ & (1.9978) \end{aligned}$ | $\begin{aligned} & 0.0016 \\ & (0.9775) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0051^{* *} \\ & (2.2169) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0035^{* *} \\ & (-2.0759) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0001 \\ & (-0.1127) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0028^{* *} \\ & (2.4679) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0030^{* *} \\ & (2.1654) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0010 \\ & (0.6788) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0049^{* *} \\ & (2.0119) \\ & \hline \end{aligned}$ |

## Table A-3: The Influence of Specific Law Firms

This Table reports the impact of law firm characteristics on firm-level similarity measures. We extract and hand-code law firm names from $10-\mathrm{Ks}$ and $10-\mathrm{Qs}$. InHouseLawyer is a dummy and equals to one if a firm has in-house lawyers. Panel $A$ reports the differential effects of in-house versus outside lawyers on firm-level similarity measures. Panel $B$ reports law firm fixed effects on firm-level similarity scores and the $F$-tests on the joint significance of law firm fixed effects. $t$-statistics are shown below the estimates, and statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels is indicated by ${ }^{* * *}$, ${ }^{* *}$, and ${ }^{*}$, respectively.

Panel A

|  | $(1)$ <br> Sim_Cosine | $(2)$ <br> Sim_Jaccard | $(3)$ <br> Sim_MinEdit | $(4)$ <br> Sim_Simple |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| InHouseLawyer | $-0.0370^{* * *}$ | $-0.0602^{* * *}$ | $-0.0266^{* * *}$ | $-0.0087^{* * *}$ |
| Cons | $(-23.8120)$ | $(-41.9617)$ | $(-19.5237)$ | $(-11.8535)$ |
|  | $0.9107^{* * *}$ | $0.4830^{* * *}$ | $0.4514^{* * *}$ | $0.1815^{* * *}$ |
|  | $(26.8179)$ | $(15.7561)$ | $(15.4419)$ | $(28.5386)$ |
| Firm Fixed Effects |  |  |  |  |
| Time Fixed Effects | Yes | Yes | Yes | Yes |
| R-Squared | Yes | Yes | Yes | Yes |
| N | 0.0620 | 0.1266 | 0.1197 | 0.0666 |

Panel B

|  | (1) |  | (2) |  | (3) |  | (4) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sim_Cosine |  | Sim_Jaccard |  | Sim_MinEdit |  | Sim_Simple |  |
| Law Firm Fixed Effects | No | Yes | No | Yes | No | Yes | No | Yes |
| Firm Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Time Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Adjusted R-Squared | 0.1402 | 0.1592 | 0.104 | 0.125 | 0.0527 | 0.0711 | 0.1031 | 0.1216 |
| N | 88,024 | 88,024 | 88,024 | 88,024 | 88,024 | 88,024 | 86,359 | 86,359 |
| $F$-test for joint significance of | 1.2799 |  | 1.4371 |  | 1.4370 |  | 1.3076 |  |
| Law Firm fixed effects | Prob $>$ chi2 $=0.0000$ |  | Prob $>$ chi2 $=0.0000$ |  | Prob $>$ chi $2=0.0000$ |  | Prob $>$ chi2 $=0.0000$ |  |
| Number of constraints | 1901 |  | 1901 |  | 1901 |  | 1885 |  |

## Table A-4: Robustness - Drop Special Events

This Table reports the calendar-time portfolio returns controlling for special events. Excluded special events are taken from CapitaliQ: M\&A buyer, M\&A target, M\&A seller, Change in by laws, Discontinued operations/downsizings, Strategic alliances, and Bankruptcy events. For each of the four similarity measures, we compute quintiles based on the prior year's distribution of similarity scores across all stocks. Stocks then enter the quintile portfolios in the month after the public release of one of their 10-K or $10-\mathrm{Q}$ reports. Firms are held in the portfolio for 3 months. We report Excess Returns (return minus risk free rate), Fama-French 3 -factor Alphas (market, size, and value), and 5-factor Alphas (market, size, value, momentum, and liquidity). Panel A reports equal-weight portfolio returns and Panel B reports value-weight portfolio returns. $t$ statistics are shown below the estimates, and statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels is indicated by ${ }^{* * *}, * *$, and $*$, respectively.

| Sim_Cosine |  |  |  |  |  |  | Sim_Jaccard |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5 - Q1 |
| Excess | 0.0063 | 0.0074* | 0.0073** | 0.0084** | 0.0088** | 0.0025** | Excess | 0.0062 | 0.0070* | 0.0074** | 0.0086** | 0.0099*** | 0.0037** |
| Return | (1.6030) | (1.9194) | (2.0633) | (2.4356) | (2.5375) | (2.5985) | Return | (1.5503) | (1.8207) | (1.9989) | (2.4889) | (3.0469) | (2.4251) |
| 3-Factor | -0.0012 | -0.0003 | -0.0001 | 0.0011 | 0.0017** | 0.0029*** | 3-Factor | -0.0014 | -0.0007 | -0.0002 | 0.0013 | 0.0029*** | $0.0042^{* * *}$ |
| Alpha | (-1.6139) | (-0.3863) | (-0.1126) | (1.3272) | (2.2380) | (3.7844) | Alpha | (-1.6327) | (-0.8590) | (-0.2762) | (1.6246) | (3.3973) | (4.1719) |
| 5-Factor | -0.0011 | -0.0001 | 0.0000 | 0.0010 | 0.0018*** | 0.0029*** | 5-Factor | -0.0012 | -0.0006 | -0.0002 | 0.0013* | 0.0029*** | $0.0041^{* * *}$ |
| Alpha | (-1.4662) | (-0.1807) | (0.0453) | (1.2463) | (2.6528) | (3.6473) | Alpha | (-1.4669) | (-0.7566) | (-0.2663) | (1.6856) | (3.5619) | (3.9667) |
| Sim_MinEdit |  |  |  |  |  |  | Sim_Simple |  |  |  |  |  |  |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5 - Q1 |  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5 - Q1 |
| Excess | 0.0063 | 0.0077** | 0.0067* | 0.0091*** | 0.0095*** | 0.0033** | Excess | 0.0074* | 0.0084** | 0.0083** | 0.0095*** | 0.0091*** | 0.0017 |
| Return | (1.5726) | (1.9887) | (1.7801 | (2.6073) | (3.0828) | -2.2708) | Return | (1.9424) | (2.2612) | (2.3579) | (2.8616) | (3.0887) | (1.1519) |
| 3-Factor | -0.0014* | 0.0000 | -0.0010 | 0.0017** | 0.0028*** | 0.0042*** | 3-Factor | -0.0006 | 0.0003 | 0.0003 | 0.0018** | 0.0022*** | 0.0028*** |
| Alpha | (-1.7522) | (0.0060) | (-1.3492) | (2.2251) | (3.4409) | (4.9929) | Alpha | (-0.8484) | (0.4135) | (0.4200) | (2.5169) | (2.6701) | (3.0772) |
| 5-Factor | -0.0012 | 0.0002 | -0.0009 | 0.0016** | 0.0028*** | $0.0041^{* * *}$ | 5-Factor | -0.0004 | 0.0007 | 0.0004 | 0.0020*** | 0.0023*** | $0.0027^{* * *}$ |
| Alpha | (-1.6463) | (0.3036) | (-1.2398) | (2.1617) | (3.5705) | (4.7510) | Alpha | (-0.5514) | (1.0237) | (0.6361) | (2.7743) | (2.8367) | (2.8601) |


| Sim_Cosine |  |  |  |  |  |  | Sim_Jaccard |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5- Q1 |  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |
| Excess | 0.0033 | 0.0025 | 0.0052 | 0.0069** | 0.0072** | 0.0040*** | Excess | 0.0031 | 0.0038 | 0.0064* | 0.0066** | 0.0074** | 0.0043*** |
| Return | (0.9514) | (0.6931) | (1.5896) | (2.1086) | (2.1225) | (2.7535) | Return | (0.8883) | (1.0790) | (1.8623) | (2.0594) | (2.2841) | (2.9620) |
| 3-Factor | -0.0020** | -0.0034*** | -0.0001 | 0.0011 | 0.0019* | 0.0039*** | 3-Factor | -0.0025** | -0.0015 | $\begin{aligned} & 0.0005 \\ & (- \end{aligned}$ | 0.0011 | 0.0017 | 0.0042*** |
| Alpha | (-1.9856) | (-2.9025) | (-0.1470) | (1.1444 | (1.7524) | (2.7065) | Alpha | (-1.9863) | (-0.9498) | $0.3963)$ | (1.0263) | (1.4919) | (2.9253) |
| 5-Factor | -0.0015 | $-0.0037 * * *$ | -0.0003 | 0.0011 | 0.0023** | 0.0038** | 5-Factor | -0.0019 | -0.0015 | $0.0011$ (- |  | 0.0017 | 0.0036** |
| Alpha | (-1.4854) | (-3.1055) | (-0.3447) | (1.1397 | (2.0361) | (2.5447) | Alpha | (-1.5410) | (-0.9363) | 0.8698) | (1.3649) | (1.5918) | (2.4539) |
| Sim_MinEdit |  |  |  |  |  |  | Sim_Simple |  |  |  |  |  |  |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5- Q1 |  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |
| Excess | 0.0034 | 0.005 | 0.0062* | 0.0070** | 0.0075** | 0.0041** | Excess | 0.0045 | 0.0067** | 0.0074** | 0.0078*** | 0.0072** | 0.0028 |
| Return | (0.9598) | (1.4573) | (1.8261) | (2.1917) | (2.4727) | (2.1768 | Return | (1.3889) | (2.1807) | (2.4933) | (2.6327) | (2.4889) | (1.6334) |
| 3-Factor | -0.002 | -0.0006 | 0.0006 | 0.0016 | 0.0024* | 0.0044** | 3-Factor | -0.0017** | 0.0007 | 0.0015* | 0.0021* | 0.0017 | 0.0034** |
| Alpha | (-1.5685) | (-0.5890) | (0.5245) | (1.0906) | (1.8605) | (2.4659) | Alpha | (-2.0656) | (0.8990) | (1.7417) | (1.8444) | (1.3655) | (2.1627) |
| 5-Factor | -0.0015 | -0.0001 | 0.0011 | 0.0019 | 0.0016 | 0.0031* | 5-Factor | -0.0018** | 0.001 | 0.0011 | 0.0019* | 0.0011 | 0.0029* |
| Alpha | (-1.1744) | (-0.1428) | (1.0410) | (1.3485) | (1.2414) | (1.7785) | Alpha | (-2.1834) | (1.2281) | (1.2159) | (1.6741) | (0.8812) | (1.8378) |

## Table A-5: Robustness - Industry Adjusted

This Table reports the industry adjusted calendar-time portfolio returns. We use Fama \& French 17 industry classification. Within each industry, we compute quintiles based on the prior year's distribution of similarity measures across all stocks. Stocks then enter the quintile portfolios in the month after the public release of one of their $10-\mathrm{K}$ or $10-\mathrm{Q}$ reports. Firms are held in the portfolio for 3 months. We then aggregate all five quintiles across all industries. We report Excess Returns (return minus risk free rate), Fama-French 3 -factor Alphas (market, size, and value), and 5 -factor Alphas (market, size, value, momentum, and liquidity). Panel A reports equal-weight portfolio returns and Panel B reports value-weight portfolio returns. $t$-statistics are shown below the estimates, and statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels is indicated by ${ }^{* * *},{ }^{* *}$, and ${ }^{*}$, respectively.

| Panel A: Equally Weighted |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sim_Cosine |  |  |  |  |  |  | Sim_Jaccard |  |  |  |  |  |  |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5 - Q1 |  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |
| Excess | 0.0057 | 0.0066* | 0.0064* | 0.0074** | 0.0082** | $0.0024^{* * *}$ | Excess | 0.0058 | 0.0059 | 0.0060 | 0.0077** | 0.0087** | 0.0029** |
| Return | (1.4891) | (1.7466) | (1.7834) | (2.1023) | (2.2509) | (2.7679) | Return | (1.4499) | (1.5638) | (1.6224) | (2.1973) | (2.5822) | (2.5085) |
| 3-Factor | -0.0018** | -0.0010 | -0.0011 | 0.0000 | 0.0008 | 0.0026*** | 3-Factor | -0.0018** | -0.0017** | -0.0017** | 0.0004 | 0.0016** | 0.0034*** |
| Alpha | (-2.3316) | (-1.1938) | (-1.5042) | (-0.0380) | (1.0666) | (3.2812) | Alpha | (-2.3011) | (-2.2107) | (-2.1913) | (0.4852) | (2.0887) | $(3.9636)$ |
| 5-Factor <br> Alpha | $\begin{aligned} & -0.0016^{* *} \\ & (-2.1584) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0008 \\ & (-1.0445) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0011 \\ & (-1.5786) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0001 \\ & (0.1041 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0009 \\ & (1.2934) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0025^{* * *} \\ & (3.1305) \\ & \hline \end{aligned}$ | 5-Factor <br> Alpha | $\begin{aligned} & -0.0016^{* *} \\ & (-2.0193) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0017 * * \\ & (-2.3936) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0016^{* *} \\ & (-2.1911) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0005 \\ & (0.6098) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0017^{* *} \\ & (2.2899) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0033^{* * *} \\ & (3.6616) \\ & \hline \end{aligned}$ |
| Sim_MinEdit |  |  |  |  |  |  | Sim_Simple |  |  |  |  |  |  |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5 - Q1 |  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |
| Excess | 0.0056 | 0.0068* | 0.0052 | 0.0079** | 0.0086*** | 0.0031** | Excess | 0.0060 | 0.0066* | 0.0073** | 0.0076** | 0.0083** | 0.0022** |
| Return | (1.4124) | (1.7723) | (1.3864) | (2.1979) | (2.7255) | (2.5472) | Return | (1.5790) | (1.7504 | (2.0145 | (2.1739) | (2.5002) | $(2.2999)$ |
| 3-Factor | -0.0021*** | -0.0009 | -0.0025*** | 0.0005 | 0.0018** | $0.0040^{* * *}$ | 3-Factor | -0.0016** | -0.0012 | -0.0002 | 0.0003 | 0.0014 | 0.0030*** |
| Alpha | (-2.6731) | (-1.1401) | (-3.4899) | (0.6631) | (2.3691) | (5.2953) |  | (-2.1048) | $(-1.5965)$ | $(-0.2344)$ | (0.4697) | (1.6247) | (3.8744) |
| 5-Factor | -0.0019** | -0.0006 | -0.0023*** | 0.0005 | 0.0018** | $0.0037 * * *$ | 5-Factor | -0.0014* | -0.0009 | -0.0001 | 0.0004 | 0.0011 | 0.0025*** |
| Alpha | (-2.5441) | (-0.8508) | (-3.3781) | (0.6707) | (2.4059) | (4.8931) |  |  |  |  |  |  |  |


| Sim_Cosine |  |  |  |  |  |  | Sim_Jaccard |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |
| Excess <br> Return | $\begin{aligned} & 0.0038 \\ & (1.1006) \end{aligned}$ | $\begin{aligned} & 0.0022 \\ & (0.5904) \end{aligned}$ | $\begin{aligned} & 0.0047 \\ & (1.3795) \end{aligned}$ | $\begin{aligned} & 0.0063^{*} \\ & (1.9184) \end{aligned}$ | $\begin{aligned} & 0.0072^{*} \\ & (2.0482) \end{aligned}$ | $\begin{aligned} & 0.0034^{* *} \\ & (2.3219) \end{aligned}$ | Excess <br> Return | $\begin{aligned} & 0.0024 \\ & (0.6738 \end{aligned}$ | $\begin{aligned} & 0.0027 \\ & (0.7607) \end{aligned}$ | $\begin{aligned} & \text { 0.0059* } \\ & (1.6708) \end{aligned}$ | $\begin{aligned} & 0.0063^{*} \\ & (1.8467) \end{aligned}$ | $\begin{aligned} & 0.0072^{*} \\ & (2.1958) \end{aligned}$ | $\begin{aligned} & 0.0048^{* * *} \\ & (3.1364) \end{aligned}$ |
| 3-Factor <br> Alpha | $\begin{aligned} & -0.0014 \\ & (-1.2372) \end{aligned}$ | $\begin{aligned} & -0.0036^{* *} \\ & (-2.7523) \end{aligned}$ | $\begin{aligned} & -0.0008 \\ & (-0.7300) \end{aligned}$ | $\begin{aligned} & 0.0007 \\ & (0.7206) \end{aligned}$ | $\begin{aligned} & 0.002 \\ & (1.6445) \end{aligned}$ | $\begin{aligned} & 0.0034^{* *} \\ & (2.2797) \end{aligned}$ | 3-Factor <br> Alpha | $\begin{aligned} & -0.0031^{* * *} \\ & (-2.6333) \end{aligned}$ | $\begin{aligned} & -0.0026^{*} \\ & (-1.8155) \end{aligned}$ | $\begin{aligned} & 0.0000 \\ & (0.0179) \end{aligned}$ | $\begin{aligned} & 0.0008 \\ & (0.7102) \end{aligned}$ | $\begin{aligned} & 0.0017 \\ & (1.4244) \end{aligned}$ | $\begin{aligned} & 0.0048^{* *} \\ & (3.2153) \end{aligned}$ |
| 5-Factor <br> Alpha | $\begin{aligned} & -0.0005 \\ & (-0.4411) \end{aligned}$ | $\begin{aligned} & -0.0032^{* *} \\ & (-2.4643) \end{aligned}$ | $\begin{aligned} & -0.0007 \\ & (-0.6314) \end{aligned}$ | $\begin{aligned} & 0.0010 \\ & (1.0777) \end{aligned}$ | $\begin{aligned} & 0.0028^{* *} \\ & (2.4049) \end{aligned}$ | $\begin{aligned} & 0.0033^{*} * \\ & (2.1701) \end{aligned}$ | 5-Factor <br> Alpha | $\begin{aligned} & -0.0021^{*} \\ & (-1.8471) \end{aligned}$ | $\begin{aligned} & -0.0023 \\ & (-1.5963) \end{aligned}$ | $\begin{aligned} & 0.0005 \\ & (0.5286) \end{aligned}$ | $\begin{aligned} & 0.0013 \\ & (1.1779) \end{aligned}$ | $\begin{aligned} & 0.0020^{*} \\ & (1.7388) \end{aligned}$ | $\begin{aligned} & 0.0041^{* * *} \\ & (2.7512) \end{aligned}$ |
| Sim_MinEdit |  |  |  |  |  |  | Sim_Simple |  |  |  |  |  |  |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |
| Excess | 0.0026 | 0.0033 | 0.0054 | 0.0074** | 0.0070** | 0.0044** | Excess | 0.0019 | 0.0048 | 0.0065** | 0.0076** | 0.0056* | 0.0037* |
| Return | (0.7228) | (0.8988) | (1.5467) | (2.2968) | (2.1895) | (2.2498) | Return | (0.5353) | (1.4496) | (2.0319) | (2.3788) | (1.8168) | (1.9096) |
| 3-Factor <br> Alpha | $\begin{aligned} & -0.0030^{* *} \\ & (-2.4261) \end{aligned}$ | $\begin{aligned} & -0.0023^{*} \\ & (-1.8728) \end{aligned}$ | $\begin{aligned} & -0.0002 \\ & (-0.1734) \end{aligned}$ | $\begin{aligned} & 0.0020^{*} \\ & (1.8576) \end{aligned}$ | $\begin{aligned} & 0.0021 \\ & (1.5384) \end{aligned}$ | $\begin{aligned} & 0.0051^{* * *} \\ & (2.6985) \end{aligned}$ | 3-Factor <br> Alpha | $\begin{aligned} & -0.0038^{* * *} \\ & (-3.2838) \end{aligned}$ | $\begin{aligned} & -0.0007 \\ & (-0.8938) \end{aligned}$ | $\begin{aligned} & 0.0011 \\ & (1.2616) \end{aligned}$ | $\begin{aligned} & 0.0026^{* *} \\ & (2.3852) \end{aligned}$ | $\begin{aligned} & 0.0007 \\ & (0.5439) \end{aligned}$ | $\begin{aligned} & 0.0045^{* *} \\ & (2.4987) \end{aligned}$ |
| 5-Factor <br> Alpha | $\begin{aligned} & -0.0023^{*} \\ & (-1.8303) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0016 \\ & (-1.3212) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0006 \\ & (0.5521) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0020^{* *} \\ & (2.0623) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0018 \\ & (1.2900) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0040^{* *} \\ & (2.1465) \\ & \hline \end{aligned}$ | 5-Factor <br> Alpha | $\begin{aligned} & -0.0037^{* *} \\ & (-3.1089) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0003 \\ & (-0.3288) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0007 \\ & (0.8373) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0024^{* *} \\ & (2.1841) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0001 \\ & (-0.0482) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0037^{* *} \\ & (1.9931) \\ & \hline \end{aligned}$ |

Table A-6: Bias-Adjusted Fama-MacBeth Coefficients
This Tables reports the test for the importance of our similarity measures to predict future stock returns relative to unobservables that are correlated with both future stock returns and error term in Fama-MacBeth regression in Table V. We follow Oster (2016) and Altonji, Elder, and Taber (2005) to evaluate the robustness to omitted variable bias by observing coefficient and R-squared movements after inclusion of controls. The bias adjusted treatment effect is computed as follows. We start with the most basic regression:

Ret $=\alpha+\beta_{0} \times$ Similarity + error, $R_{0}^{2}$
We then observe coefficients and R-squared after adding observable controls (Table V):
Ret $=\alpha+\beta_{1} \times$ Similarity + ObservableControls + error, $R_{1}^{2}$
The bias-adjusted treatment effect is defined as $\beta^{*}$ :
Ret $=\alpha+\beta^{*} \times$ Similarity + ObservableControls + UnobservableControls + error, $R_{\max }^{2}$
The true treatment effect of is then computed as:

$$
\beta^{*}=\beta_{1}-\delta\left[\beta_{0}-\beta_{1}\right] \frac{R_{\max }^{2}-R_{1}^{2}}{R_{1}^{2}-R_{0}^{2}}
$$

The estimates for $\beta_{0}$ and $R_{0}^{2}$ are from Table $\mathbf{V}$, columns (1), (4), (7), and (10). The estimates for $\beta_{1}$ and $R_{1}^{2}$ are taken from Table V, columns (3), (6), (9), and (12). We follow Oster (2016) and choose $\delta=1$ and $R_{\max }^{2}=1.3 \times R_{1}^{2}$. The bias-adjusted treatment effect is reported in this table below.

| $\beta_{0}$ | $\boldsymbol{\beta}_{\mathbf{1}}$ | $R_{0}^{2}$ | $R_{1}^{2}$ | $R_{\max }^{2}$ | $\boldsymbol{\beta}^{*}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0.0045 | $\mathbf{0 . 0 0 3 7}$ | 0.0006 | 0.0485 | 0.06305 | $\mathbf{0 . 0 0 3 4 5 7}$ |
| 0.0082 | $\mathbf{0 . 0 0 5 9}$ | 0.0017 | 0.0489 | 0.06357 | $\mathbf{0 . 0 0 5 1 8 5}$ |
| 0.0054 | $\mathbf{0 . 0 0 2 9}$ | 0.0017 | 0.0488 | 0.06344 | $\mathbf{0 . 0 0 2 1 2 3}$ |
| 0.0404 | $\mathbf{0 . 0 2 9 2}$ | 0.0019 | 0.0492 | 0.06396 | $\mathbf{0 . 0 2 5 7 0 5}$ |

Table A-7: Explicitly Comparative Statements
This Table reports calendar-time portfolio value weighted 5-factor alphas (market, size, value, momentum, and liquidity) for separate samples of firms who make explicitly comparative statements in their annual and quarterly filings, and firms who do not. We define firms who make explicit comparisons when firms financial reports include phrases listed in Panel B. More specifically, we search for instances where all the words in each example phrase from Panel B are within 10 words of each other. For each subsample, we compute quintiles based on the prior year's distribution of similarity scores across all stocks. Stocks then enter quintile portfolios in the month after the public release of one of their 10-K or 10-Q reports. Firms are held in quintile portfolios for 3 months. $t$-statistics are shown below the estimates, and statistical significance at the $1 \%$, $5 \%$, and $10 \%$ levels is indicated by ${ }^{* * *},{ }^{* *}$, and ${ }^{*}$, respectively.

Panel A

| Explicitly comparative statements | 5-Factor Alpha, Jaccard Similarity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q 5-Q1 |
| Yes | $\begin{gathered} 0.0020 \\ (0.9319) \end{gathered}$ | $\begin{gathered} -0.0022 \\ (-0.7717) \end{gathered}$ | $\begin{gathered} -0.0005 \\ (-0.2233) \end{gathered}$ | $\begin{gathered} 0.0021 \\ (1.0289) \end{gathered}$ | $\begin{gathered} 0.0030 \\ (1.4480) \end{gathered}$ | $\begin{gathered} 0.0010 \\ (0.3432) \end{gathered}$ |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q 5 - Q1 |
| No | $\begin{gathered} -0.0031^{* * *} \\ (-2.7690) \\ \hline \end{gathered}$ | $\begin{gathered} -0.0007 \\ (-0.4987) \\ \hline \end{gathered}$ | $\begin{gathered} -0.0003 \\ (-0.2253) \\ \hline \end{gathered}$ | $\begin{gathered} 0.0009 \\ (0.7658) \\ \hline \end{gathered}$ | $\begin{gathered} 0.0023^{* *} \\ (1.9894) \\ \hline \end{gathered}$ | $\begin{gathered} 0.0054^{* * *} \\ (3.6268) \\ \hline \end{gathered}$ |

Panel B: Example Phrases captured in 10-Ks and 10-Qs
last|previous|prior year sales
last|previous|prior year ebitda
last|previous|prior year roa
last|previous|prior year operating income
last|previous|prior year net income
increase|decrease sale
increase|decrease ebitda
increase|decrease roa
increase|decrease operating income
increase|decrease net income

Table A-8: Short-Run Announcement Effects by Attention Category
This Table reports short-run announcement effects for firms in Q1 that have investors who make the multi-year downloads on the SEC server, and firms that do not. Daily returns are adjusted according to Daniel, K., Grinblatt, M., Titman, S., Wermers, R., (1997). $t$-statistics are shown below the estimates, and statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels is indicated by ${ }^{* * *}$, ${ }^{* *}$, and ${ }^{*}$, respectively.

| Compare with last year |  | cret1radj | cret2radj | cret3radj | cret4radj | cret5radj | cret6radj | cret30radj |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No | Q1 | $\begin{aligned} & -0.0002 \\ & (-0.5664) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0002 \\ & (-0.5786) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0002 \\ & (-0.4186) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0007 \\ & (-1.2335) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0006 \\ & (-1.0299) \end{aligned}$ | $\begin{aligned} & -0.0000 \\ & (-0.0672) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0027^{* *} \\ & (-1.9941) \\ & \hline \end{aligned}$ |
| Yes | Q1 | cret1radj | cret2radj | cret3radj | cret4radj | cret5radj | cret6radj | cret30radj |
|  |  | $\begin{aligned} & -0.0008^{*} \\ & (-1.8969) \end{aligned}$ | $\begin{aligned} & -0.0015^{* * *} \\ & (-2.7838) \\ & \hline \end{aligned}$ | $\begin{aligned} & -0.0019^{* * *} \\ & (-3.0316) \end{aligned}$ | $\begin{aligned} & -0.0017^{* *} \\ & (-2.4104) \end{aligned}$ | $\begin{gathered} -0.0015^{* *} \\ (-1.9890) \end{gathered}$ | $\begin{aligned} & -0.0007 \\ & (-0.8653) \end{aligned}$ | $\begin{aligned} & -0.0014 \\ & (-0.8586) \end{aligned}$ |

Table A-9: Comparing Textual Similarity to Tone Changes
This Table compares our similarity measure Sim_Jaccard to the existing tone change measures in the literature. We measure tone and sentiment changes for full financial reports by first obtaining the set of negative and positive words using the Loughran and McDonald (2011)'s dictionary. We then follow Loughran and McDonald (2011) and measure negative tone change of full financial report as the change in the number of negative words normalized by document size, positive tone changes of the full financial report as changes in the number of positive words normalized by document size. Panel B compare our Jaccard similarity measure with the tone changes of the full financial report using a Fama-MacBeth regression framework.

| Panel A |  |  |
| :---: | :---: | :---: |
|  |  | (2) |
|  | Sim_Jaccard |  |
| Negative tone change | $\begin{aligned} & -0.0216^{* * *} \\ & (-30.1115) \end{aligned}$ |  |
| Positive tone change |  | $\begin{aligned} & -0.0134^{* * *} \\ & (-20.3073) \end{aligned}$ |
| Cons | $\begin{aligned} & 0.3371^{* * *} \\ & (63.6421) \end{aligned}$ | $\begin{aligned} & 0.3368^{* * *} \\ & (63.6235) \end{aligned}$ |
| R-Squared | 0.1228 | 0.1189 |
| N | 342183 | 342006 |

## Panel B



## Table A-10: Exploring High Distraction Dates

This Table reports calendar-time portfolio 5 -factor alphas (market, size, value, momentum, and liquidity) for separate samples of firms with filing dates that have over 100 earnings announcements on that same date (which we view as high distraction or high news days, hence low attention days), relative to filing dates that have fewer than 100 earnings announcements (as in Hirshleifer, Lim, and Teoh (2006)). For each subsample, we compute quintiles based on the prior year's distribution of similarity scores across all stocks. Stocks then enter quintile portfolios in the month after the public release of one of their $10-\mathrm{K}$ or $10-\mathrm{Q}$ reports. Firms are held in quintile portfolios for 3 months. $t$-statistics are shown below the estimates, and statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels is indicated by ${ }^{* * *}$, **, and $*$, respectively.

| Distraction | 5-Factor Alpha, Jaccard Similarity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q 5-Q1 |
| High news day | $\begin{aligned} & -0.0033^{* *} \\ & (-2.0790) \end{aligned}$ | $\begin{aligned} & -0.0048^{* *} \\ & (-2.4662) \end{aligned}$ | $\begin{gathered} -0.0005 \\ (-0.2715) \end{gathered}$ | $\begin{gathered} 0.0001 \\ (0.0444) \end{gathered}$ | $\begin{gathered} 0.0024 \\ (1.5023) \end{gathered}$ | $\begin{gathered} 0.0056^{* * *} \\ (2.8485) \end{gathered}$ |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q 5- Q1 |
| Low news day | $\begin{gathered} -0.0011 \\ (-0.7663) \end{gathered}$ | $\begin{gathered} 0.0000 \\ (0.0170) \end{gathered}$ | $\begin{gathered} -0.0004 \\ (-0.2638) \end{gathered}$ | $\begin{gathered} 0.0005 \\ (0.3566) \end{gathered}$ | $\begin{gathered} 0.0023 \\ (1.5135) \end{gathered}$ | $\begin{gathered} 0.0034^{*} \\ (1.8294) \\ \hline \end{gathered}$ |

Table A-11: Textual Similarity and the Life Cycle of the Firm
This Table reports test that textual similarity may be related to the life cycle of the firm. We follow Spence (1979), Kotler (1980), and Anthony and Ramesh (1992) and use these four variables as proxies for a firm life cycle stage: (1) annual dividend as a percentage of income, (2) percent sales growth, (3) capital expenditure normalize by total asset, and (4) age of the firm. More specifically, we compute annual firm-specific financial variables to proxy for the life cycle stage as follows (1) Depreciation Rate: $\mathrm{dp}=(\mathrm{dvt} / \mathrm{ib})^{*} 100$, (2) Sales Growth: $s \mathrm{~s}=(\mathrm{sale}-\mathrm{sale}[\mathrm{t}-1]) /$ sale $[\mathrm{t}-1]^{*} 100$, (3) Capital Expenditure: ce = capx/at*100,(4) Age: age = fyear - ipoyear (if IPO year is missing, we use the first year that the firm appears in Compustat). Panel A reports regression of Jaccard similarity on lagged five-year average of depreciation rate, sales growth, capital expenditure, and age. Panel B reports the result for the test whether the unexpected component of Jaccard similarity can still predict future stock returns using a Fama-MacBeth regression framework. We decompose Jaccard similarity into the expected and unexpected components based on the above predictors for a firm's life cycle. The unexpected component is computed as the contemporary Jaccard similarity minus the predicted Jaccard similarity obtained from running a rolling window regression of Jaccard similarity on lagged five-year average of depreciation rate, sales growth, capital expenditure, and age.

|  | Sim_Jaccard |
| :--- | :---: |
| Depreciation Rate | $-0.0000^{* *}$ |
|  | $(-2.4104)$ |
| Sales Growth | $0.0000^{* *}$ |
|  | $(2.3175)$ |
| Capital Expenditure | 0.0001 |
|  | $(1.0198)$ |
| Age | $-0.0094^{* * *}$ |
|  | $(-14.4651)$ |
| Constant | $0.4212^{* * *}$ |
|  | $(213.8191)$ |
| R-Squared | 0.001 |
| N | 233511 |


|  |  |
| :--- | :---: |
|  |  |
| Unexpected Sim_Jaccard | Ret |
|  |  |
| Size | $0.0055^{* * *}$ |
|  | $(3.8174)$ |
|  |  |
| log(BM) | 0.0001 |
|  | $(0.1539)$ |
| Ret(-1, 0) | $0.0014^{*}$ |
|  | $(1.7692)$ |
| Ret(-12,-1) | $-0.0259^{* * *}$ |
|  | $(-4.1693)$ |
| Constant | $0.0048^{*}$ |
| R-Squared | $(1.7268)$ |
| N |  |

## Table A-12: Using Only Negative Words in Sentiment

This Table reports results involving Sentiment of Changes using only negative words. Sentiment category identifiers. In Panel A, we regress Sim_Simple on Sentiment of Changes using only negative words, as defined in Loughran and McDonald (2011). Panel B reports the calendar-time portfolio 5 -factor alphas (market, size, value, momentum, and liquidity) for samples of high and low levels of Sentiment of Changes using only negative words. For each subsample, we compute quintiles based on the prior year's distribution of Simple similarity scores across all stocks. Stocks then enter quintile portfolios in the month after the public release of one of their $10-\mathrm{K}$ or $10-\mathrm{Q}$ reports. Firms are held in quintile portfolios for 3 months. t-statistics are shown below the estimates, and statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels is indicated by ${ }^{* * *},{ }^{* *}$, and *, respectively.

| Panel A |  |
| :---: | :---: |
|  | (1) <br> Sim_Simple |
| Sentiment of Changes (negative words only) | $\begin{aligned} & 4.1602^{* * *} \\ & (89.1211) \end{aligned}$ |
| Cons | $\begin{aligned} & 0.1829^{* * *} \\ & (24.7472) \end{aligned}$ |
| Firm Fixed Effect | Yes |
| Time Fixed Effect | Yes |
| R-Squared | 0.0855 |
| N | 311044 |

## Panel B

|  |  | Panel |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sentiment of Changes (negative words only) | 5-Factor Alpha, Simple Similarity |  |  |  |  |  |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q 5 - Q1 |
| High | -0.0039** | -0.0014 | 0.0016 | 0.0016 | 0.0015 | 0.0054** |
|  | (-2.1787) | (-1.0077) | (1.3704) | (0.9662) | (1.1074) | (2.3087) |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q 5-Q1 |
| Low | -0.0014 | -0.0024** | 0.0014 | 0.0025 | 0.0018 | 0.0032 |
|  | (-1.0454) | (-2.0033) | (1.1497) | (1.6221) | (1.0176) | (1.4693) |

## Table A-13: Comparing 10-Ks and 10-Qs Only

This Table reports calendar-time portfolio excess return, 3-Factor alphas, and 5 -factor alphas (market, size, value, momentum, and liquidity). Sim_Cosine is the cosine similarity measure of quarter-on-quarter financial reports. Results in Panel A1 and A2 use only 10-Q financial reports and results in Panel B1 and B2 use only 10-K financial reports. We compute quintiles based on the prior year's distribution of Sim_Cosine for each type of financial reports across all stocks. Stocks then enter quintile portfolios in the month after the public release of one of their 10-Q reports (in Panel A1 and A2) or one of their $10-\mathrm{K}$ reports (in Panel B1 and B2). Firms are held in quintile portfolios for 3 months in Panel A1 and A2 (10-Q-only similarity), and firms are held in quintile portfolios for 9 months in Panel B1 and Panel B2 (10-K-only similarity). $t$-statistics are shown below the estimates, and statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels is indicated by ${ }^{* * *}$, **, and *, respectively.

Panel A1: Equally weighted - 10-Q only

| Panel A1: Equally weighted - 10-Q only |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |
| Excess | $0.0066^{*}$ | $0.0064^{*}$ | $0.0073^{* *}$ | $0.0094^{* * *}$ | $0.0103^{* * *}$ | $0.0038^{* * *}$ |
| Return | $(1.7625)$ | $(1.7988)$ | $(2.1252)$ | $(2.9089)$ | $(3.2686)$ | $(4.1171)$ |
|  |  |  |  |  |  |  |
| 3-Factor | $-0.0017^{* *}$ | $-0.0015^{* *}$ | -0.0006 | $0.0019^{* * *}$ | $0.0032^{* * *}$ | $0.0049^{* * *}$ |
| Alpha | $(-2.2814)$ | $(-1.9897)$ | $(-0.8533)$ | $(2.9710)$ | $(4.2077)$ | $(6.9071)$ |
|  |  |  |  |  |  |  |
| 5-Factor | $-0.0015^{* *}$ | $-0.0014^{* *}$ | -0.0005 | $0.0020^{* * *}$ | $0.0033^{* * *}$ | $0.0049^{* * *}$ |
| Alpha | $(-2.2124)$ | $(-1.9743)$ | $(-0.7858)$ | $(3.1190)$ | $(4.5727)$ | $(6.7986)$ |

Panel A2: Value weighted - 10-Q only

|  | Sim_Cosine |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |
| Excess | 0.0053 | 0.0048 | 0.0062* | 0.0082*** | 0.0084** | 0.0031** |
| Return | (1.5893) | (1.5326) | (1.8774) | (2.6014) | (2.5172) | (2.2882) |
| 3-Factor | -0.0012 | -0.0011 | -0.0001 | $0.0021^{* *}$ | 0.0023** | 0.0036*** |
| Alpha | (-1.3993) | (-1.1725) | (-0.0890) | (2.1015) | (2.0734) | (2.6084) |
| 5-Factor | -0.0015* | -0.0012 | 0.0002 | 0.0027*** | 0.0020* | 0.0035** |
| Alpha | (-1.6919) | (-1.3472) | (0.2042) | (2.6660) | (1.7365) | (2.4974) |

Panel B1: Equally weighted - 10-K only

| Panel B1: Equally weighted - 10-K only |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |
| Excess | $0.0080^{* *}$ | $0.0077^{* *}$ | $0.0075^{* *}$ | $0.0085^{* *}$ | $0.0096^{* * *}$ | 0.0016 |
| Return | $(2.1767)$ | $(2.1340)$ | $(2.1732)$ | $(2.5585)$ | $(3.0462)$ | $(1.4954)$ |
|  |  |  |  |  |  |  |
| 3-Factor | 0.0000 | -0.0002 | -0.0003 | 0.0010 | $0.0024^{* * *}$ | $0.0024^{* * *}$ |
| Alpha | $(0.0445)$ | $(-0.2030)$ | $(-0.3097)$ | $(1.2233)$ | $(2.7560)$ | $(2.8182)$ |
|  |  |  |  |  |  |  |
| 5-Factor | 0.0004 | -0.0000 | -0.0000 | 0.0011 | $0.0023^{* * *}$ | $0.0019^{* *}$ |
| Alpha | $(0.5252)$ | $(-0.0070)$ | $(-0.0190)$ | $(1.4990)$ | $(2.7037)$ | $(2.2403)$ |

Panel B2: Value weighted - 10-K only

| Panel B2: Value weighted - 10-Konly |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |
| Excess | 0.0036 | 0.0051 | 0.0053 | 0.0053 | $0.0100^{* * *}$ | $0.0064^{* * *}$ |
| Return | $(0.9916)$ | $(1.4004)$ | $(1.5592)$ | $(1.5988)$ | $(3.0037)$ | $(3.5457)$ |
|  |  |  |  |  |  |  |
| 3-Factor | $-0.0030^{* *}$ | -0.0009 | -0.0001 | -0.0005 | $0.0044^{* * *}$ | $0.0074^{* * *}$ |
| Alpha | $(-2.4396)$ | $(-0.6340)$ | $(-0.0769)$ | $(-0.3420)$ | $(2.7778)$ | $(4.1685)$ |
|  |  |  |  |  |  |  |
| 5-Factor | $-0.0024^{* *}$ | -0.0002 | -0.0000 | -0.0002 | $0.0043^{* * *}$ | $0.0068^{* * *}$ |
| Alpha | $(-2.0299)$ | $(-0.1170)$ | $(-0.0121)$ | $(-0.1423)$ | $(2.8070)$ | $(3.7676)$ |

## Table A-14: Removing Stop Words

This Table reports calendar-time portfolio excess return, 3-Factor alphas, and 5 -factor alphas (market, size, value, momentum, and liquidity). Sim_Cosine is the cosine similarity measure of quarter-on-quarter financial reports after excluding stop words. We exclude "Generic" stop words as recommended by Tim Loughran and Bill McDonald (https://sraf.nd.edu/textual-analysis/resources/\#StopWords). We then compute quintiles based on the prior year's distribution of Sim_Cosine across all stocks. Stocks then enter the quintile portfolio in the month after the public release of one of their $10-\mathrm{K}$ or $10-\mathrm{Q}$ reports. Firms are held in quintile portfolios for 3 months. Panel A reports equally weighted returns and Panel B reports value weighted returns. $t$-statistics are shown below the estimates, and statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels is indicated by ${ }^{* * *}$, ${ }^{* *}$, and ${ }^{*}$, respectively.

Panel A: Equally weighted

| Panel A: Equally weighted |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q5 Cosine | Q5-Q1 |
| Excess | $0.0065^{*}$ | $0.0067^{*}$ | $0.0076^{* *}$ | $0.0091^{* * *}$ | $0.0107^{* * *}$ | $0.0042^{* * *}$ |
| Return | $(1.8044)$ | $(1.8334)$ | $(2.3154)$ | $(2.9625)$ | $(3.6306)$ | $(3.9433)$ |
|  |  |  |  |  |  |  |
| 3-Factor | $-0.0021^{* * *}$ | $-0.0020^{* * *}$ | -0.0007 | 0.0013 | $0.0032^{* * *}$ | $0.0053^{* * *}$ |
| Alpha | $(-2.8080)$ | $(-2.7619)$ | $(-1.0424)$ | $(1.5540)$ | $(4.7566)$ | $(7.1544)$ |
|  |  |  |  |  |  |  |
| 5-Factor | $-0.0017^{* *}$ | $-0.0017^{* *}$ | -0.0004 | $0.0016^{* *}$ | $0.0034^{* * *}$ | $0.0050^{* * *}$ |
| Alpha | $(-2.3476)$ | $(-2.3916)$ | $(-0.6444)$ | $(2.0254)$ | $(5.3938)$ | $(6.6965)$ |

Panel B: Value weighted

| Panel B: Value weighted |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Qim_Cosine |  |  |  |
|  | 0.005 | $0.0066^{* *}$ | $0.0057^{*}$ | $0.0072^{* *}$ | $0.0091^{* * *}$ | $0.0041^{* * *}$ |
| Excess | $(1.5009)$ | $(2.1955)$ | $(1.8780)$ | $(2.4518)$ | $(3.0514)$ | $(2.7715)$ |
| Return |  |  |  |  |  |  |
|  | $-0.0022^{* *}$ | -0.0002 | -0.0012 | 0.0005 | $0.0027^{* * *}$ | $0.0049^{* * *}$ |
| 3-Factor | $(-2.2945)$ | $(-0.2242)$ | $(-1.2807)$ | $(0.5350)$ | $(3.0524)$ | $(3.5829)$ |
| Alpha |  |  |  |  |  |  |
|  | $-0.0021^{* *}$ | -0.0002 | -0.0006 | 0.0012 | $0.0023^{* *}$ | $0.0044^{* * *}$ |
| 5-Factor | $(-2.1201)$ | $(-0.2811)$ | $(-0.7094)$ | $(1.2300)$ | $(2.5640)$ | $(3.1479)$ |
| Alpha |  |  |  |  |  |  |

Table A-15: Measuring Sequential Quarterly Changes to the Risk Factors Section, Instead of Annual Document Changes
This Table reports calendar-time portfolio excess return, 3 -Factor alphas, and 5 -factor alphas (market, size, value, momentum, and liquidity). Sim_Cosine is the cosine similarity measure of quarter-over-quarter "Risk Factors" sections of firms' quarterly reports (10-Qs). We compute quintiles based on the prior year's distribution of Sim_Cosine across all stocks. Stocks then enter the quintile portfolio in the month after the public release of their 10-Q reports. Firms are held in the portfolio for 3 months. Panel A reports equally weighted returns and Panel B reports value weighted returns. $t$-statistics are shown below the estimates, and statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels is indicated by ${ }^{* * *}$, **, and *, respectively.

Panel A: Equally weighted

| Panel A: Equally weighted |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q5 | Q5-Q1 |
| Excess | -0.0014 | 0.0055 | 0.0066 | 0.0076 | 0.0068 | $0.0082^{*}$ |
| Return | $(-0.1895)$ | $(1.0195)$ | $(1.1575)$ | $(1.4051)$ | $(1.3422)$ | $(1.6964)$ |
|  |  |  |  |  |  |  |
| 3-Factor | $-0.0080^{* *}$ | -0.0013 | -0.0004 | 0.0007 | 0.0014 | $0.0095^{* *}$ |
| Alpha | $(-2.1598)$ | $(-1.2402)$ | $(-0.3648)$ | $(0.6200)$ | $(0.8682)$ | $(2.0278)$ |
|  |  |  |  |  |  |  |
| 5-Factor | $-0.0080^{* *}$ | -0.0014 | -0.0004 | 0.0007 | 0.0015 | $0.0095^{* *}$ |
| Alpha | $(-2.2232)$ | $(-1.4157)$ | $(-0.3426)$ | $(0.6283)$ | $(0.9347)$ | $(2.1219)$ |

Panel B: Value weighted

| Panel B: Value weighted |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Qim_Cosine |  |  |  |
|  | Q3 | Q4 | Q5 | Q5-Q1 |  |  |
| Excess | -0.0023 | 0.0043 | 0.0056 | 0.0073 | 0.0078 | $0.0100^{*}$ |
| Return | $(-0.3218)$ | $(0.8817)$ | $(1.0841)$ | $(1.6429)$ | $(1.5857)$ | $(1.9113)$ |
|  |  |  |  |  |  |  |
| 3-Factor | $-0.0096^{* *}$ | $-0.0026^{*}$ | -0.0005 | 0.0012 | 0.0016 | $0.0112^{* *}$ |
| Alpha | $(-2.2899)$ | $(-1.8741)$ | $(-0.2876)$ | $(0.8735)$ | $(0.7720)$ | $(2.1774)$ |
|  |  |  |  |  |  |  |
| 5-Factor | $-0.0096^{* *}$ | $-0.0027^{*}$ | -0.0005 | 0.0014 | 0.0018 | $0.0113^{* *}$ |
| Alpha | $(-2.3391)$ | $(-1.9496)$ | $(-0.3066)$ | $(0.9744)$ | $(0.8803)$ | $(2.2986)$ |

Figure A-1: More Example Passages and the Changes Made to Them from Baxter's 10-Ks in 2008 and 2009

## 2008:

We continue to address issues with our infusion pumps as discussed further under the caption entitled certain Regulatory Matters in Management Discussion and Analysis of the Annual Report.

In connection with these issues, there can be no assurance that additional costs or civil and criminal penalties will not be incurred, that additional regulatory actions with respect to the company will not occur, that substantial additional charges or significant asset impairments may not be required, or that additional legislation or regulation will not be introduced that may adversely affect the company's operations. Third parties may also file claims against us in connection with these pump issues. In addition, sales of these products may continue to be affected and sales of other Baxter products may be adversely affected if we do not adequately address these pump issues

In addition, the healthcare regulatory environment may change in way that restricts our existing operations or our growth. The healthcare industry is likely to continue to undergo significant changes for the foreseeable future, which could have an adverse effect on our business, financial condition and results of operations. We cannot predict the effect of possible future legislation and regulation.

Failure to provide quality products and services to our customers could have an adverse effect on our business and subject us to regulatory actions and costly litigation.
$\backslash$

## 2009:

We continue to address a number of regulatory issues as discussed further under the caption entitled Certain Regulatory Matters in Item 7 of this Annual Report on Form 10-K.

In connection with these issues, there can be no assurance that additional costs or civil and criminal penalties will not be incurred, that additional regulatory actions with respect to the company will not occur, that substantial additional charges or significant asset impairments may not be required, or that additional legislation or regulation will not be introduced that may adversely affect the company's operations. Third parties may also file claims against us in connection with these
issues. In addition, sales of the related products may continue to be affected and sales of other Baxter products may be adversely affected if we do not adequately address these issues.

The sales and marketing of our products and our relationships with healthcare providers are under increasing scrutiny by federal, state and foreign government agencies. The FDA, the OIG, the Department of Justice (DOJ) and the Federal Trade Commission have each increased their enforcement efforts with respect to the anti-kickback statute, False Claims Act, off-label promotion of products, other healthcare related laws, antitrust and other competition laws. The DOJ has announced an increased focus on the enforcement of the U.S. Foreign Corrupt Practices Act (FCPA) particularly as it relates to the conduct of pharmaceutical companies. Foreign governments have also increased their scrutiny of pharmaceutical companies' sales and marketing activities and relationships with healthcare providers. The laws and standards governing the promotion, sale and reimbursement of our products and those governing our relationships with healthcare providers and governments can be complicated, are subject to frequent change and may be violated unknowingly. We have compliance programs in place, including policies, training and various forms of monitoring designed to address these risks. Nonetheless, these programs and policies may not always protect us from conduct by our employees that violate these laws. Violations, or allegations of violations, of these laws may result in large civil and criminal penalties, debarment from participating in government programs, diversion of management time, attention and resources and may otherwise have an adverse effect on our business, financial condition and results of operations.

Issues with product quality could have an adverse effect on our business and subject us to regulatory actions and costly litigation.

2008:
Failure to provide quality products and services to our customers could have an adverse effect on our business and subject us to regulatory actions and costly litigation.

Quality management plays an essential role in determining and meeting customer requirements, preventing defects and improving the company's products and services. Our future operating results will depend on our ability to implement and improve our quality management program, and effectively train and manage our employee base with respect to quality management. While Baxter has a network of quality systems throughout our business units and facilities, which relates to the design, development, manufacturing, packaging, sterilization, handling, distribution and labeling of our products, quality and safety issues may occur with respect to any of our products. In addition, some of the raw materials employed in Baxter's production processes are derived from human and animal origins. Though great care is taken to assure the safety of these raw materials, the nature of their origin elevates the potential for the introduction of pathogenic agents or other contaminants.

A quality or safety issue could have an adverse effect on our business, financial condition and results of operations and may result in warning letters, product recalls or seizures, monetary sanctions, injunctions to halt manufacture and distribution of products, civil or criminal sanctions, refusal of a government to grant approvals, restrictions on operations or withdrawal of existing approvals. An inability to address a quality or safety issue in an effective manner on a timely basis may also cause a loss of customer confidence in us or our products, which may result in losses of sales. In addition, we may be named as a defendant in product liability lawsuits, which could result in costly litigation, reduced sales, significant liabilities and diversion of our management's time, attention and resources. Even claims without merit could subject us to adverse publicity and require us to incur significant legal fees.

In 2008, we removed our heparin sodium injection products from distribution in the United States after identifying an increasing level of allergic-type and hypotensive adverse reactions occurring in certain patients. For more information on this recall and the lawsuits we face in connection with this recall, please refer to "Certain Regulatory Matters" in "Management's Discussion and Analysis" of the Annual Report and "Notes to Consolidated Financial Statements - Note 11 Legal Proceedings" of the Annual Report.

2009:
Issues with product quality could have an adverse effect on our business and subject us to regulatory actions and costly litigation.

Quality management plays an essential role in determining and meeting customer requirements, preventing defects and improving the company's products and services. Our future operating results will depend on our ability to implement and improve our quality management program, and effectively train and manage our employee base with respect to quality management. While we have a network of quality systems throughout our business units and facilities that relate to the design, development, manufacturing, packaging, sterilization, handling, distribution and labeling of our products, quality and safety issues may occur with respect to any of our products. In addition, some of the raw materials employed in our production processes are derived from human and animal origins. Though great care is taken to assure the safety of these raw materials, the nature of their origin elevates the potential for the introduction of pathogenic agents or other contaminants.

A quality or safety issue could have an adverse effect on our business, financial condition and results of operations and may result in warning letters, product recalls or seizures, monetary sanctions, injunctions to halt manufacture and distribution of products, civil or criminal sanctions, refusal of a government to grant approvals, restrictions on operations or withdrawal of existing approvals. An inability to address a quality or safety issue in an effective manner on a timely basis may also cause a loss of customer confidence in us or our products, which may result in the loss of sales. In addition, we may be named as a defendant in product liability or other lawsuits, which could result in costly litigation, reduced sales, significant liabilities and diversion of our management's time, attention and resources. We continue to be self-insured with respect to product liability claims. The absence of third-party insurance coverage increases our potential exposure to unanticipated claims and adverse decisions. Even claims without merit could subject us to adverse publicity and require us to incur significant legal fees.

For more information on certain regulatory matters currently being addressed by the company with the FDA, please refer to "Certain Regulatory Matters" in Item 7 of this Annual Report on Form 10-K.
2008:
The company began to hold shipments of COLLEAGUE
infusion pumps in July 2005, and continues to hold
shipments of new pumps in the United States. Following a
number of Class I recalls (recalls at the highest priority
level for the FDA) relating to the performance of the
pumps, as well as the seizure litigation described in
Note 11, the company entered into a Consent Decree in
June 2006 outlining the steps the company must take to
resume sales of new pumps in the United States. Additional
Class I recalls related to remediation and repair and
maintenance activities were addressed by the company in
2007. The Consent Decree provides for reviews of the
company's facilities, processes and controls by the
company's outside expert, followed by the FDA. In
December 2007, following the outside expert's review, the
FDA inspected and remains in a dialogue with the company
with respect to observations from its inspection as well as
the validation of modifications to the pump required to be
completed in order to secure approval for
recommercialization. As discussed in Note 5, the company
has recorded a number of charges in connection with its
COLLEAGUE infusion pumps. It is possible that additional
charges related to COLLEAGUE may be required in future
periods, based on new information, changes in estimates,
and modifications to the current remediation plan as a
result of ongoing dialogue with the FDA.

2009:
In July 2005, the company stopped shipment of COLLEAGUE infusion pumps in the United States. Following a number of Class I recalls (recalls at the highest priority level for the FDA) relating to the performance of the pumps, as well as the seizure litigation described in Note 11, the company entered into a Consent Decree in June 2006. Additional Class I recalls related to remediation and repair and maintenance activities were addressed by the company in 2007 and 2009. The Consent Decree provides for reviews of the company's facilities, processes and controls by the company's outside expert, followed by the FDA. In December 2007, following the outside expert's review, the FDA conducted inspections and remains in a dialogue with the company. As discussed in Note 11, the company received a subpoena from the Office of the United States Attorney of the Northern District of Illinois relating to the COLLEAGUE infusion pump in September 2009. As discussed in Note 5, the company has recorded a number of charges in connection with its COLLEAGUE infusion pumps. It is possible that substantial additional charges, including significant asset impairments, related to COLLEAGUE may be required in future periods, based on new information, changes in estimates, and modifications to the current remediation plan.

Figure A-2: Further Example - Herbalife

Panel A: Changes in 10-K Similarity
Item 1. Business


Item 1A. Risk Factors


1. 02/18/2014: Herbalife filed its 2013 10-K financial report with the SEC
https://www.sec.gov/Archives/edgar/data/10456/000095012310015380/0000950123-10-015380index.htm
2. $03 / 12 / 2014:$ Reuters "Herbalife says FTC opens inquiry long sought by Ackman"
http://www.reuters.com/article/us-herbalife-ftc-idUSBREA2B1KS20140313
"Herbalife Ltd said on Wednesday that the U.S. Federal Trade Commission had opened an inquiry into 0its operations, news that briefly sent the nutrition and weight loss company's share price down more than 16 percent."
3. 11/04/2014: Reuters "FBI conduction a probe into Herbalife"
http://www.reuters.com/article/us-herbalife-idUSBREA3A1V520140411
"The FBI is probing Herbalife Ltd, the nutrition and weight loss company that hedge fund manager William Ackman has called a pyramid scheme, sources familiar with the investigation said on Friday."


Panel C: Example passages and the changes made to them from Herbalife's 10-Ks in 2013 and 2014

## 2013

From time to time, we receive inquiries from various government authorities requesting information from the Company. Following December 2012 market events and a subsequent meeting we requested with the staff of the SEC's Division of Enforcement, the staff requested information regarding the Company's business and financial operations. Consistent with its policies, the Company is and will fully corporate with these inquiries.

## 2013 <br> Our stock price may be affected by speculative trading, including those shorting our stock.

In late 2012, a hedge fund manager publicly raised allegations regarding the legality of our network marketing program and announced that his fund had taken a significant short position regarding our common shares, leading to intense public scrutiny and significant stock price volatility. Following this public announcement in December 2012, our stock price dropped from $\$ 42.50$ on December 18, 2012, to prices as low as $\$ 24.24$ in the following week. Our stock price has continued to exhibit heightened volatility. As of January 15, 2013, the New York Stock Exchange reported a short interest of approximately 35.8 million of our common shares, which constitutes approximately $33 \%$ of our outstanding shares. As of the end of fiscal year 2012, the number of common shares sold short represented a significantly unusual high short position based on our historical trend, where our short interests in our common shares were less than $5 \%$ at the end of fiscal year 2011 compared to approximately $35 \%$ at the end of fiscal year 2012. It is also possible that the New York Stock Exchange short interest reporting system does not fully capture the total short interest and that it could be larger. Short sellers expect to make a profit if our common shares decline in value, and their actions and their public statements may cause further volatility in our share price. While a number of traders have publicly announced that they have taken long positions contrary to the hedge fund shorting our shares, the existence of such a significant short interest position and the related publicity may lead to continued volatility. The volatility of our stock may cause the value of a shareholder's investment to decline rapidly.

2014
From time to time, the Company is subject to inquiries from and investigations by various governmental and other regulatory authorities with respect to the legality of the Company's network marketing program. To the extent any of these inquiries are or become material they will be disclosed as required by applicable securities laws. The Company believes it could receive additional inquiries. Consistent with its policies, the Company has cooperated and will fully cooperate with any such inquiries.

## 2014

## Our stock price may be adversely affected by third

 parties who raise allegations about our Company.Short sellers and others who raise allegations regarding the legality of our business activities, some of whom are positioned to profit if our stock declines, can negatively affect our stock price. In late 2012, a hedge fund manager publicly raised allegations regarding the legality of our network marketing program and announced that his fund had taken a significant short position regarding our common shares, leading to intense public scrutiny and significant stock price volatility. Following this public announcement in December 2012, our stock price dropped significantly. This hedge fund manager continues to make allegations regarding the legality of our network marketing program, our product safety, our accounting practices and other matters.
Additionally, from time to time the Company is subject to governmental and regulatory inquiries and inquiries from legislators that may adversely affect our stock price. Our stock price has continued to exhibit heightened volatility and the short interest in our common shares continues to remain high. Short sellers expect to make a profit if our common shares decline in value, and their actions and their public statements may cause further volatility in our share price. While a number of traders have publicly announced that they have taken long positions contrary to the hedge fund shorting our shares, the existence of such a significant short interest position and the related publicity may lead to continued volatility. The volatility of our stock may cause the value of a shareholder's investment to decline rapidly.

Figure A-3:
This Figure plots calendar-time long-short value-weighted excess returns. Quintile 1 (Q1) refers to firms that have the least similarity (Cosine similarity) between their document this year and the one last year, quintile 5 (Q5) refers to firms that have the most similarity in their documents across years. Q5-Q1 represents the long-short (L/S) portfolio that goes long Q5 and short Q1 each month.


Figure A-4: Release date of $\mathbf{1 0 - K s}$ and $\mathbf{1 0 - Q s}$ by month of the year.
This Figure plots the number of filings by their release dates, by calendar month of the year, for the $10-\mathrm{Ks}$ and $10-\mathrm{Qs}$ in our sample.

| Month | Freq. | Percent | Cum. |
| :--- | ---: | ---: | ---: |
| 1 | 5,290 | 1.59 | 1.59 |
| 2 | 24,834 | 7.47 | 9.07 |
| 3 | 49,150 | 14.79 | 23.86 |
| 4 | 13,798 | 4.15 | 28.01 |
| 5 | 63,832 | 19.21 | 47.22 |
| 6 | 8,444 | 2.54 | 49.76 |
| 7 | 9,812 | 2.95 | 52.71 |
| 8 | 64,705 | 19.47 | 72.19 |
| 9 | 9,483 | 2.85 | 75.04 |
| 10 | 10,455 | 3.15 | 78.19 |
| 11 | 63,674 | 19.16 | 97.35 |
| Total | 8,807 | 2.65 | 100 |

