The Puzzle of Frequent and Large Issues of Debt and Equity

Rongbing Huang and Jay R. Ritter*

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ABSTRACT

More frequent, larger, and more recent debt and equity issues in the prior three years are followed by lower stock returns in the subsequent year. The intercept of the Fama-French 5-factor regression for a value-weighted portfolio of firms with at least three large issues is -0.64% per month. A Fama-MacBeth regression that controls for several firm characteristics shows that firms with three debt issues underperform non-issuers by -0.62% per month, and firms with three equity issues underperform by -1.25%. Earnings announcement returns are lower following more frequent issues, especially equity issues. These patterns are consistent with successful market timing.

Keywords: New issues puzzle, Seasoned Equity Offerings, Debt issues, Equity issues, Market Efficiency

JEL classifications: G14, G32

* Huang is from the Coles College of Business, Kennesaw State University, Kennesaw, GA 30144. Huang can be reached at rhuang1@kennesaw.edu. Ritter is from the Warrington College of Business Administration, University of Florida, Gainesville, FL 32611. Ritter can be reached at jay.ritter@warrington.ufl.edu. We thank Mark Flannery, Jon Garfinkel, Feng Zhang, Clara Qing Zhou, and the participants at the 2016 FMA Annual Meeting and the 2017 FMA Asia/Pacific Conference for comments, Kenneth French for making the Fama-French factor returns available, and Lu Zhang for sharing the q-factor returns.

Almost all papers on post-issuance stock performance study one type of security issuance without fully controlling for surrounding issuances of the same type of security and other types of securities.[1] This paper documents that frequent issuances are prevalent, raising the possibility that prior findings have been influenced by confounding effects. Using U.S. firms' equity and debt issuance information from the prior three fiscal years during 1974-2014, we document the roles of the number of issues, issue size, how recently the issues occurred (recency), the type of security issued, and the number of types of securities issued in explaining stock returns in the subsequent year.

As an example, cable TV provider Adelphia Communications had both equity and debt issues in each of fiscal years 1997, 1998, and 1999. Following this frequent issuance, Adelphia's stock price collapsed, and it filed for bankruptcy in 2002. The experience of Adelphia, although extreme, is not uncommon. We find that more frequent and larger issues of debt or equity in the prior three years are followed by lower average raw and abnormal stock returns in the subsequent year. An equally weighted portfolio of firms that have not done any external financing in the prior three years have an average return of 21.1% during the next year, whereas those that have issued debt or equity at least three times have an average annual return of only 4.9%. Even after controlling for investment and profitability factors, there are negative abnormal returns for frequent issuers, with the abnormal returns even lower for firms conducting large issues. We call these patterns the puzzle of frequent and large issues of debt and equity.

[1] See Ritter (1991) on initial public offerings (IPOs), Loughran and Ritter (1995) and Spiess and Affleck-Graves (1995) on seasoned equity offerings (SEOs), Spiess and Affleck-Graves (1999) on bond offerings, Hertzel et al. (2002) on private equity placements, and Billett, Flannery, and Garfinkel (2006) on bank loans. Lee and Loughran (1998) focus on convertible bonds and control for the effects of IPOs and SEOs. None of these papers examine the relation between the number of issues and future stock returns.

Our calendar-time regressions of value-weighted (VW) portfolio returns confirm that the Fama-French 5-factor model and the q-factor model are generally better at describing average stock returns (i.e., the abnormal returns are closer to zero) following equity issues than the market model or the Fama-French 3-factor model (Fama and French (2015 and 2016), and Hou, Xue, and Zhang (2015 and 2016)). This finding is partly because equity issuers tend to have low profitability and heavy investment, characteristics that are associated with low average returns. In contrast, these four models show similar abilities at describing average stock returns following debt issues.

Confirming the findings of Lyandres, Sun, and Zhang (2008) and Bessembinder and Zhang (2013), we show that there is no reliable underperformance for firms that have issued equity only once within the prior three years when an investment factor is included in a multifactor model. An economically important proportion of firms, however, engage in substantial external financing activity during the prior three years. Over 10% of all firm-years are preceded by at least three issues of debt or equity, with a firm classified as an issuer in a year if the equity or debt issue exceeds 5% of assets and 3% of the market cap at the beginning of the year. Almost 6% of all firm-years are preceded by at least three large issues, with a large issue defined as exceeding 10% of assets and 3% of the market cap. The intercept of the 5-factor calendar-time regression for a VW portfolio of firms with at least three issues from t-2 to t is -0.43% per month in the subsequent year, and for firms with at least three large issues, it is -0.64% per month.

We also find that more recent issues are followed by lower average stock returns. A VW portfolio of firms that did two equity issues in fiscal years t and t-1, with nothing in t-2, has a 5-

factor alpha of -0.52% per month in t+1, while a VW portfolio of those that did not issue equity in the most recent year, but did in the prior two years, has a 5-factor alpha of -0.28% per month.

The 5-factor model and the q-factor model also do better than the market model or the 3-factor model in explaining the difference in abnormal stock returns across the portfolios sorted by equity issue frequency and recency, although substantial spreads remain in many cases. The spread in the intercepts between the VW portfolios of non-equity-issuers and firms with three equity issues from t-2 to t or two equity issues from t-1 to t is 1.10% per month in the market model, but it shrinks to 0.69% in the 5-factor model and 0.63% in the q-factor model. Therefore, up to 0.47% of the 1.10% spread in abnormal returns can be explained by size, book-to-market, profitability, and investment patterns. However, the spread in stock returns across the portfolios sorted by debt issue frequency and recency is explained equally well by the four models.

Our Fama-MacBeth (1973) regressions also show that firms that frequently raise external capital have lower subsequent abnormal stock returns, confirming our calendar-time regression results. After controlling for investment, profitability, and several other firm characteristics, our Fama-MacBeth (FM) regressions show that firms with one, two, three, or at least four issues from t-2 to t underperform those with no issuance by -0.11%, -0.37%, -0.58% and -1.15% per month, respectively, in the subsequent year.

Equity issues on average are followed by lower raw returns than debt issues. Equity and debt issuers, however, have different characteristics, making it important to control for them when calculating abnormal returns. Our FM regressions that control for several characteristics show that equity issues are followed by lower abnormal returns than debt issues. In one FM regression, firms with one, two, and three debt issues in the prior three years underperform non-issuers in the subsequent year by -0.09%, -0.30%, and -0.62% per month, respectively, while

firms with one, two, and three equity issues underperform non-issuers by -0.30%, -0.64%, and -1.25% per month, respectively. The FM results are consistent with the finding of Lewis and Tan (2016) that equity issuers underperform by more than debt issuers, suggesting that firms issue equity rather than debt when the cost of equity is low. Our calendar-time multifactor regressions, however, provide mixed evidence on the relation between security type and subsequent abnormal stock returns when profitability and investment factors are included.

In the existing literature, only Billett, Flannery, and Garfinkel (2011) systematically examine the relation between the number of types of securities issued and long-run performance. They distinguish between initial public offerings (IPOs), seasoned equity offerings (SEOs), private investments in public equity (PIPEs), bank loans, and public bond offerings. Using a sample of U.S. firms issuing in 1980-2005, they find that firms that issue multiple types of securities in the prior three years have lower long-run stock performance. Our results differ from theirs in several important ways. We find that it is not the number of types of securities issued that matters, but the number of issues, issue recency, and issue size. After presenting our empirical results, we will discuss the differences in findings further.

The low raw returns after security issues are consistent with both market timing (e.g., Loughran and Ritter (1995) and Baker and Wurgler (2000)) and the q-theory of investment (e.g., Lyandres, Sun, and Zhang (2008)). The market timing theory states that firms issue a security when the expected return on that security is low, possibly due to market mispricing. The q-theory states that subsequent returns following heavy investment should be lower because required returns are lower.

Companies that do a lot of external financing tend to have high levels of investment, and those that issue equity tend to be unprofitable and have low book-to-market ratios. The prior

literature has demonstrated that firms with these characteristics tend to have low average returns. We document, however, that frequent and large issuers have negative abnormal returns after controlling for these characteristics. Furthermore, the abnormal returns are lower the more recent the external financing has been. These findings are consistent with successful market timing but not with the q-theory. The q-theory does not predict negative abnormal returns following frequent and large issuances once investment and profitability have been accounted for, and it does not predict that returns should revert upwards after a temporary decline.

To further distinguish between market timing and the q-theory, we examine subsequent earnings announcement returns. If firms issue overvalued debt or equity but are unable to deliver anticipated earnings, then investors will be disappointed when the firms announce their actual earnings. There is strong evidence that more frequent and larger issues, especially equity issues, are associated with lower stock returns around the earnings announcements made in the subsequent year. In one regression that controls for several firm characteristics, firms with three debt issues or three equity issues are associated with average three-day buy-and-hold abnormal earnings announcement returns of -0.35% and -1.04%, respectively. These abnormal returns are consistent with the market timing hypothesis, but are difficult to explain with other theories.[2]

Unlike some anomalies, which McLean and Pontiff (2016) show cease to reliably exist after first being publicly identified, the underperformance of frequent and large issuers has not weakened over time. For example, the 5-factor intercepts for the value-weighted portfolio of firms with at least three large issues are -0.40% and -0.63%, respectively, during 1975-1995 and

[2] Another explanation for low raw returns following equity issuance is that risk and required returns are reduced, either because leverage is reduced or because or because growth options are converted into assets in place. However, this risk-based explanation does not explain why investors are disappointed at earnings announcements following debt and equity issuances. Greenwood and Hanson (2012) also provide evidence inconsistent with this explanation. They find that characteristics of stock issuers and repurchasers forecast returns for firms that do not issue or repurchase.

1996-2015. Furthermore, the results are not being driven by the smallest firms. We present most of our results using time-series regressions with value-weighted portfolios, which, by construction, place little weight on microcap stocks. Similarly, Fama and French (2016, Table 6) find that the net stock issue anomaly is not unique to microcaps, although they do not distinguish between occasional and frequent stock issuers. Our calendar-time regressions of equally weighted returns generally yield qualitatively similar results to those of value-weighted returns. Finally, we find that persistence of the anomaly of frequent and large issues can be partially explained by limits to arbitrage, with the abnormal returns being stronger for stocks with high idiosyncratic volatility.

I. Sample Construction and Distribution

Our sample starts with non-financial and non-utility firms with information from Compustat and CRSP. We require stock returns over fiscal year t and cash flow information over the three fiscal years from t-2 to t. All returns are from CRSP, and include capital gains, dividends, and other distributions. Because the cash flow information is available only from fiscal year 1971 and CRSP does not include returns on Nasdaq-listed stocks before December 1972, our final sample starts from fiscal year 1974. Since we examine stock returns from month 4 to month 15 after each fiscal year, our sample period ends at fiscal year 2014. We require net equity and net debt issue amounts in year t, t-1, and t-2, as well as the book value of assets and the market value of equity at the beginning of each year.[3] We further drop firm-year observations for which the book value of assets at the end of fiscal year t is less than $10 million (expressed in terms of purchasing power at the end of 2010). We also drop firm-year observations for which

[3] The requirement of the market value at the beginning of each year from t-2 to t excludes firms that have not been publicly listed for at least three years.

the net sales is not positive (excluding many unprofitable biotech companies), or investment (from cash flow statements) or profitability has a missing value in year t. Our final sample includes 128,806 firm-year observations from 1974-2014 (fiscal years).

A firm is defined to have an equity issue or a debt issue in a year if the net equity issue amount or the net debt issue amount in the year is at least 5% of the book value of assets and at least 3% of the market value of equity at the beginning of the year.[4] A firm is defined to have a large equity issue or a large debt issue in a year if the net equity issue amount or the net debt issue amount in the year is at least 10% of the book value of assets and at least 3% of the market value of equity at the beginning of the year. Because statements of cash flow are used, a firm making a large acquisition financed by issuing stock to the shareholders of the target firm would not necessarily be classified as an equity issue, nor would a firm that increases its book value of equity by retaining earnings. We are able, however, to pick up securities issues that are missed by the popular databases such as Thomson Reuters's SDC new issues database.

We use security issuance information in year t, t-1, and t-2 to assign a firm into an issuance category and examine its stock return in the subsequent year from the 4th month after the end of t. For example, assume that a firm has an equity issue in year t-2 and another equity issue in t, but no equity issue in t-1, t+1, and t+2. The firm will be defined as issuing equity two times for the three-year window ending at the end of year t, and one time for the three-year windows ending at the end of year t+1 and at the end of year t+2. Our approach is similar to the "variable-length" window approach in Billett, Flannery, and Garfinkel (2011), although we aggregate all equity issue amounts in a fiscal year to define equity issues, and aggregate all debt

[4] The 3% of market value screen eliminates from the equity issuer category most companies with employee stock option exercises but no other equity issues.

issue amounts in a fiscal year to define debt issues. If a firm has issued equity and debt in each of the past three years, it would be classified as having six issuances.

Panel A of Table I reports the sample distribution by the total number of issues and the total number of large issues. In our sample, 57.7% of firm-years are preceded by at least one debt or equity issue in the prior three years. Multiple security issues over consecutive years are common. For 26.4% of firm-years, there are at least two issues in the prior three years. For over 10% of firm-years, there are at least three issues in the prior three years. Many firms raise a large amount of external capital. For 16.7% of firm-years, there are at least two large issues in the prior three years. For 5.9% of firm-years, there are at least three large issues in the prior three years. Thus, an economically important percentage of firms do significant external financing.

Panel B of Table I reports the two-way distribution by the number of equity issues and the number of debt issues. The proportions of firm-years preceded by one, two, and three equity issues in a three-year window are 17.1%, 5.6%, and 1.8%, respectively, with the sum of 24.5% being the proportion with at least one recent equity issue. The 2,282 firm-years with three equity issues in the prior three years belong to 1,243 unique firms. The corresponding proportions of firm-years that are preceded by one, two, and three debt issues are 31.8%, 12.1%, and 2.8%, respectively, with the sum of 46.7% being the proportion with at least one recent debt issue. At least one debt issue and at least one equity issue precede 13.5% of the sample. Panel C of Table I reports the two-way distribution of large equity and debt issues. In our sample, 9.1% of firm-years are preceded by at least one large debt issue and at least one large equity issue.

For firm-years that are preceded by one equity issue, the equity issue could occur in year t, t-1, or t-2. Similarly, for firm-years that are preceded by two equity issues, the two equity issues could occur in t and t-1, t and t-2, or t-1 and t-2. The same is true for the recency of debt

issues. Panel D reports the sample distribution by the issuance recency. A value of 1 denotes the occurrence of an equity issue or a debt issue, and 0 denotes no equity or debt issue. For example, the category of (0,0,1) for equity issues denotes that an equity issue occurs in year t-2, but no equity issue in t or t-1. Panel E reports the sample distribution by the recency of large issues. We will discuss Panels D and E when discussing our recency regression results later.

II. Average Firm Characteristics and Post-Issuance Buy-and-Hold Stock Returns

Table II reports the mean firm characteristics. Panel A reports the means categorized by the number of equity issues in the prior three years. For all of the variables except for the concurrent (year t) stock return, there are very strong patterns. Firms with more equity issues on average have a higher Tobin's Q, are smaller, invest more, are much less profitable, and have much more intensive research and development (R&D). Panel B reports the means categorized by the number of debt issues. Firms that have no debt issues on average have a slightly higher Tobin's Q. More debt issues are associated with much larger investment and lower R&D expenses. The number of debt issues is not closely related to firm size or profitability. Comparing Panels A and B of Table II, although equity issuers and debt issuers are quite different in every other characteristic, they are common in having large investment.

Panel C of Table II reports the average firm characteristics sorted by the total number of issues, from zero to a maximum of six. Also reported are the means conditional on at least three, or at least four, issues in the prior three years. The number of issues is positively related to investment and negatively related to profitability.

Panel D of Table II reports the average firm characteristics double-sorted by the number of equity issues and the number of debt issues. Conditional on the number of debt issues, the

number of equity issues is positively related to Tobin's Q, investment, and R&D, and negatively related to Ln(Sales) and profitability. Conditional on the number of equity issues, the number of debt issues is positively related to investment but negatively related to R&D. Conditional on the number of equity issues and excluding firms with no equity issue, the number of debt issues is positively related to Ln(Sales) and profitability and negatively related to Tobin's Q. Firms with three equity issues and zero debt issues have the highest Tobin's Q and R&D and are the smallest and the least profitable.

Panels E-H of Table II report the mean firm characteristics sorted by the number of large issues. Relative to security issuers in Panels A-D, large security issues in Panels E-H are generally slightly smaller and less profitable, and have higher Tobin's Q, investment, and R&D. Other than that, the patterns in Panels E-H are similar to the patterns in Panels A-D.

Table III reports the equal-weighted (EW) mean post-issuance stock returns. We report both one-year returns and three-year returns in the table, but will focus on one-year returns in the following discussions. We measure the returns starting from three months after the end of fiscal year t in order to allow the release of financial statements for year t before portfolios are formed. The mean raw and market-adjusted buy-and-hold returns show that more issues are followed by lower one-year stock price performance, and equity issues are followed by lower performance than debt issues.

Panel A of Table III reports the mean returns sorted by the number of equity issues in the previous three years. For firms with zero, one, two, and three equity issues in the prior three years, the mean one-year buy-and-hold returns in the following year are 20.1%, 13.8%, 7.1%, and -8.3%, respectively, a spread of 28.4% between non-issuers and three-time issuers of equity. The very large spread of 28.4% and the very low return of -8.3% per year for this last category

are unlikely to be explained by risk-based theories. The corresponding mean market-adjusted buy-and-hold returns in the following year are 7.9%, 1.3%, -4.3%, and -17.6%, respectively, a spread of 25.5% between the non-issuers and three-time issuers of equity. The mean market-adjusted 3-year buy-and-hold return for three-time equity issuers is -37.0%.[5]

Panel B of Table III reports the EW mean buy-and-hold returns sorted by the number of debt issues. For firms with zero, one, two, and three debt issues in the prior three years, the mean raw returns in the following year are 19.7%, 17.7%, 12.1%, and 8.1%, respectively, a spread of 11.6%. The corresponding mean market-adjusted returns are 7.4%, 5.5%, 0.5%, and -3.9%, respectively, a spread of 11.3%. Whether using raw returns or market-adjusted returns, the spread in one-year subsequent returns between the most frequent issuers and non-issuers is more than twice as large when sorted on equity issuance as is the spread when sorted by debt issuance. The similarity of the spreads when either raw returns or market-adjusted returns are used suggests that most of the action is due to abnormal returns rather than the ability to time general movements in debt and equity markets.

Panel C of Table III reports the EW average buy-and-hold returns sorted by the number of issues. Frequent issuers generally have lower returns than firms that do not do extensive external financing. Firms with no debt or equity issue in the previous three years have an average raw return of 21.1% in the following year. In contrast, firms with six issues have a negative mean raw return of -9.2% in the subsequent year. The spread in the mean subsequent one-year raw returns between firms with zero and six issues is a stunning 30.3%. It is not easy for risk-based

[5] Approximately 70% of the 2,282 firm-years with three equity issues in the three prior years are followed by a negative three-year market-adjusted stock return. Of the 2,282 firm-years, 605 firm-years are of biotech firms (all of which have positive sales, due to our screen). This industry concentration is not surprising, since most biotech firms have large funding needs. The average subsequent one-year market-adjusted return is -6.4% for the 605 biotech firms and -21.6% for the 1,677 non-biotech firms. The average subsequent three-year market-adjusted return is -19.8% for the 605 biotech firms and -41.3% for the 1,677 non-biotech firms, showing that firms from other industries do even worse than biotechs.

theories to explain such a large difference in returns.[6] The mean market-adjusted 3-year buy-and-hold return for firms with six issues is -43.5%. Panel D of Table III reports the average returns double-sorted by both the number of equity issues and the number of debt issues. Conditional on the number of debt issues, more equity issues are followed by lower stock returns. Conditional on the number of equity issues, more debt issues are generally followed by lower stock returns.

Panels E-H of Table III report the EW mean returns following large issues, which are a subset of all issues. Large issues are followed by lower stock performance than all issues. As reported in Panel E, the mean one-year raw return following three large equity issues is -11.6%. In Panel F, the mean one-year raw return following three large debt issues is 1.5%. Panel G reports mean returns conditional on the number of large issues. Consistent with the Panel C results for all issues, but stronger, the more frequent are the large issues, the lower are the average returns. The mean one-year market-adjusted return that follows five or six large issues is below -25.8%, although there are only 479 such firm-years. Panel H reports double-sorted average returns. The average one-year raw return is negative in six cases, all of which involve multiple equity issues. Because large issuers are more likely to be small firms that are unprofitable (at least for the equity issuers) with aggressive investment, in the next section we will control for these characteristics in multifactor time-series regressions.

III. Calendar-Time Factor Regression Results

A. Stock Returns following Equity Issues

[6] In Internet Appendix Table IA-1, we list the company names, characteristics, and subsequent returns for, respectively, firms conducting three equity issues, three debt issues, and six issues in total during fiscal years 2005-2007. Heavy industry concentrations are apparent, with biotech companies among frequent equity issuers, and oil & gas companies among frequent debt issuers. Issuers in other years have different industry concentrations. Industry concentrations could reflect time-variation in both investor sentiment and investment opportunities.

Table IV reports calendar-time factor regression results for portfolios formed on the basis of the frequency of equity issues for all issues and for large issues, using monthly value-weighted (VW) returns from January 1975 to December 2015.[7] We report the coefficients from the market model, 3-factor model, 5-factor model, and q-factor model, because there is no universal agreement on which model is the best in identifying abnormal returns. The multifactor models, however, allow us to test whether there is an independent issuer effect after controlling for other cross-sectional patterns such as the size, value, investment, and profitability effects, and to examine whether frequent and large issues are associated with stronger effects than less frequent and smaller issuers.

Panel A1 of Table IV reports monthly abnormal returns for portfolios sorted by the number of equity issues. A firm is in a portfolio for the 12 months beginning in the 4th month after the end of its fiscal year or its delisting date, if this date is earlier. For example, a retailer with a fiscal year-end in January 2012 would be in the portfolio from May 2012 through April 2013. A coefficient is highlighted in bold to signify that it is statistically different from the corresponding coefficient in the first column of the panel at the 5% level. Using the market model, the portfolio of firms with no equity issue in years t-2 to t has an intercept of 0.07% per month while the portfolio of firms with at least two equity issues has an intercept of -0.59% per month, a spread of 66 basis points. This spread is significantly different from zero at the 5% level. The intercept decreases with the number of equity issues. The market factor beta is the smallest for the portfolio of firms with no equity issue.

[7] We start from January 1975 and end in December 2015 because our Compustat sample period is from fiscal year 1974 to 2014, and because we examine stock returns at least three months after the fiscal year-end. However, our results are similar if we start from January 1974. Equal-weighting and value-weighting have relative strengths and weaknesses (Loughran and Ritter (2000)). Our major results using equal-weighting (reported in the Internet Appendix) are qualitatively similar, although generally quantitatively stronger. For brevity, we focus on value-weighted results.

When the 3-factor model is used, firms with no equity issues continue to outperform and firms with at least one equity issue continue to underperform. The intercept for the portfolio of firms with at least one equity issue is -0.24% per month. The intercept for the portfolios of firms with at least two equity issues is -0.53% per month. The slope for the size factor is strongly positive for firms with one or more equity issues, suggesting that equity issuers tend to be smaller than other firms. The slope for the value factor is strongly negative for equity issuers, suggesting that equity issuers tend to be growth firms rather than value firms.

The 5-factor model and the q-factor model generally improve the description of the portfolio returns (that is, the intercepts get closer to zero), consistent with Fama and French (2015 and 2016) and Hou, Xue, and Zhang (2015 and 2016). When the 5-factor model is used, the intercepts become indistinguishable from zero, except for the portfolio of firms with at least two equity issues. The negative slopes (factor loadings) on the profitability factor, r, for equity issuers suggest that equity issuers are less profitable than other firms, consistent with our Table II patterns for average firm characteristics. The strongly negative slopes on the investment factor, c, suggest that equity issuers invest more than other firms. The q-factor model results are generally similar to the 5-factor model results, although the slopes for the investment factor and the profitability factors are quite different between the two models.

The spread in the intercepts between non-issuers and frequent equity issuers ($\geq$2) is 0.66% in the market model, but it shrinks to 0.63% in the 3-factor model, and to 0.42% in the 5-factor model and 0.37% in the q-factor model. Thus, up to 0.29% of the 0.66% spread in abnormal return can be explained by size, profitability, and investment patterns. Even after controlling for these factors, however, frequent equity issuers reliably underperform.

Motives for large equity issues could include market timing and large investment needs. Panel A2 of Table IV reports the results of the regressions for the portfolios sorted by the number of large equity issues. As expected, the Panel A2 results are qualitatively similar to those reported in Panel A1, but identify even lower abnormal returns for firms with large and frequent issues. The portfolio of firms with at least two large equity issues has a 5-factor intercept of -0.51% per month. The absolute values of the slopes of the size factor and the value factor for the portfolios of firms with one or more large equity issues in Panel A2 are generally larger than those for the portfolios of firms with one or more equity issues in Panel A1, suggesting that small and growth firms make relatively larger equity issues.

Our results in Panel A of Table IV show that firms with frequent and large equity issues have negative slope coefficients on the conservative-minus-aggressive investment factor and the robust-minus-weak profitability factor. As a result, the abnormal returns following frequent and large equity issues are less anomalous (closer to zero), but much of the abnormal returns following frequent and large equity issues remains. It should be noted, however, that the intercepts in the multifactor models are biased towards zero because of what Loughran and Ritter (2000) refer to as factor contamination. As our Table I shows, almost 58% of all firm-years are preceded by at least one debt or equity issue. Our Table II shows that both debt and equity issuers on average invest heavily, and equity issuers on average have low profitability. Thus, the portfolio of firms with heavy investment and the portfolio of firms with low profitability are composed of many equity issuers. These portfolios are used to construct the investment and profitability factors. In other words, the low returns on equity issuers are being used to explain the low returns on equity issuers, biasing the intercept towards zero.[8]

[8] Furthermore, as Greenwood and Hanson (2012) suggest, event studies that compare issuers' performance to firms matched on characteristics will omit any returns coming from issuers' timing of those characteristics.

Panel B of Table IV reports the factor regression results for the portfolios sorted by the recency of equity issues in year t, t-1, and t-2. The first column in Panel B, with no equity issues in the prior three years, is the same as the first column in Panel A. In the last column of Panel B, we also pool the firm-years with (1,1,0) with (1,1,1) to have a better diversified portfolio. As shown in Table I, the pooled portfolio includes 4,650 firm-years, with an average of almost 113 stocks in the portfolio each month. The intercepts in the last column for the market model, the 3- and 5-factor models, and the q-factor model are, respectively, -1.03%, -0.88%, -0.65%, and -0.55% per month. More recent (e.g., (1,1,0) relative to (0,1,1)) equity issues are followed by lower returns in year t+1, indicating a gradual diminution of abnormal returns: the intercept of the 5-factor model is -0.52% per month in column of (1,1,0) and -0.28% in the column of (0,1,1). The findings on issue recency suggests that if low stock returns following equity issues reflect a low required rate of return, the low rate is only temporary. Table IA-6 in the Internet Appendix reports multifactor regression results sorted by the recency of large equity issues. The results are similar to those in Panel B of Table IV for all equity issues, but stronger, as expected.

B. Stock Returns following Debt Issues

Table V reports the results from calendar time factor regressions of VW portfolio returns following debt issues. Panel A1 of Table V reports the results sorted by the number of debt issues, once again defining a debt issue to be statements of cash flow interest-bearing debt increases in excess of 5% of the book value of assets and 3% of the market value of equity at the beginning of the year. For the portfolio of firms with no debt issues, the intercept of the market model is positive but not statistically significant, whereas the intercepts of the 5-factor model and the q-factor model are a reliably positive 0.10% and 0.15%, respectively. However, for the portfolio of firms with at least two debt issues, the 5-factor and q-factor intercepts are -0.25%

and -0.18%, respectively. In comparison, the corresponding 5-factor and q-factor intercepts for frequent equity issuers in Table IV, Panel A1 are -0.38% and -0.29%. The slopes on the profitability factor are positive for frequent debt issuers, in contrast to the strongly negative slopes for frequent equity issuers. The difference in factor loadings helps explain why the intercepts get closer to zero for equity issuers, but not debt issuers, as one moves from the market model to 3-factor, and then 5-factor and q-factor models. These findings are consistent with the Table II summary statistics, which show that equity issuers are less profitable than debt issuers, and are intuitively plausible: profitable firms find it much easier to borrow than, for example, money-losing biotech firms.

Interestingly, the market model slightly outperforms the other three models in explaining stock returns across the portfolios sorted by debt issue frequency. The spread between the intercepts for the zero debt issue portfolio and the frequent debt issue (≥2) portfolio is 0.23% in the market model, 0.33% in the 3-factor model, 0.35% in the 5-factor model, and 0.33% in the q-factor model.

Panel A2 of Table V reports the results sorted by the number of large debt issues. There is some evidence of reliable underperformance following frequent large debt issues. For the portfolio of firms with at least two large debt issues, the 5-factor and the q-factor intercepts are -0.35% and -0.27%, respectively.

Panel B of Table V reports the results sorted by the recency of debt issues. As with equity issuers, more recent issues are associated with lower stock returns. For example, the intercept of the 5-factor model is -0.36% per month in the (1,1,0) column and -0.13% in the (0,1,1) column. The last column, which pools (1,1,0) and (1,1,1) firm-years, includes 9,893 firm-years, and reports 5-factor and q-factor intercepts of -0.36% and -0.28% per month, respectively. The

slopes of the profitability factor, r in the 5-factor model or b^{ROE} in the q-factor model, are positive in most cases. The spread in the intercepts between columns (0,0,0) and the last column is 0.31% in the market model, 0.43% in the 3-factor model, 0.46% in the 5-factor model, and 0.43% in the q-factor model.

In the Internet Appendix, Table IA-7 reports the results sorted by the recency of large debt issues. The VW results in Panel A of Table IA-7 are stronger than those in Panel B of Table V, but are otherwise similar to those in Panel B of Table V, as expected.

Our Tables IV (equity) and V (debt) results showing that the abnormal returns following issuance are lower, the larger and the more recent are the issues, have implications for the power of various specifications to detect abnormal returns. In most of the analysis of Billett, Flannery, and Garfinkel (2011), for example, the effect of an issue has been specified to last up to 71 months. Bessembinder and Zhang (2013, Panel E of Table 4) use portfolios composed of firms that conducted an event within the prior 60 months. Their abnormal returns would presumably be stronger if they used a shorter window. These papers also do not address the importance of issue size in explaining subsequent stock returns.

Comparing Panel A of Tables IV and V, the market model intercepts suggest that equity issues are followed by more negative abnormal stock returns than debt issues, consistent with the market timing hypothesis. For example, the market model intercept is -0.59% per month when the number of equity issues is at least two, while it is -0.16% per month when the number of debt issues is at least two, differing by -0.43% per month. The 3-factor intercepts show a similar, albeit weaker, pattern. The pattern largely disappears when the 5-factor model or the q-factor model is used. As discussed earlier, the difference in the profitability and investment factor

loadings helps explain why the intercepts get closer to zero for equity issuers, but not debt issuers, as one moves from the market model to 3-factor, and then 5-factor and q-factor models.

C. Stock Returns following Equity and Debt Issues

So far we have examined equity (Table IV) and debt (Table V) issues separately. Table VI examines equity and debt issues together and evaluates the importance of the total number of issues. VW calendar-time regression results are reported. In Panels A and B of Table VI, we do not distinguish between equity and debt. In Panel C, we distinguish between equity and debt.

In Panel A1 of Table VI, there is robust evidence that more frequent security issues are followed by lower abnormal stock returns, and that the 5-factor model and the q-factor model generally do a better job in describing stock returns following frequent security issues than the market model or the 3-factor model. The intercepts for the portfolio of firms with no security issues are always positive and statistically significant. The market model intercept for the portfolio with no issues in the prior three years of 0.10 per month is surprisingly small, given the Table III, Panel C one-year market-adjusted buy-and-hold return for the no issue portfolio of 8.6%. Our calendar time regressions are value-weighted, however, whereas the Table III results are equally weighted. In Internet Appendix Table IA-4, we report time-series regressions using EW portfolios. The market model intercept there is 0.64% per month, which when annualized is close to 8.6%. The intercepts are generally statistically insignificant for the portfolio of firms with one security issue or the portfolio of firms with two issues. As shown in Panel A of Table I, 12,986 firm-years (or 10% of the sample) and 3,869 firm-years (or 3.0% of the sample) are preceded by at least three and at least four issues, respectively, in the previous three years. For firms with at least three issues, the market, 3-factor, 5-factor, and q-factor model intercepts are -

0.44%, -0.43%, -0.43%, and -0.33%, respectively. Firms with at least four issues do worse. For these firms, the intercepts are -0.64%, -0.60%, -0.55%, and -0.36%, respectively.

In Panel A1 of Table VI, the difference in the intercepts between the first column (=0) and the last column (≥4) is 0.74% in the market model, 0.75% in the 3-factor model, 0.64% in the 5-factor model, and 0.50% in the q-factor model. The differences are all statistically significant from zero at the 5% level. The q-factor model outperforms the other three models in explaining stock returns across the portfolios in this panel, but a substantial spread remains unexplained.

Panel A2 of Table VI reports the results for large issues. There is strong evidence that firms with more frequent large security issues have lower subsequent performance. The 5-factor and q-factor models make the abnormal returns less anomalous, but encounter substantial challenges in describing the returns on the portfolios of firms with at least three or at least four large issues in the previous three years. As shown in Panel A of Table I, 7,642 firm-years (or 5.9% of the sample) and 2,123 firm-years (or 1.6% of the sample) are preceded by at least three and at least four large security issues, respectively, in the previous three years. For firms with at least three large security issues, the intercepts of the four models are -0.75%, -0.70%, -0.64%, and -0.53%, respectively. Firms with at least four large security issues do much worse. For these firms, the intercepts are -1.03%, -0.99%, -0.88%, and -0.69%, respectively.

In Panel A2, the spread in the intercepts between the first column (=0) and the last column (≥4) is 1.09% in the market model, 1.08% in the 3-factor model, 0.91% in the 5-factor model, and 0.77% in the q-factor model.

Billett, Flannery, and Garfinkel (2011) (henceforth BFG) find that the number of different types of securities issued is related to post-issuance stock returns. For example, a firm

that issues equity via both an IPO and an SEO, and issues debt via both a debt issue and increasing its bank loans, would be deemed to have engaged in four external financings. In their Table 3, they report abnormal returns that are insignificantly different from zero if there has been only one external financing event in the prior 36 months, but reliably negative abnormal returns if there have been two or more different types of financing.

To see whether our finding in Panel A of Table VI on the number of issues is driven by the number of types of securities, our Panel B of Table VI explicitly distinguishes between the number of issues and the number of types of securities. In Panel B1, we estimate time-series regressions for the portfolios sorted by the number of types of securities, regardless of the number of issues. The results in Panel B1 are generally consistent with those in BFG, regardless of which factor model is used. Firms that issue more types of securities are associated with lower stock returns. In Panel B2, we examine the relation between the number of issues and stock returns, conditional on issuing only one type of security. In Panel B3, we examine the relation between the number of issues and stock returns, conditional on issuing both types of securities. There is a negative relation between the number of issues and future stock returns, even after controlling for the number of types of securities.

The number of issues is two in both columns 5 and 7, but firms in column 5 issue one type of security (only two debt issues or only two equity issues) while firms in column 7 have one debt issue and one equity issue. Although column 7 has a slightly lower market model intercept than column 5, it has a higher multifactor intercept, suggesting that firms with one debt issue and one equity issue do not necessarily underperform those with only two debt issues or only two equity issues, inconsistent with BFG's conclusion.

The number of issues is three in both columns 6 and 8, but firms in column 6 issue one type of security (only three debt issues or only three equity issues) while firms in column 8 issue both debt and equity. Again, there is no evidence that the number of types of securities is important in predicting abnormal returns, especially when the 5-factor or the q-factor is used.

BFG find that firms that issue only one type of security do not subsequently underperform. However, in our column 6 of Panel B, Table VI, the portfolio of firms with three issues of the same type of security has a negative and statistically significant alpha in the multifactor models.

After controlling for the number of types of securities, BFG find that security type is not reliably related to long-run performance. However, Baker and Wurgler (2000) and Lewis and Tan (2016) suggest that equity issues are followed by lower stock returns than debt issues. To shed light on the debate, Panel C of Table VI examines the relation between security type and subsequent stock returns, after controlling for the total number of issues.[9]

Panel C of Table VI shows that, when the market model is used, the number of equity issues is negatively related to future abnormal stock returns after controlling for the total number of issues. However, when a multifactor model is used, the evidence on the relation between security type and abnormal stock returns is mixed. When the total number of issues equals one or two, there is a positive relation between the number of equity issues and the intercepts using the 5-factor model or the q-factor model. For example, when the 5-factor model is used, the intercept for the portfolio of firms with only two equity issues is +0.46%, outperforming firms

[9] In Internet Appendix Table IA-8, we report the results sorted by the number of types of securities and the number of large issues. In Table IA-9, we report the results sorted by the number of large issues and security type.

with only two debt issues.[10] However, when the total number of issues is three, there is generally a negative relation between the number of equity issues and abnormal returns.

In column 6 of Panel C, the portfolio of firms with three debt issues and no equity issue has a statistically significant 5-factor intercept of -0.44% and q-factor intercept of -0.33%. In column 9 for firms with three equity issues only, the market, 3-factor, 5-factor, and q-factor model intercepts are -1.18%, -1.00%, -0.61%, and -0.70%, respectively. These results are inconsistent with BFG's finding that firms that issue only one type of security do not subsequently underperform.

We do not report the results in the paper when the total number of issues is greater than or equal to four, because the number of observations in a portfolio becomes small. The results are reported in Internet Appendix Table IA-10 instead, and suggest that conditional on the total number of issues being equal to four or five, more equity issues are associated with lower abnormal returns when the market model or the 3-factor model is used, but the pattern is weakened when the 5-factor model or q-factor model is used.[11]

It is not surprising that the market model or the 3-factor model results on security type are different from the 5-factor or q-factor results. Unlike debt issuers, equity issuers tend to be

[10] In column 5 of Panel C, the 5-factor VW intercept of +0.46 and the q-factor intercept of +0.53 for firms with no debt issues but two equity issues are perplexing, given the year t+1 EW market-adjusted returns of -1.1% reported in Panel D of Table III for this group of issuers (the sample size is 3,200 firm-years). These firms have strongly negative loadings on the profitability and investment factors. Thus, the low returns for these firms are being attributed to the factor returns. The factor loadings are generally just as strong in column 9 as in column 5 of Panel C, but when there are three equity issues and no debt issues, the intercepts are strongly negative.

[11] In Internet Appendix Table IA-11, we report the results that are double-sorted by the number of equity issues and the number of debt issues. The 5-factor and q-factor intercepts are -0.66% and -0.57%, respectively, for the value-weighted portfolio of firms with at least on debt issue and at least two equity issues. In Table IA-12, we report the results that are double-sorted by the number of large equity issues and the number of large debt issues. The 5-factor and q-factor intercepts are -0.84% and -0.71%, respectively, for the value-weighted portfolio of firms with at least one large debt issue and at least two large equity issues.

unprofitable, with a strongly negative factor loading on either the Fama-French profitability factor or the Hou-Xue-Zhang ROE factor.

D. Stock Returns in Two Subperiods

As is well-known, abnormal returns often become less anomalous after the publication of an anomaly (e.g., McLean and Pontiff (2016)). To understand whether our results continue to hold after the publications on negative abnormal returns following equity issues (e.g., Loughran and Ritter (1995) and Spiess and Affleck-Graves (1995)), we estimate the factor model regressions separately for the subperiods of 1975-1995 and 1996-2015 (the calendar year of the stock return month). Table VII reports the results. Frequent equity issues are associated with low subsequent year abnormal stock returns in both subperiods measured using any of the four models. For the portfolio of firms with at least three large issues, the market, 3-factor, 5-factor, and q-factor intercepts are -0.75%, -0.55%, -0.40%, and -0.57%, respectively, during 1975-1995, and they are -0.76%, -0.76%, -0.63%, and -0.48%, respectively, during 1996-2015.

Our major results generally hold in both subperiods.[12] This pattern is in contrast to the numbers reported by Fu and Huang (2016, Table 1), who examine firms conducting SEOs rather than all equity issuers. They report calendar-time regressions with value-weighted abnormal returns of -16.20% per year during 1980-2002 and -0.36% per year during 2003-2012. In Internet Appendix Tables IA-20 and 21, we confirm that the abnormal returns on frequent equity issuers were close to zero during the ten years from 2003-2012, but are generally similar to those for our overall sample period when either 2000-2002 or 2013-2015 is added to these ten years.

IV. Fama-MacBeth Regression Results of Monthly Stock Returns

[12] Tables IV-VII report value-weighted results. For comparison, Internet Appendix Tables IA-2 through 5 report the corresponding equal-weighted results.

Fama-MacBeth (1973) regressions allow us to more easily control for firm characteristics. In this section, we report Fama-MacBeth results using monthly returns. For each of the 492 months from January 1975 to December 2015, we estimate cross-sectional regressions of various model specifications using the return on a stock as the dependent variable. Table VIII reports the time-series averages of the coefficients from the monthly regressions and the Newey-West t-statistics, computed using the time-series standard deviations of the monthly coefficients. The dependent variable is the firm's monthly stock return in the 12 months starting from the 4th month after the end of year t. In each model of Table VIII, we also control for Tobin's Q at the end of year t, and Ln(Sales), profitability, investment, R&D, and the raw stock return in t. The independent variables take on the values from fiscal year t, the firm's most recent fiscal year that ends at least three months prior to the stock return month.

Model 1 does not include security issue dummy variables. The coefficients on the independent variables are generally consistent with the literature. Tobin's Q, sales, and investment are negatively related to future stock returns, while profitability and R&D are positively related to future stock returns. The stock return in year t is used to capture potential momentum effects. Its coefficient is not statistically significant.

In Model 2 of Table VIII, we include four dummy variables for one, two, three, or at least four issues, without distinguishing between debt and equity. Consistent with the factor regression results in Table VI, more frequent issues are followed by lower stock returns. Firms with one, two, three, and at least four issues underperform non-issuers by 0.11%, 0.37%, 0.58%, and 1.15% per month, respectively.

BFG find that the more different types of securities are issued, the lower are a firm's subsequent abnormal returns. Our Model 3 of Table VIII includes dummy variables for the

number of issues and the number of different types of securities issued. Conditional on the number of types of securities, there is a monotone relation between the number of issues and subsequent returns, consistent with the results in Model 2 of Table VIII and Panel B of Table VI. However, there is mixed evidence on the number of types of securities issued. With two issues and just one type, the coefficient of -0.34 is similar to the coefficient of -0.45 with two issues and two types. With three issues and one type, the coefficient of -0.72 is more negative than the coefficient of -0.51 with three issues and two types. Model 4 of Table VIII includes the number of issues and the number of types of securities issued in t-2, t-1, and t, and the results suggest that more issues are associated with lower returns, but more types are associated with higher returns. Thus, our results do not confirm BFG's findings. Instead, our Models 3 and 4 results suggest that the number of issues is more reliable than the number of types of securities in predicting returns.

Model 5 of Table VIII includes a dummy variable that equals one if there is at least one debt issue in t-2, t-1, and t, and a dummy variable that equals one if there is at least one equity issue in t-2, t-1, and t. The coefficients on the two variables are -0.16 and -0.41, respectively, both of which are statistically significant, suggesting that firms with a debt issue in the prior three years underperform non-issuers by 0.16% per month in the next year and firms with an equity issue in the prior three years underperform non-issuers by 0.41% per month.

In their Table 3 Fama-MacBeth regressions, BFG find that, after controlling for the number of security types, the security type for the first financing event (IPO, SEO, private equity placement, public debt offering, or bank loan) in a 36-month window is not related to long-run returns. In Model 6 of Table VIII, we distinguish between debt and equity by including six dummy variables: three dummy variables that equal one if there is, respectively, one, two, or three debt issues in the previous three years; and three dummy variables for the frequency of

equity issues. More frequent debt issues or more frequent equity issues are followed by lower stock returns in year t+1. Firms with one, two, and three debt issues underperform those with zero debt or equity issues by 0.09%, 0.30%, and 0.62% per month, respectively. Firms with one, two, and three equity issues underperform those with zero debt or equity issues by 0.30%, 0.64%, and 1.25% per month, respectively. Inconsistent with BFG, equity issues are followed by much lower stock returns than debt issues after controlling for the number of equity issues and the number of debt issues. This finding suggests that some firms successfully issue equity rather than debt when their stocks are overvalued, consistent with the market timing hypothesis. Lewis and Tan (2016) also find that equity issuers underperform by more than debt issuers, although they do not examine the effect of issuance frequency.

There are potentially multiple reasons for the difference between BFG's results and ours here. BFG focus on the type of the first security issue and the number of types of securities issued (see their Table 3), while our Model 6 of Table VIII considers the type of each security issue and focuses on the number of debt issues and the number of equity issues in a 36-month window. It is perhaps not surprising that BFG do not find the type of the first issue to be important for explaining the stock return in a month, because our paper finds that, other things being held equal, the first issue has a weaker effect on the stock return in the month than the most recent issue. BFG also distinguish between IPOs, SEOs, and private investments in public equity (PIPEs) and distinguish between public debt and private debt offerings, while we do not.[13] If a firm issued several different types of equity in different years, they would classify the firm as issuing multiple types, whereas we would classify it as a frequent issuer of equity. Thus, the

[13] Billett, Floros, and Garfinkel (2016) document that "At-The-Market" (ATM) equity offerings, where shares are issued directly to secondary market investors, have become popular in recent years. We do not distinguish between ATMs and other types of equity offerings.

different classification schemes may account for some of the difference in conclusions. Furthermore, we use net issues whereas they use gross issues.

In Internet Appendix Table IA-14, we replicate Table VIII using large issues, study the importance of issue recency, and check the results for the subperiods of 1975-1995 and 1996-2015. The Fama-MacBeth results are generally consistent with our Tables IV-VII time-series regression results. Larger and more recent issues are generally followed by lower stock returns in the subsequent year. Our major results are robust in both subperiods.

Bessembinder and Zhang (2013) match each equity issuer during 1980-2005 with a non-issuer with similar size and book-to-market ratio. Their regressions use the difference in monthly log returns between issuers and their matching firms as the dependent variable, and the differences in firm characteristics such as beta and illiquidity as independent variables. They do not find that IPO firms and SEO firms underperform their matching firms. Our results are not directly comparable to theirs for several reasons. First, unlike their regression sample, the sample for our Fama-MacBeth regressions does not exclude firm months that belong to neither issuers nor their matching firms. Second, in some of our analysis we examine the importance of issue frequency and issue recency in explaining subsequent stock returns, but they do not. In their analysis, a firm that issues equity in a year is treated as an equity issuer for the next five years. In examining stock returns in t+1, we distinguish between, for example, an equity issue in t-2 and an equity issue in t, and find that issues from earlier years have a weaker relation with returns in year t+1 than more recent issues. Including infrequent issuers and issuers from earlier years reduces their power to identify the abnormal returns that we document for frequent and recent issuers. Third, they control for differences in liquidity, beta, residual stock return volatility, and other characteristics between equity issuers and their matching firms. In untabulated results, our

Fama-MacBeth results are qualitatively similar, although quantitatively weaker, if we include these controls. There are reasons, however, to omit some of their control variables.[14]

Bessembinder, Cooper, and Zhang (2016) measure the abnormal stock return following an event (e.g., an SEO) using the intercept of a pooled ordinary least squares (OLS) regression, where the dependent variable is the difference between an event firm's realized return and predicted return each month during the 36 months following the event. To predict a firm's stock return in a month, they rely mainly on the estimation of a cross-sectional regression each month of the firm's stock return on its characteristics measured at the end of the preceding month rather than its characteristics measured immediately prior to the event date. They find no evidence that SEO firms underperform firms with similar post-event monthly updated characteristics. Our paper is different in that we use pre-issuance firm characteristics, distinguish between occasional and frequent issuers, and pay more attention to issue recency than they do.

To interpret the underperformance following frequent issues, one could argue that frequent and occasional issuers are not only different in size, book-to-market ratio, profitability, and investment shortly prior to being categorized as frequent or occasional issuers, but also different in these characteristics one or two years before the categorization. Securities issuance decisions in the first two of the three prior years could be correlated with the differences in the earlier-year characteristics (e.g., investment in t-2 and t-1), rather than a market timing motive. It is also possible that the relations between firm characteristics and subsequent stock returns are nonlinear. Inconsistent with these interpretations, however, our Fama-MacBeth regression results

[14] For example, the stock of a firm that issues equity in a year could become more liquid in the same year as financial analysts affiliated with the firm's equity underwriters provide "buy" and "strong buy" recommendations. Therefore, liquidity may be endogenous.

of monthly stock returns in the subsequent year in the Internet Appendix Tables IA-15 and IA-16 are robust to controlling for the lagged and non-linear effects of firm characteristics.[15]

V. Fama-MacBeth Regression Results of Earnings Announcement Returns

Our previous results are consistent with the market timing hypothesis, which states that firms more frequently issue risky securities, especially equity, when their securities are overvalued. However, an alternative explanation on the basis of the q-theory is that firms issue debt and equity more frequently to finance their investment projects when the required rate of return on the projects is low (see Hou, Xue, and Zhang (2015 and 2016)). One could argue that the investment measures in our earlier tables do not fully control for the effect of investment. To further distinguish between the two explanations, we follow Chopra, Lakonishok, and Ritter (1992), La Porta et al. (1997), Cooper, Gulen, and Schill (2008), and Lewis and Tan (2016) and examine stock returns around earnings announcement days (EADs). According to the market timing hypothesis, if firms issue overvalued debt and equity but are unable to deliver anticipated earnings after issuance, then investors are likely to be disappointed when the firms announce their actual earnings. Larger and more frequent issues should be associated with lower subsequent earnings announcement returns (EARs). The alternative q-theory explanation does not make such predictions.

[15] We also do many other robustness checks for the results in Table VIII as well as the results in Table IX in Section V. First, we try alternative measures of asset growth. We define investment on the basis of cash flow statements and separate out the change in net working capital, which can be a place to park issue proceeds, especially equity issue proceeds. Bessembinder, Cooper, and Zhang (2016) suggest that, for most corporate events, the rate of asset growth is one of the five characteristics that explain actual returns in the months after corporate events. When we use the growth rate in the book value of assets as a measure for investment instead, our major results on the effect of equity issues are only slightly weaker, as expected. Second, we also try the cash profitability measure in Fama and French (2017). Our major results are not materially affected when this alternative measure of profitability is used. Third, our results are also robust to replacing the log of net sales and Tobin's Q with the log of market cap and the ratio of the market value of equity to the book value of equity.

Issue frequency is related to other firm characteristics such as investment. To understand whether other characteristics drive the difference in EARs, we estimate regressions. The dependent variable is the average three-day buy-and-hold percentage return from one day before to one day after each EAD for all earnings announcements made from 92 to 457 calendar days after the end of fiscal year t. We first estimate the cross-sectional regressions for each of the calendar years from 1974-2014. Table IX reports the time-series averages of the annual coefficients and the corresponding Newey-West t-statistics. Overall, the results in this table are consistent with the expectational error mispricing story in La Porta et al. (1997).

The model specifications in Table IX are similar to those in Table VIII. In Model 1 of Table IX, the results on the control variables are generally consistent with those in Lewis and Tan (2016). The results in Model 2 of Table IX show that firms with more issues are associated with lower EARs. During the three days around the earnings announcement, firms with at least four issues in the three prior years underperform non-issuers by -0.92%. Since there are typically four earnings announcements per year, this three-day abnormal return translates into a cumulative 12-day abnormal return of -3.68% in year t+1. In Model 2 of Table VIII, the corresponding coefficient is -1.15% per month or -13.8% per year. Thus, on average, over a quarter of the abnormal return in year t+1 occurs on the 12 days around the four earnings announcements.

Model 3 of Table IX includes dummy variables for the number of issues and the number of different types of securities issued. Conditional on the number of types of securities, the number of issues is generally associated with lower EARs. However, conditional on the number of issues, there is mixed evidence on the relation between the number of security types and

EARs. The results in Model 4 of Table IX suggest that the number of issues is negatively associated with EARs, but the number of types of securities is not reliably related to EARs.

In Model 5, the three-day EARs in the subsequent year of firms with a debt issue in t-2 to t are 0.07% lower than those without any issue, and the three-day EARs in the subsequent year of firms with an equity issue are 0.47% lower. Equity issues are followed by lower EARs than debt issues, consistent with the market timing hypothesis and the findings of Lewis and Tan.

The Model 6 results suggest that more frequent debt issues or more frequent equity issues are followed by lower EARs. Furthermore, after controlling for the number of equity issues and the number of debt issues, equity issues are followed by much lower EARs than debt issues. The coefficient of -1.04 suggests that firms with three equity issues in the prior three years underperform non-issuers by 4.16% on the 12 days surrounding the four earnings announcements in year t+1. The corresponding coefficient in Model 6 of Table VIII suggests that these firms underperform non-issuers by 15% per year. Thus, about 28% of the abnormal return in year t+1 occurs on the 12 days around the four earnings announcements. This finding is consistent with the market timing hypothesis, but it is difficult to explain with other theories.

The results on large issues, which we report in Panel B of Internet Appendix Table IA-17, are generally consistent with those in Table IX. The results in Panel C of Table IA-17 suggest that more recent issues are generally followed by more negative EARs. Panel D of Table IA-17 shows that our major results are robust over time, with the EARs following equity issues being lower in the second subperiod, suggesting that the frequent equity issues anomaly is becoming more anomalous over time.[16]

[16] Our Fama-MacBeth results on earnings announcement returns are robust to controlling for the lagged and nonlinear effects of firm characteristics (see Internet Appendix Tables IA-18 and IA-19).

Many anomalous findings are driven by small-cap stocks, or, using Fama and French's (2008) terminology, microcap stocks, defined as stocks with a market cap that places them in the bottom 20% of the distribution of NYSE stocks in a given year. Our factor regression results that use value-weighted portfolio returns as the dependent variable are unlikely to be driven by these microcap stocks, because value-weighting by itself generally reduces the impact of microcap stocks. In Internet Appendix Tables IA-13, IA-14, and IA-17, we report the results after dividing stocks into the categories of microcaps and all others. Table IA-13 shows the factor regression results, Panel E of Table IA-14 shows the Fama-Macbeth results of returns in the subsequent year, and Panel E of Table IA-17 shows the results of earnings announcement abnormal returns. Our major results are present in both the microcap and all other stocks samples.

The literature provides empirical evidence that limits to arbitrage help explain why some asset pricing anomalies can persist (e.g., McLean and Pontiff (2016)). We find that limits to arbitrage help explain the low abnormal returns following frequent and large security issues. Using idiosyncratic stock return volatility as a proxy for limits to arbitrage, we find that the negative relation between frequent issues from t-2 to t and stock returns (and EARs) in t+1 is much stronger for stocks that face more severe limits to arbitrage (e.g., those with high idiosyncratic stock return volatility). These results are reported in Panel F of both Internet Appendix Tables IA-14 and IA-17.

VI. Conclusions

The literature on post-issuance stock returns almost always studies one type of security issuance without fully controlling for surrounding issuances of the same type of security and other types of securities. This practice makes inferences difficult, especially since frequent

issuances are prevalent. For example, without adequately controlling for surrounding debt issues when studying long-run stock returns following SEOs, it is not clear how much of the results on SEOs are driven by debt issues. Billett, Flannery, and Garfinkel (2011) find that an increase in the number of types of securities issued is related to lower abnormal long-run stock returns. In comparison, we find that more frequent and larger issues of debt and equity in the three years from t-2 to t are followed by lower abnormal stock returns in the 12 months starting from month 4 of year t+1. The intercept of the Fama-French 5-factor calendar-time regression for a value-weighted portfolio of firms with at least three large issues from t-2 to t is -0.64% per month.

More recent issues (e.g., year t issues relative to year t-1 or t-2 issues) are also followed by lower average abnormal returns in t+1 than less recent issues. These effects of issue frequency, size, and recency help explain the difference between the Bessembinder and Zhang (2013) and Bessembinder, Cooper, and Zhang (2016) findings of no reliable abnormal returns and our findings. Their focus on average returns in the five years (the 2013 paper) and in the three years (the 2016 paper) after issuance without considering issue size and frequency has much less power to identify abnormal returns in the first year after issuing than our methodology, where we examine the effects of a firm's issue size, frequency, and recency from year t-2 to t on its abnormal stock returns in year t+1.

The negative abnormal returns that we document for frequent and large issuers, and the negative abnormal returns that dissipate over time, are consistent with successful market timing. These patterns are not consistent with a q-theory explanation, since abnormal returns persist in both our factor model regressions and our Fama-MacBeth (FM) regressions that control for investment and profitability.

Equity issues on average are followed by lower raw returns than debt issues. Furthermore, our FM regressions show that equity issues are followed by lower abnormal returns than debt issues. For example, an FM regression that controls for several important firm characteristics shows that firms with three debt issues underperform non-issuers by -0.62% per month, and firms with three equity issues underperform by -1.25% per month. However, our calendar-time multifactor regressions provide mixed evidence on the relation between security type and abnormal returns, partly because equity issuers have a negative loading while debt issuers have a positive loading on the profitability factor.

If firms issue overvalued debt and equity but are unable to deliver anticipated earnings after issuance, then investors are likely to be disappointed when the firms announce their actual earnings. We provide strong evidence that more frequent and larger issues, especially equity issues, are on average associated with lower stock returns around the earnings announcements in the subsequent year. These findings are consistent with market timing but cannot be easily explained by the q-theory.

To summarize, we confirm the finding in the recent literature that once other important determinants of cross-sectional returns on stocks are controlled for, firms that occasionally do small amounts of external financing do not subsequently underperform. We find, however, that firms that have recently done extensive external financing subsequently underperform. Thus, there is a remaining puzzle regarding the low returns following frequent and large issues of debt and equity.

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Appendix A. Variable Definitions

Following Frank and Goyal (2003), we set some Compustat items to zero when they are missing or their Compustat data codes indicate that they are a combined figure or an insignificant figure.

Variable Name	Detailed Definition
ΔEquity	Sale of Common and Preferred Stock (SSTK) – Purchase of Common and Preferred Stock (PRSTKC).
ΔDebt	For firms reporting format codes 1 to 3, ΔDebt = Long-Term Debt Issuance (Compustat item DLTIS) – Long-Term Debt Reduction (DLTR) – Current Debt Changes (DLCCH). For firms reporting format code 7, ΔDebt = DLTIS – DLTR + DLCCH.
Equity issue	A firm is defined to have an equity issue in a year if ΔEquity in the year is at least 5% of the book value of assets and at least 3% of the market value of equity at the beginning of the year.
Large equity issue	A firm is defined to have a large equity issue in a year if ΔEquity in the year is at least 10% of the book value of assets and at least 3% of the market value of equity at the beginning of the year.
Debt issue	A firm is defined to have a debt issue in a year if ΔDebt in the year is at least 5% of the book value of assets and at least 3% of the market value of equity at the beginning of the year.
Large debt issue	A firm is defined to have a large debt issue in a year if ΔDebt in the year is at least 10% of the book value of assets and at least 3% of the market value of equity at the beginning of the year.
Tobin's Q	The sum of the market value of equity and the book value of debt (Common Shares Outstanding (CSHO) × Price Close Fiscal Year (PRCC_F) + Total liabilities (LT) + Liquidating Value of Preferred Stock (PSTKL) – Deferred Taxes and Investment Tax Credit (TXDITC)) ÷ the book value of assets (item AT). When PSTKL is missing, the redemption value (PSTKRV) is used. When PSTKRV is also missing, the carrying value (PSTK) is used.
OIBD	Operating income before depreciation (Compustat item OIBDP) ÷ beginning-of-year assets (item AT).
Ln(Sales)	The natural logarithm of net sales (Compustat item SALE). Net sales is in $millions and expressed in the purchasing power at the end of 2010.
Investments	For firms reporting format codes 1-3, Investments = [Capital Expenditures (Compustat item CAPX) + Increase in Investments (IVCH) + Acquisitions (AQC) + Uses of Funds Other (FUSEO) – Sale of Property (SPPE) – Sale of Investments (SIV)] ÷ beginning-of-year assets. For firms reporting format code 7, investments = [CAPX + IVCH + AQC – SPPE – SIV – Investing Activities Other (IVACO)] ÷ beginning-of-year assets.
R&D	Research and development expense (Compustat item XRD) ÷ beginning-of-year assets
$Return_t$	The total return on a stock in fiscal year t.
$Return_{t+1}$	The total return on a stock in fiscal year t+1, measured from month 4 to month 15 after the end of fiscal year t so as to allow the release of fiscal year t's numbers before returns are measured and a firm is classified. If the stock gets delisted before 1 year, the return until delisting is used.
$Return_{t+1, t+3}$	The total return on a stock from fiscal year t+1 to t+3, measured from month 4 to month 39. If the stock gets delisted before 3 years, the return until delisting is used.
Market adjusted $return_{t+1}$	The total return on the firm's stock in fiscal year t+1, measured from month 4 to month 15 after the end of fiscal year t, minus the value-weighted return on the market in the same year.
Market adjusted $return_{t+1, t+3}$	The total return on the firm's stock from fiscal year t+1 to fiscal year t+3, measured from month 4 to month 39, minus the value-weighted return on the market in the same 3 years.

Appendix B. Factor Models

This appendix lists the factor models for our calendar-time regressions. All of the time-series regressions use monthly VW percentage excess returns as the dependent variable, although some of the Internet Appendix tables present robustness results using equally weighted portfolios. A stock is allocated to a portfolio using its debt and equity issuance information during its fiscal years t-2, t-1, and t. The stock stays in the portfolio from month 4 to month 15 after the end of fiscal year t. The portfolios are updated monthly. For a VW portfolio, beginning-of-month market values from CRSP are used to compute the weight of each stock in the portfolio.

1. Market model:

$$R_{it} - R_{Ft} = a_i + b_i(R_{Mt} - R_{Ft}) + e_{it} \quad \text{(A1)}$$

Subscript i denotes portfolio i, and subscript t denotes month t. The factor return data are from Kenneth French's website.

2. Fama-French 3-factor model (described in Fama and French (2015)):

$$R_{it} - R_{Ft} = a_i + b_i(R_{Mt} - R_{Ft}) + s_i SMB_t + h_i HML_t + e_{it} \quad \text{(A2)}$$

Subscript i denotes portfolio i, and subscript t denotes month t. See Fama and French (2015 and 2016a) for details. The factor return data are from Kenneth French's website.

3. Fama-French (2015) 5-factor model:

$$R_{it} - R_{Ft} = a_i + b_i(R_{Mt} - R_{Ft}) + s_i SMB_t + h_i HML_t + r_i RMW_t + c_i CMA_t + e_{it} \quad \text{(A3)}$$

Subscript i denotes portfolio i, and subscript t denotes month t. RMW denotes "robust minus weak", or the difference between the returns on diversified portfolios of stocks with robust and weak profitability. CMA denotes "conservative minus aggressive", or the difference between the returns on diversified portfolios of the stocks of low and high investment firms. We use the factor returns from the 2×3 sorts on Size and B/M, or Size and OP, or Size and Investment. See Fama and French (2015 and 2016a) for details. The factor return data are from Kenneth French's website.

4. Hou, Xue and Zhang's (2015) q-factor model:

$$R_{it} - R_{Ft} = a_i + b_i(R_{Mt} - R_{Ft}) + s_i SMB_t + b_i^{ROE} r_t^{ROE} + b_i^{I/A} r_t^{I/A} + e_{it} \quad \text{(A4)}$$

Subscript i denotes portfolio i, and subscript t denotes month t. r^{ROE} denotes the difference between the returns on diversified portfolios of stocks of firms with robust and weak profitability (ROE). $r^{I/A}$ denotes the difference between the returns on diversified portfolios of stocks of firms with low and high investment-to-assets (I/A, defined as the annual change in the book value of total assets divided by the book value of beginning-of-year total assets). See Hou, Xue, and Zhang (2015 and 2016) for details. Lu Zhang provided the q-factor return data.

Table I
Sample Distribution, 1974-2014

This table reports the sample distribution. A firm is defined to have an equity issue (a debt issue) in a year if ΔEquity (ΔDebt) in the year is at least 5% of the book value of beginning-of-year assets and at least 3% of the market value of beginning-of-year equity. A firm is defined to have a large equity issue (a large debt issue) in a year if ΔEquity (ΔDebt) in the year is at least 10% of the book value of beginning-of-year assets and at least 3% of the market value of beginning-of-year equity. No. of equity (debt) issues equals the number of fiscal years with equity (debt) issues in fiscal years t-2, t-1, and t. No. of issues equals the total number of equity or debt issues in fiscal years t-2, t-1, and t. No. of large equity (or large debt) issues equals the number of fiscal years with large equity (debt) issues in fiscal years t-2, t-1, and t. No. of large issues equals the total number of large equity or large debt issues in fiscal years t-2, t-1, and t. See Appendix A for the definitions of ΔEquity and ΔDebt. In Panels D and E, (0,0,1) for equity issues, for example, denotes that the firm conducted no equity issue in t and t-1 but did an equity issue in t-2.

Panel A: Sample distribution by number of issues and number of large issues, independently

All issues			Large issues		
No. of issues	No. of firm-years	% of sample	No. of large issues	No. of firm-years	% of sample
=0	54,525	42.33	=0	73,216	56.84
=1	40,219	31.22	=1	34,115	26.49
=2	21,076	16.36	=2	13,833	10.74
=3	9,117	7.08	=3	5,519	4.28
=4	2,908	2.26	=4	1,644	1.28
=5	823	0.64	=5	425	0.33
=6	138	0.11	=6	54	0.04
All	128,806	100.00	All	128,806	100.00

Panel B: Sample distribution by number of equity issues and number of debt issues

		No. of observations					% of sample				
		No. of debt issues					No. of debt issues				
		=0	=1	=2	=3	All	=0	=1	=2	=3	All
No. of equity issues	=0	54,525	30,382	10,331	2,032	97,270	42.33	23.59	8.02	1.58	75.52
	=1	9,837	7,545	3,678	977	22,037	7.64	5.86	2.86	0.76	17.11
	=2	3,200	2,330	1,237	450	7,217	2.48	1.81	0.96	0.35	5.60
	=3	1,077	694	373	138	2,282	0.84	0.54	0.29	0.11	1.77
	All	68,639	40,951	15,619	3,597	128,806	53.29	31.79	12.13	2.79	100.00

Panel C: Sample distribution by number of large equity issues and number of large debt issues

		No. of observations					% of sample				
		No. of large debt issues					No. of large debt issues				
		=0	=1	=2	=3	All	=0	=1	=2	=3	All
No. of large equity issues	=0	73,216	24,620	5,044	776	103,656	56.84	19.11	3.92	0.60	80.47
	=1	9,495	5,857	2,077	438	17,867	7.37	4.55	1.61	0.34	13.87
	=2	2,932	1,684	734	219	5,569	2.28	1.31	0.57	0.17	4.32
	=3	982	472	206	54	1,714	0.76	0.37	0.16	0.04	1.33
	All	86,625	32,633	8,061	1,487	128,806	67.25	25.33	6.26	1.15	100.00

Panel D: Sample distribution by recency of debt issues and recency of equity issues

	Debt issues (t,t-1,t-2)								
Equity issues (t,t-1,t-2)	(0,0,0)	(0,0,1)	(0,1,0)	(1,0,0)	(0,1,1)	(1,0,1)	(1,1,0)	(1,1,1)	All
No. of firm-years									
(0,0,0)	54,525	10,643	9,614	10,125	3,892	2,961	3,478	2,032	97,270
(0,0,1)	3,809	879	986	890	467	318	597	364	8,310
(0,1,0)	3,041	925	648	875	389	533	296	345	7,052
(1,0,0)	2,987	826	826	690	466	277	335	268	6,675
(0,1,1)	1,214	303	237	325	144	146	168	196	2,733
(1,0,1)	941	187	285	207	140	81	144	131	2,116
(1,1,0)	1,045	294	228	264	149	131	134	123	2,368
(1,1,1)	1,077	252	216	226	118	111	144	138	2,282
All	68,639	14,309	13,040	13,602	5,765	4,558	5,296	3,597	128,806
% of sample									
(0,0,0)	42.33	8.26	7.46	7.86	3.02	2.30	2.70	1.58	75.52
(0,0,1)	2.96	0.68	0.77	0.69	0.36	0.25	0.46	0.28	6.45
(0,1,0)	2.36	0.72	0.50	0.68	0.30	0.41	0.23	0.27	5.47
(1,0,0)	2.32	0.64	0.64	0.54	0.36	0.22	0.26	0.21	5.18
(0,1,1)	0.94	0.24	0.18	0.25	0.11	0.11	0.13	0.15	2.12
(1,0,1)	0.73	0.15	0.22	0.16	0.11	0.06	0.11	0.10	1.64
(1,1,0)	0.81	0.23	0.18	0.20	0.12	0.10	0.10	0.10	1.84
(1,1,1)	0.84	0.20	0.17	0.18	0.09	0.09	0.11	0.11	1.77
All	53.29	11.11	10.12	10.56	4.48	3.54	4.11	2.79	100.00

Panel E: Sample distribution by recency of large debt issues and recency of large equity issues

	Large debt issues (t,t-1,t-2)								
Large equity issues (t,t-1,t-2)	(0,0,0)	(0,0,1)	(0,1,0)	(1,0,0)	(0,1,1)	(1,0,1)	(1,1,0)	(1,1,1)	All
No. of firm-years									
(0,0,0)	73,216	8,801	7,866	7,953	1,966	1,453	1,625	776	103,656
(0,0,1)	3,717	794	810	645	306	167	327	176	6,942
(0,1,0)	2,921	667	577	642	229	339	155	165	5,695
(1,0,0)	2,857	535	611	576	212	155	187	97	5,230
(0,1,1)	1,105	218	194	242	97	90	116	103	2,165
(1,0,1)	853	145	200	139	74	48	83	57	1,599
(1,1,0)	974	185	166	195	77	68	81	59	1,805
(1,1,1)	982	161	147	164	69	61	76	54	1,714
All	86,625	11,506	10,571	10,556	3,030	2,381	2,650	1,487	128,806
% of sample									
(0,0,0)	56.84	6.83	6.11	6.17	1.53	1.13	1.26	0.60	80.47
(0,0,1)	2.89	0.62	0.63	0.50	0.24	0.13	0.25	0.14	5.39
(0,1,0)	2.27	0.52	0.45	0.50	0.18	0.26	0.12	0.13	4.42
(1,0,0)	2.22	0.42	0.47	0.45	0.16	0.12	0.15	0.08	4.06
(0,1,1)	0.86	0.17	0.15	0.19	0.08	0.07	0.09	0.08	1.68
(1,0,1)	0.66	0.11	0.16	0.11	0.06	0.04	0.06	0.04	1.24
(1,1,0)	0.76	0.14	0.13	0.15	0.06	0.05	0.06	0.05	1.40
(1,1,1)	0.76	0.12	0.11	0.13	0.05	0.05	0.06	0.04	1.33
All	67.25	8.93	8.21	8.20	2.35	1.85	2.06	1.15	100.00

Table II
Average Firm Characteristics, 1974-2014

This table reports the averages of several firm characteristics. See Appendix A and Table I for variable definitions.

Panel A: Average characteristics by number of equity issues

No. of equity issues	Tobin's Q_t	Ln(Sales)$_t$	Investment$_t$ (%)	OIBD$_t$ (%)	R&D$_t$ (%)	Return$_t$ (%)
=0	1.51	5.65	8.73	14.24	2.82	19.16
=1	1.89	4.86	14.27	9.38	5.65	22.95
=2	2.57	3.91	18.86	-4.31	11.57	21.26
=3	3.25	2.97	21.60	-24.19	19.00	26.13
All	1.66	5.37	10.47	11.69	4.08	20.05

Panel B: Average characteristics by number of debt issues

No. of debt issues	Tobin's Q_t	Ln(Sales)$_t$	Investment$_t$ (%)	OIBD$_t$ (%)	R&D$_t$ (%)	Return$_t$ (%)
=0	1.80	5.32	7.17	11.48	5.07	22.99
=1	1.53	5.47	12.05	11.94	3.28	18.51
=2	1.45	5.36	17.34	11.85	2.43	13.13
=3	1.46	5.30	25.80	12.06	1.67	11.62

Panel C: Average characteristics by number of issues

No. of issues	Tobin's Q_t	Ln(Sales)$_t$	Investment$_t$ (%)	OIBD$_t$ (%)	R&D$_t$ (%)	Return$_t$ (%)
=0	1.61	5.62	6.36	14.39	3.40	21.56
=1	1.59	5.47	10.13	12.60	3.67	20.46
=2	1.75	5.06	14.34	8.81	5.04	17.56
=3	1.97	4.59	19.41	2.84	6.93	16.69
=4	2.03	4.41	27.11	0.77	6.38	15.82
=5	1.90	4.61	37.38	1.27	5.22	15.39
=6	2.08	4.70	42.99	-2.06	5.02	21.48
$\geqslant$3	1.98	4.55	22.52	2.22	6.68	16.47
$\geqslant$4	2.01	4.46	29.86	0.78	6.08	15.93

Panel D: Average characteristics by number of equity and number of debt issues

No. of equity issues	No. of debt issues	Tobin's Q_t	Ln(Sales)$_t$	Investment$_t$ (%)	OIBD$_t$ (%)	R&D$_t$ (%)	Return$_t$ (%)
=0	=0	1.61	5.62	6.36	14.39	3.40	21.56
=1	=0	2.19	4.62	9.33	7.69	8.07	28.69
=2	=0	3.15	3.36	12.33	-10.50	17.05	27.58
=3	=0	3.90	2.29	13.28	-35.52	26.56	29.45
=0	=1	1.39	5.74	10.39	14.18	2.25	17.80
=1	=1	1.72	5.04	15.47	10.18	4.46	20.37
=2	=1	2.31	4.11	19.29	-2.18	9.34	20.51
=3	=1	2.97	3.17	22.76	-19.76	15.16	22.47
=0	=2	1.33	5.61	14.14	13.79	1.75	12.41
=1	=2	1.52	5.09	20.99	11.40	2.68	14.54
=2	=2	1.92	4.51	27.65	2.87	5.20	11.38
=3	=2	2.31	3.95	35.54	-7.91	9.48	25.11
=0	=3	1.38	5.45	19.94	13.42	1.46	9.45
=1	=3	1.51	5.16	29.51	12.71	1.64	16.71
=2	=3	1.56	5.16	38.90	8.88	1.69	7.34
=3	=3	2.08	4.70	42.99	-2.06	5.02	21.48

Panel E: Average characteristics by number of large equity issues

No. of large equity issues	Tobin's Q_t	Ln(Sales)$_t$	Investment$_t$ (%)	OIBD$_t$ (%)	R&D$_t$ (%)	Return$_t$ (%)
=0	1.51	5.65	8.87	14.11	2.86	19.45
=1	2.00	4.57	15.69	8.22	6.36	22.86
=2	2.82	3.57	20.02	-8.71	13.74	20.20
=3	3.65	2.59	22.00	-32.11	23.05	26.74

Panel F: Average characteristics by number of large debt issues

No. of large debt issues	Tobin's Q_t	Ln(Sales)$_t$	Investment$_t$ (%)	OIBD$_t$ (%)	R&D$_t$ (%)	Return$_t$ (%)
=0	1.70	5.42	7.48	11.75	4.47	21.97
=1	1.59	5.33	14.43	11.74	3.46	17.20
=2	1.58	5.10	22.35	10.97	2.86	12.71
=3	1.56	5.00	33.61	10.89	1.82	10.84

Panel G: Average characteristics by number of large issues

No. of large issues	Tobin's Q_t	Ln(Sales)$_t$	Investment$_t$ (%)	OIBD$_t$ (%)	R&D$_t$ (%)	Return$_t$ (%)
=0	1.54	5.69	6.79	14.11	3.10	21.07
=1	1.66	5.26	11.98	12.12	4.03	19.38
=2	1.98	4.66	17.32	6.18	6.56	18.25
=3	2.33	4.07	23.34	-3.17	9.62	17.27
=4	2.32	4.06	32.13	-4.09	8.74	15.32
=5	2.05	4.39	44.42	-4.30	7.34	8.24
=6	2.42	4.41	53.91	-8.09	4.07	46.85
$\geqslant$3	2.31	4.09	26.62	-3.47	9.26	16.55
$\geqslant$4	2.27	4.13	35.14	-4.24	8.34	14.70

Panel H: Average characteristics by number of large equity issues and number of large debt issues

No. of large equity issues	No. of large debt issues	Tobin's Q_t	Ln(Sales)$_t$	Investment$_t$ (%)	OIBD$_t$ (%)	R&D$_t$ (%)	Return$_t$ (%)
=0	=0	1.54	5.69	6.79	14.11	3.10	21.07
=1	=0	2.22	4.36	10.44	6.67	8.33	27.41
=2	=0	3.25	3.15	12.89	-13.68	18.18	24.55
=3	=0	4.07	2.16	14.17	-39.23	28.16	28.71
=0	=1	1.44	5.60	12.58	14.21	2.37	16.29
=1	=1	1.81	4.81	18.76	9.59	4.73	19.93
=2	=1	2.55	3.79	23.26	-6.11	10.80	19.10
=3	=1	3.38	2.76	25.66	-27.19	18.99	23.91
=0	=2	1.44	5.37	18.23	13.77	1.94	12.63
=1	=2	1.64	4.83	26.50	10.46	2.90	12.63
=2	=2	2.09	4.36	33.28	0.64	6.23	11.81
=3	=2	2.58	3.79	42.55	-15.72	12.95	18.61
=0	=3	1.49	5.08	26.64	12.35	1.56	11.20
=1	=3	1.57	4.95	37.16	12.85	1.91	11.93
=2	=3	1.55	4.95	46.18	6.44	2.06	-1.50
=3	=3	2.42	4.41	53.91	-8.09	4.07	46.85

Table III
Average Post-Issuance Buy-and-Hold Returns (%), 1974-2014

This table reports the average post-issuance raw and market-adjusted three-year and one-year buy-and-hold returns (in percent). Returns are calculated starting 3 months after the end of the fiscal year. See Appendix A and Table I for variable definitions.

Panel A: Average returns by number of equity issues

No. of equity issues	$Return_{t+1, t+3}$ (%)	$Return_{t+1}$ (%)	Market adjusted return $_{t+1, t+3}$ (%)	Market adjusted return $_{t+1}$ (%)
=0	57.5	20.1	21.5	7.9
=1	35.9	13.8	-0.3	1.3
=2	14.0	7.1	-18.2	-4.3
=3	-11.4	-8.3	-37.0	-17.6
All	50.1	17.8	14.5	5.6

Panel B: Average returns by number of debt issues

No. of debt issues	$Return_{t+1, t+3}$ (%)	$Return_{t+1}$ (%)	Market adjusted return $_{t+1, t+3}$ (%)	Market adjusted return $_{t+1}$ (%)
=0	53.0	19.7	16.6	7.4
=1	50.3	17.7	14.9	5.5
=2	42.0	12.1	8.3	0.5
=3	29.9	8.1	-3.1	-3.9

Panel C: Average returns by number of issues

No. of issues	$Return_{t+1, t+3}$ (%)	$Return_{t+1}$ (%)	Market adjusted return $_{t+1, t+3}$ (%)	Market adjusted return $_{t+1}$ (%)
=0	58.7	21.1	21.8	8.6
=1	53.7	19.7	18.1	7.5
=2	40.1	13.7	5.5	1.8
=3	25.6	7.8	-7.2	-3.8
=4	9.3	0.4	-22.3	-11.1
=5	-8.5	-9.9	-38.1	-20.8
=6	-21.2	-9.2	-43.5	-18.7
$\geqslant$3	19.3	4.9	-12.9	-6.6
$\geqslant$4	4.4	-2.1	-26.4	-13.4

Panel D: Average returns by number of equity issues and number of debt issues

No. of equity issues	No. of debt issues	$Return_{t+1, t+3}$ (%)	$Return_{t+1}$ (%)	Market adjusted return $_{t+1, t+3}$ (%)	Market adjusted return $_{t+1}$ (%)
=0	=0	58.7	21.1	21.8	8.6
=1	=0	40.5	17.9	4.5	5.6
=2	=0	14.6	10.2	-18.4	-1.1
=3	=0	-10.1	-7.3	-34.0	-15.6
=0	=1	58.1	20.3	22.5	8.1
=1	=1	34.7	12.6	-2.0	-0.4
=2	=1	17.4	8.2	-14.7	-3.1
=3	=1	-8.2	-7.5	-35.2	-17.1
=0	=2	51.9	15.6	18.3	4.2
=1	=2	30.6	8.2	-5.1	-4.2
=2	=2	11.1	2.1	-20.0	-9.6
=3	=2	-17.7	-12.6	-46.5	-23.5
=0	=3	45.2	14.7	11.9	2.6
=1	=3	19.3	4.0	-16.0	-8.8
=2	=3	-0.8	-7.6	-31.0	-18.5
=3	=3	-21.2	-9.2	-43.5	-18.7

Panel E: Average returns by number of large equity issues

No. of large equity issues	$Return_{t+1, t+3}$ (%)	$Return_{t+1}$ (%)	Market adjusted return $_{t+1, t+3}$ (%)	Market adjusted return $_{t+1}$ (%)
=0	56.3	19.8	20.2	7.5
=1	32.5	12.9	-2.9	0.5
=2	11.3	6.5	-20.2	-4.8
=3	-13.8	-11.6	-37.3	-19.9

Panel F: Average returns by number of large debt issues

No. of large debt issues	$Return_{t+1, t+3}$ (%)	$Return_{t+1}$ (%)	Market adjusted return $_{t+1, t+3}$ (%)	Market adjusted return $_{t+1}$ (%)
=0	52.9	19.5	16.3	7.1
=1	48.1	16.0	13.9	4.2
=2	34.9	9.7	2.6	-1.9
=3	17.0	1.5	-14.1	-10.6

Panel G: Average returns by number of large issues

No. of large issues	$Return_{t+1, t+3}$ (%)	$Return_{t+1}$ (%)	Market adjusted return $_{t+1, t+3}$ (%)	Market adjusted return $_{t+1}$ (%)
=0	57.3	20.5	20.2	8.0
=1	51.1	18.6	16.3	6.6
=2	32.2	11.3	-1.4	-0.4
=3	15.5	2.1	-14.9	-8.8
=4	1.0	-2.3	-28.9	-14.0
=5	-19.5	-16.2	-44.7	-25.8
=6	-44.7	-25.5	-63.6	-35.7
$\geqslant$3	10.0	0.0	-19.9	-11.0
$\geqslant$4	-4.2	-5.6	-32.9	-16.9

Panel H: Average returns by number of large equity and number of large debt issues

No. of large equity issues	No. of large debt issues	$Return_{t+1, t+3}$ (%)	$Return_{t+1}$ (%)	Market adjusted return $_{t+1, t+3}$ (%)	Market adjusted return $_{t+1}$ (%)
=0	=0	57.3	20.5	20.2	8.0
=1	=0	38.3	17.8	2.3	5.3
=2	=0	14.3	11.1	-18.4	-0.1
=3	=0	-15.7	-11.6	-37.7	-19.2
=0	=1	56.0	18.9	21.7	7.1
=1	=1	28.5	9.0	-6.6	-3.2
=2	=1	13.9	3.2	-16.8	-7.8
=3	=1	-2.1	-5.9	-29.5	-15.7
=0	=2	46.9	14.2	14.4	2.8
=1	=2	23.4	5.0	-10.3	-7.1
=2	=2	1.0	0.7	-28.5	-11.1
=3	=2	-23.3	-20.6	-46.6	-29.1
=0	=3	37.4	9.7	5.8	-1.9
=1	=3	4.5	-3.4	-29.0	-16.9
=2	=3	-15.7	-12.0	-42.9	-22.6
=3	=3	-44.7	-25.5	-63.6	-35.7

Table IV
Calendar-Time Factor Regression Value-Weighted Results: Equity Issues

See Appendix A and Table I for variable definitions, and Appendix B for a description of the factors. The dependent variable is the portfolio monthly VW percentage excess return. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels. A coefficient in bold is statistically different from the corresponding coefficient in the first column of the same panel (or subpanel, if available), at the 5% significance level.

Panel A: Frequency and size of equity issues, 1975-2015 (Number of months = 492)

	(A1) No. of all equity issues				(A2) No. of large equity issues			
	=0	=1	⩾1	⩾2	=0	=1	⩾1	⩾2
Market model								
α	0.07**	**-0.24****	**-0.32*****	**-0.59*****	0.06*	**-0.21**	**-0.34****	**-0.82*****
t(α)	(2.05)	(-2.17)	(-2.86)	(-3.68)	(1.72)	(-1.61)	(-2.58)	(-4.67)
b	0.98***	**1.27*****	**1.28*****	**1.31*****	0.99***	**1.29*****	**1.31*****	**1.39*****
t(b)	(106.02)	(39.65)	(40.14)	(31.22)	(104.39)	(34.45)	(34.90)	(28.88)
3-factor								
α	0.10***	**-0.15**	**-0.24****	**-0.53*****	0.09***	-0.09	**-0.22****	**-0.72*****
t(α)	(3.15)	(-1.56)	(-2.44)	(-3.52)	(2.78)	(-0.82)	(-2.14)	(-4.64)
b	0.98***	**1.18*****	**1.17*****	**1.17*****	0.99***	**1.17*****	**1.17*****	**1.24*****
t(b)	(95.08)	(43.25)	(43.43)	(30.68)	(95.69)	(40.55)	(39.29)	(27.94)
s	-0.07***	**0.28*****	**0.33*****	**0.51*****	-0.06***	**0.36*****	**0.41*****	**0.53*****
t(s)	(-3.59)	(7.13)	(8.52)	(7.67)	(-3.22)	(7.84)	(8.89)	(6.78)
h	-0.05***	**-0.30*****	**-0.31*****	**-0.33*****	-0.05***	**-0.41*****	**-0.40*****	**-0.41*****
t(h)	(-3.13)	(-6.24)	(-6.84)	(-4.82)	(-3.15)	(-8.65)	(-8.67)	(-6.02)
5-factor								
α	0.04	0.01	-0.07	**-0.38*****	0.02	0.13	-0.01	**-0.51*****
t(α)	(1.13)	(0.14)	(-0.76)	(-2.65)	(0.76)	(1.17)	(-0.11)	(-3.39)
b	1.00***	**1.12*****	**1.12*****	**1.12*****	1.01***	**1.10*****	**1.10*****	**1.17*****
t(b)	(112.71)	(44.07)	(44.80)	(30.74)	(115.58)	(43.60)	(42.62)	(26.68)
s	-0.04**	**0.23*****	**0.28*****	**0.49*****	-0.03*	**0.29*****	**0.34*****	**0.48*****
t(s)	(-2.31)	(5.72)	(7.20)	(7.36)	(-1.79)	(6.27)	(7.65)	(5.96)
h	-0.09***	-0.20***	-0.21***	**-0.26*****	-0.10***	**-0.28*****	**-0.27*****	**-0.31*****
t(h)	(-4.69)	(-2.91)	(-3.16)	(-2.98)	(-4.84)	(-4.32)	(-4.03)	(-3.09)
r	0.11***	**-0.24*****	**-0.23*****	**-0.17****	0.11***	**-0.31*****	**-0.30*****	**-0.28****
t(r)	(6.60)	(-5.20)	(-4.87)	(-1.98)	(6.59)	(-4.89)	(-4.45)	(-2.40)
c	0.09***	**-0.28*****	**-0.29*****	**-0.28****	0.09***	**-0.36*****	**-0.37*****	**-0.34****
t(c)	(3.06)	(-3.73)	(-3.93)	(-2.43)	(3.18)	(-4.61)	(-4.61)	(-2.54)
q-factor								
α	0.08**	0.07	-0.00	**-0.29***	0.07**	0.20*	0.07	**-0.45*****
t(α)	(2.45)	(0.69)	(-0.02)	(-1.95)	(2.07)	(1.66)	(0.66)	(-2.85)
b	1.00***	**1.15*****	**1.14*****	**1.15*****	1.00***	**1.13*****	**1.14*****	**1.21*****
t(b)	(101.74)	(41.55)	(42.58)	(27.89)	(103.72)	(37.13)	(38.33)	(25.81)
s	-0.08***	**0.21*****	**0.25*****	**0.42*****	-0.07***	**0.26*****	**0.30*****	**0.45*****
t(s)	(-6.04)	(5.29)	(7.12)	(7.63)	(-5.41)	(5.49)	(7.49)	(6.51)
b^{ROE}	0.05***	**-0.12*****	**-0.13*****	**-0.14**	0.05***	**-0.19*****	**-0.19*****	**-0.16**
$t(b^{ROE})$	(2.67)	(-2.90)	(-2.80)	(-1.57)	(3.09)	(-3.19)	(-3.17)	(-1.55)
$b^{I/A}$	-0.01	**-0.58*****	**-0.61*****	**-0.64*****	-0.02	**-0.73*****	**-0.74*****	**-0.75*****
$t(b^{I/A})$	(-0.68)	(-9.70)	(-10.05)	(-6.13)	(-1.21)	(-10.58)	(-10.58)	(-6.39)

Panel B: Recency of equity issues, 1975-2015 (Number of months = 492)

Equity issues (t,t-1,t-2)	(0,0,0)	(0,0,1)	(0,1,0)	(1,0,0)	(0,1,1)	(1,0,1)	(1,1,0)	(1,1,1)	(1,1,0) or (1,1,1)
Market model									
α	0.07**	-0.02	-0.15	**-0.32****	**-0.51****	**-0.46****	**-0.94*****	**-1.08*****	**-1.03*****
t(α)	(2.05)	(-0.14)	(-1.06)	(-2.35)	(-2.11)	(-1.99)	(-4.26)	(-4.22)	(-5.16)
b	0.98***	**1.27*****	**1.23*****	**1.28*****	**1.22*****	**1.26*****	**1.38*****	**1.28*****	**1.36*****
t(b)	(106.02)	(27.25)	(32.38)	(29.40)	(19.56)	(22.92)	(23.87)	(15.78)	(23.78)
3-factor									
α	0.10***	0.04	-0.09	**-0.23***	**-0.46***	**-0.34***	**-0.79*****	**-0.91*****	**-0.88*****
t(α)	(3.15)	(0.26)	(-0.72)	(-1.83)	(-1.91)	(-1.67)	(-3.83)	(-3.69)	(-4.77)
b	0.98***	**1.18*****	**1.11*****	**1.19*****	**1.14*****	**1.08*****	**1.22*****	**1.12*****	**1.18*****
t(b)	(95.08)	(26.09)	(29.39)	(29.23)	(18.20)	(21.71)	(22.19)	(14.09)	(22.11)
s	-0.07***	**0.27*****	**0.44*****	**0.24*****	**0.41*****	**0.72*****	**0.56*****	**0.62*****	**0.58*****
t(s)	(-3.59)	(4.23)	(6.78)	(4.37)	(5.07)	(6.17)	(6.65)	(4.56)	(6.06)
h	-0.05***	**-0.24*****	**-0.29*****	**-0.29*****	-0.11	**-0.36*****	**-0.41*****	**-0.39*****	**-0.45*****
t(h)	(-3.13)	(-2.78)	(-5.14)	(-4.13)	(-0.99)	(-3.39)	(-5.24)	(-3.84)	(-6.37)
5-factor									
α	0.04	0.17	0.10	-0.10	-0.28	-0.30	**-0.52****	**-0.66****	**-0.65*****
t(α)	(1.13)	(1.05)	(0.85)	(-0.73)	(-1.18)	(-1.42)	(-2.41)	(-2.56)	(-3.38)
b	1.00***	**1.15*****	1.05***	**1.14*****	1.08***	1.08***	**1.12*****	1.04***	**1.10*****
t(b)	(112.71)	(27.43)	(29.01)	(29.36)	(16.83)	(20.40)	(21.60)	(12.61)	(21.45)
s	-0.04**	**0.21****	**0.36*****	**0.24*****	**0.37*****	**0.68*****	**0.51*****	**0.49*****	**0.53*****
t(s)	(-2.31)	(2.52)	(6.75)	(3.94)	(4.52)	(7.06)	(5.69)	(4.03)	(5.92)
h	-0.09***	-0.20*	-0.21***	-0.14	-0.01	**-0.53*****	-0.23**	-0.30**	**-0.32*****
t(h)	(-4.69)	(-1.84)	(-2.79)	(-1.51)	(-0.10)	(-4.50)	(-2.42)	(-2.42)	(-3.34)
r	0.11***	**-0.24****	**-0.29*****	**-0.10**	**-0.24**	**-0.16**	**-0.30*****	**-0.42****	**-0.28****
t(r)	(6.60)	(-2.33)	(-4.16)	(-1.09)	(-1.57)	(-1.28)	(-2.93)	(-2.47)	(-2.35)
c	0.09***	-0.11	**-0.27****	**-0.40*****	-0.29	0.21	**-0.51*****	-0.27	**-0.41*****
t(c)	(3.06)	(-0.71)	(-2.35)	(-2.63)	(-1.42)	(1.29)	(-3.30)	(-1.32)	(-3.01)
q-factor									
α	0.08**	0.26	0.15	-0.06	-0.13	-0.26	**-0.49****	**-0.39**	**-0.55*****
t(α)	(2.45)	(1.51)	(1.20)	(-0.43)	(-0.53)	(-1.10)	(-2.13)	(-1.58)	(-2.85)
b	1.00***	**1.16*****	**1.08*****	**1.16*****	1.08***	1.08***	**1.17*****	1.04***	**1.15*****
t(b)	(101.74)	(25.41)	(27.98)	(32.15)	(18.55)	(15.41)	(22.19)	(13.62)	(21.99)
s	-0.08***	**0.18*****	**0.36*****	**0.22*****	**0.33*****	**0.69*****	**0.50*****	**0.37*****	**0.47*****
t(s)	(-6.04)	(2.59)	(5.39)	(4.09)	(4.11)	(5.81)	(6.10)	(2.76)	(5.27)
b^{ROE}	0.05***	**-0.19****	**-0.13***	-0.00	**-0.22**	-0.03	**-0.17**	**-0.63*****	**-0.26****
$t(b^{ROE})$	(2.67)	(-2.25)	(-1.75)	(-0.03)	(-1.57)	(-0.21)	(-1.59)	(-5.72)	(-2.52)
$b^{I/A}$	-0.01	**-0.40*****	**-0.62*****	**-0.61*****	**-0.52*****	**-0.54*****	**-0.78*****	**-0.65*****	**-0.73*****
$t(b^{I/A})$	(-0.68)	(-3.26)	(-7.44)	(-5.63)	(-2.69)	(-3.52)	(-5.28)	(-4.42)	(-6.04)

Table V
Calendar-Time Factor Regression Value-Weighted Results: Debt Issues

See Appendices A and B and Table I for variable definitions. The dependent variable is the portfolio monthly VW percentage excess return. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels. A coefficient in bold is statistically different from the corresponding coefficient in the first column of the same panel (or subpanel, if available), at the 5% significance level.

Panel A: Frequency and size of debt issues, 1975-2015 (Number of months = 492)

	(A1) No. of all debt issues				(A2) No. of large debt issues			
	=0	=1	⩾1	⩾2	=0	=1	⩾1	⩾2
Market model								
α	0.07	-0.01	-0.05	**-0.16***	0.04	0.01	-0.05	**-0.33****
t(α)	(1.54)	(-0.18)	(-0.99)	(-1.71)	(1.03)	(0.17)	(-0.66)	(-2.36)
b	0.98***	**1.05*****	**1.08*****	**1.14*****	0.99***	**1.09*****	**1.11*****	**1.22*****
t(b)	(80.19)	(70.76)	(78.73)	(46.17)	(97.12)	(61.66)	(61.77)	(37.18)
3-factor								
α	0.12***	0.03	**-0.04**	**-0.21****	0.08**	0.05	-0.01	**-0.31****
t(α)	(3.39)	(0.47)	(-0.66)	(-2.22)	(2.39)	(0.85)	(-0.09)	(-2.34)
b	0.96***	**1.04*****	**1.07*****	**1.13*****	0.98***	**1.05*****	**1.07*****	**1.16*****
t(b)	(82.16)	(67.09)	(70.95)	(48.65)	(90.65)	(64.60)	(62.77)	(35.29)
s	-0.05**	-0.01	**0.02**	**0.13****	-0.05***	**0.09*****	**0.11*****	**0.23*****
t(s)	(-2.44)	(-0.28)	(0.78)	(2.43)	(-2.95)	(3.23)	(3.29)	(3.07)
h	-0.12***	-0.08***	-0.05	**0.06**	-0.08***	-0.13***	-0.13***	-0.12*
t(h)	(-5.53)	(-2.78)	(-1.54)	(1.33)	(-4.06)	(-3.68)	(-3.43)	(-1.74)
5-factor								
α	0.10***	**-0.04**	**-0.10***	**-0.25*****	0.04	-0.01	-0.06	**-0.35*****
t(α)	(2.68)	(-0.76)	(-1.80)	(-2.59)	(1.34)	(-0.14)	(-0.93)	(-2.69)
b	0.98***	**1.06*****	**1.08*****	**1.13*****	1.00***	**1.06*****	**1.08*****	**1.15*****
t(b)	(93.31)	(73.03)	(75.69)	(48.90)	(101.62)	(65.04)	(64.54)	(35.75)
s	-0.05**	**0.04***	**0.08*****	**0.20*****	-0.05**	**0.14*****	**0.16*****	**0.31*****
t(s)	(-2.07)	(1.68)	(3.36)	(5.15)	(-2.16)	(5.35)	(6.16)	(5.39)
h	-0.15***	-0.11***	-0.07**	**0.07**	-0.11***	-0.17***	-0.16***	-0.10
t(h)	(-4.81)	(-3.58)	(-2.18)	(1.53)	(-3.86)	(-4.63)	(-4.04)	(-1.31)
r	0.03	**0.14*****	**0.14*****	0.13**	0.05***	**0.14*****	**0.14*****	0.16*
t(r)	(1.23)	(4.63)	(5.06)	(2.42)	(2.65)	(4.33)	(4.19)	(1.88)
c	0.07	0.04	0.01	**-0.10**	0.07*	0.03	-0.01	**-0.16**
t(c)	(1.64)	(0.98)	(0.22)	(-1.40)	(1.81)	(0.65)	(-0.22)	(-1.49)
q-factor								
α	0.15***	**-0.00**	**-0.05**	**-0.18***	0.09**	0.02	-0.03	**-0.27****
t(α)	(3.08)	(-0.04)	(-1.00)	(-1.84)	(2.47)	(0.26)	(-0.41)	(-2.20)
b	0.97***	**1.06*****	**1.08*****	**1.12*****	0.99***	**1.07*****	**1.08*****	**1.16*****
t(b)	(76.29)	(69.87)	(78.96)	(49.61)	(90.54)	(60.10)	(61.16)	(35.67)
s	-0.08***	**-0.01**	**0.02**	**0.13****	-0.08***	**0.08*****	**0.10*****	**0.23*****
t(s)	(-4.41)	(-0.63)	(0.96)	(2.51)	(-5.28)	(3.97)	(4.47)	(3.44)
b^{ROE}	0.00	0.08***	0.07***	0.03	0.01	**0.10*****	0.10***	0.06
$t(b^{ROE})$	(0.11)	(2.67)	(2.73)	(0.78)	(0.59)	(2.84)	(2.71)	(0.91)
$b^{I/A}$	-0.10***	-0.08**	-0.07**	-0.04	-0.06**	**-0.16*****	**-0.19*****	**-0.28*****
$t(b^{I/A})$	(-3.26)	(-2.37)	(-2.48)	(-0.58)	(-2.52)	(-4.14)	(-5.02)	(-2.94)

Panel B: Recency of debt issues, 1975-2015 (Number of months = 492)

Debt issues (t,t-1,t-2)	(0,0,0)	(0,0,1)	(0,1,0)	(1,0,0)	(0,1,1)	(1,0,1)	(1,1,0)	(1,1,1)	(1,1,0) or (1,1,1)
Market model									
α	0.07	0.03	0.06	**-0.11**	-0.04	**-0.20**	**-0.22***	**-0.28**	**-0.24****
t(α)	(1.54)	(0.43)	(0.77)	(-1.40)	(-0.27)	(-1.58)	(-1.88)	(-1.62)	(-2.09)
b	0.98***	**1.07*****	**1.07*****	**1.04*****	**1.16*****	**1.16*****	**1.05*****	**1.31*****	**1.14*****
t(b)	(80.19)	(51.78)	(47.46)	(46.21)	(24.97)	(32.21)	(34.11)	(28.14)	(39.92)
3-factor									
α	0.12***	0.06	0.08	**-0.07**	-0.08	**-0.22***	**-0.30****	**-0.34****	**-0.31*****
t(α)	(3.39)	(0.78)	(0.95)	(-0.85)	(-0.54)	(-1.75)	(-2.49)	(-2.03)	(-2.75)
b	0.96***	**1.05*****	**1.07*****	**1.03*****	**1.14*****	**1.14*****	**1.06*****	**1.27*****	**1.14*****
t(b)	(82.16)	(53.57)	(42.81)	(44.81)	(24.60)	(30.45)	(33.91)	(27.16)	(42.02)
s	-0.05**	**0.06****	-0.02	-0.02	**0.17****	**0.14***	0.09	**0.30*****	**0.16****
t(s)	(-2.44)	(2.40)	(-0.35)	(-0.39)	(2.53)	(1.94)	(1.27)	(5.05)	(2.54)
h	-0.12***	-0.08**	-0.03	-0.10**	**0.03**	0.00	**0.15****	**0.06**	**0.12****
t(h)	(-5.53)	(-2.34)	(-0.68)	(-2.35)	(0.57)	(0.00)	(2.54)	(0.72)	(2.10)
5-factor									
α	0.10***	0.01	-0.02	**-0.14***	**-0.13**	**-0.23***	**-0.36*****	**-0.38****	**-0.36*****
t(α)	(2.68)	(0.15)	(-0.23)	(-1.75)	(-0.94)	(-1.83)	(-2.81)	(-2.25)	(-3.05)
b	0.98***	**1.06*****	**1.09*****	**1.04*****	**1.14*****	**1.13*****	**1.06*****	**1.27*****	**1.13*****
t(b)	(93.31)	(50.92)	(45.16)	(47.69)	(24.22)	(32.29)	(32.81)	(28.00)	(41.78)
s	-0.05**	0.09***	0.04	0.05	**0.24*****	**0.19*****	**0.18*****	**0.38*****	**0.25*****
t(s)	(-2.07)	(3.23)	(0.98)	(1.26)	(4.32)	(2.62)	(3.31)	(6.28)	(5.81)
h	-0.15***	-0.11***	-0.09	-0.11**	**0.01**	**0.02**	**0.18*****	**0.05**	**0.14*****
t(h)	(-4.81)	(-3.06)	(-1.65)	(-2.36)	(0.16)	(0.19)	(2.80)	(0.53)	(2.66)
r	0.03	0.10*	**0.17*****	**0.17*****	0.15**	0.07	**0.20*****	0.15	**0.19*****
t(r)	(1.23)	(1.94)	(3.66)	(3.98)	(1.99)	(0.88)	(3.14)	(1.56)	(3.25)
c	0.07	0.02	0.10	0.00	-0.03	-0.10	-0.15	-0.12	**-0.16***
t(c)	(1.64)	(0.30)	(1.63)	(0.04)	(-0.38)	(-0.85)	(-1.52)	(-0.80)	(-1.83)
q-factor									
α	0.15***	0.05	0.06	**-0.13**	-0.09	-0.10	**-0.30****	-0.22	**-0.28****
t(α)	(3.08)	(0.53)	(0.76)	(-1.45)	(-0.63)	(-0.82)	(-2.19)	(-1.23)	(-2.24)
b	0.97***	**1.06*****	**1.08*****	**1.05*****	**1.14*****	**1.12*****	1.06***	**1.26*****	**1.13*****
t(b)	(76.29)	(46.20)	(47.20)	(47.73)	(24.78)	(33.56)	(30.19)	(29.60)	(39.12)
s	-0.08***	**0.06****	-0.03	-0.00	**0.17*****	**0.11***	**0.11**	**0.26*****	**0.16*****
t(s)	(-4.41)	(2.04)	(-0.70)	(-0.06)	(2.68)	(1.77)	(1.46)	(3.84)	(2.62)
b^{ROE}	0.00	0.07	0.05	0.13***	0.07	-0.04	0.08	-0.10	0.04
$t(b^{ROE})$	(0.11)	(1.35)	(1.17)	(2.65)	(1.42)	(-0.65)	(1.21)	(-0.94)	(0.71)
$b^{I/A}$	-0.10***	-0.12*	-0.03	-0.10*	-0.04	-0.17*	0.04	-0.08	-0.01
$t(b^{I/A})$	(-3.26)	(-1.80)	(-0.41)	(-1.79)	(-0.55)	(-1.69)	(0.39)	(-0.62)	(-0.13)

Table VI

Calendar-Time Factor Regression VW Results: Equity and Debt Issues Combined

See Appendices A and B and Table I for variable definitions and a description of the factor models. See Table I for the definition of issuer or large issuer. The number of issues represents the number of the last three fiscal years in which a debt or equity issue occurred, with a maximum of 6 potential issues. The dependent variable is the monthly percentage value-weighted portfolio return minus the risk free rate. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels. A coefficient in bold is statistically different from the corresponding coefficient in the first column of the same subpanel at the 5% significance level.

Panel A: One-way sort by number of security issues, 1975-2015 (Number of months = 492)

	(A1) No. of all issues					(A2) No. of large issues				
	=0	=1	=2	≥3	≥4	=0	=1	=2	≥3	≥4
Market model										
α	0.10**	0.01	**-0.13**	**-0.44*** **	**-0.64*** **	0.06	0.06	-0.18	**-0.75*** **	**-1.03*** **
t(α)	(2.26)	(0.11)	(-1.61)	(-3.23)	(-3.02)	(1.52)	(0.84)	(-1.52)	(-4.47)	(-4.13)
b	0.95***	**1.06*** **	**1.17*** **	**1.23*** **	**1.32*** **	0.97***	**1.09*** **	**1.26*** **	**1.34*** **	**1.38*** **
t(b)	(89.23)	(75.56)	(50.84)	(37.77)	(28.92)	(101.57)	(62.69)	(36.33)	(34.84)	(22.10)
3-factor										
α	0.15***	**0.04**	**-0.14***	**-0.43*** **	**-0.60*** **	0.09***	0.10	-0.13	**-0.70*** **	**-0.99*** **
t(α)	(3.99)	(0.72)	(-1.73)	(-3.22)	(-3.07)	(2.73)	(1.64)	(-1.12)	(-4.53)	(-4.11)
b	0.95***	**1.04*** **	**1.14*** **	**1.16*** **	**1.22*** **	0.98***	**1.04*** **	**1.18*** **	**1.23*** **	**1.29*** **
t(b)	(85.20)	(78.46)	(48.28)	(32.55)	(24.74)	(91.33)	(67.43)	(32.97)	(29.06)	(19.05)
s	-0.09***	**0.04**	**0.15*** **	**0.28*** **	**0.42*** **	-0.09***	**0.15*** **	**0.26*** **	**0.40*** **	**0.41*** **
t(s)	(-4.46)	(1.64)	(3.32)	(4.11)	(3.84)	(-4.32)	(5.74)	(4.04)	(4.34)	(3.29)
h	-0.09***	-0.09***	-0.02	-0.11*	-0.22**	-0.06***	**-0.15*** **	**-0.22*** **	**-0.26*** **	-0.16
t(h)	(-4.55)	(-3.09)	(-0.53)	(-1.65)	(-2.47)	(-2.98)	(-4.90)	(-3.39)	(-3.58)	(-1.47)
5-factor										
α	0.09**	-0.01	**-0.10**	**-0.43*** **	**-0.55*** **	0.03	0.06	-0.03	**-0.64*** **	**-0.88*** **
t(α)	(2.54)	(-0.22)	(-1.16)	(-3.32)	(-2.89)	(1.04)	(0.98)	(-0.22)	(-4.39)	(-3.77)
b	0.97***	**1.05*** **	**1.12*** **	**1.14*** **	**1.18*** **	0.99***	**1.05*** **	**1.13*** **	**1.20*** **	**1.24*** **
t(b)	(96.12)	(79.49)	(49.74)	(32.37)	(25.78)	(104.31)	(64.95)	(36.54)	(29.00)	(18.12)
s	-0.08***	**0.06*** **	**0.16*** **	**0.36*** **	**0.50*** **	-0.07***	**0.17*** **	**0.27*** **	**0.45*** **	**0.41*** **
t(s)	(-3.73)	(2.93)	(3.81)	(6.75)	(5.88)	(-3.47)	(7.14)	(4.23)	(6.01)	(3.65)
h	-0.13***	**-0.13*** **	0.02	-0.07	-0.10	-0.09***	**-0.20*** **	-0.10	-0.18*	-0.11
t(h)	(-4.73)	(-4.28)	(0.45)	(-0.90)	(-0.86)	(-3.69)	(-5.68)	(-1.23)	(-1.96)	(-0.69)
r	0.08***	0.08***	**-0.03**	0.11	0.08	0.09***	0.06	**-0.07**	0.03	-0.11
t(r)	(3.46)	(2.61)	(-0.62)	(1.40)	(0.62)	(4.50)	(1.53)	(-0.93)	(0.24)	(-0.62)
c	0.10**	0.06	**-0.15** **	**-0.21***	**-0.41** **	0.09***	0.07	**-0.33*** **	**-0.31** **	-0.21
t(c)	(2.37)	(1.59)	(-2.29)	(-1.92)	(-2.50)	(2.61)	(1.39)	(-3.47)	(-2.39)	(-0.89)
q-factor										
α	0.14***	0.03	-0.04	**-0.33*** **	**-0.36***	0.08**	0.10	0.04	**-0.53*** **	**-0.69*** **
t(α)	(3.05)	(0.57)	(-0.48)	(-2.61)	(-1.87)	(2.22)	(1.48)	(0.33)	(-3.61)	(-2.97)
b	0.96***	**1.05*** **	**1.13*** **	**1.15*** **	**1.19*** **	0.99***	**1.05*** **	**1.15*** **	**1.21*** **	**1.26*** **
t(b)	(80.65)	(72.80)	(53.20)	(33.95)	(25.78)	(92.51)	(51.84)	(37.82)	(29.77)	(20.05)
s	-0.11***	**0.02**	**0.11*** **	**0.27*** **	**0.36*** **	-0.10***	**0.13*** **	**0.21*** **	**0.36*** **	**0.30** **
t(s)	(-6.93)	(1.06)	(3.10)	(4.22)	(3.36)	(-6.61)	(3.91)	(3.95)	(4.43)	(2.39)
b^{ROE}	0.03	0.05*	-0.03	0.01	-0.12	0.04*	0.05	-0.05	-0.04	**-0.27** **
$t(b^{ROE})$	(1.36)	(1.73)	(-0.76)	(0.13)	(-1.18)	(1.79)	(1.39)	(-0.84)	(-0.40)	(-1.98)
$b^{I/A}$	-0.04	-0.09**	**-0.16*** **	**-0.35*** **	**-0.58*** **	-0.01	**-0.18*** **	**-0.48*** **	**-0.57*** **	**-0.37** **
$t(b^{I/A})$	(-1.42)	(-2.53)	(-3.38)	(-3.44)	(-4.30)	(-0.58)	(-4.65)	(-7.29)	(-5.42)	(-2.14)

Panel B: Two-way sort by number of types of securities and number of issues, 1975-2015 (492 months)

	B1			B2			B3		
No. of types of securities	0	1	2		1			2	
No. of issues	0	1-3	2-6	1	2	3	2	3	≥4
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Market model									
α	0.10**	-0.02	**-0.36*** **	0.01	-0.07	-0.24	-0.14	-0.47***	**-0.64*** **
t(α)	(2.26)	(-0.31)	(-2.94)	(0.11)	(-0.70)	(-1.50)	(-0.97)	(-2.94)	(-3.02)
b	0.95***	**1.08*** **	**1.24*** **	1.06***	**1.13*** **	**1.21*** **	1.26***	1.20***	1.32***
t(b)	(89.23)	(82.46)	(40.80)	(75.56)	(35.37)	(25.31)	(33.17)	(28.51)	(28.92)
3-factor									
α	0.15***	**-0.00**	**-0.29** **	0.04	-0.13	**-0.35** **	-0.02	**-0.45*** **	**-0.60*** **
t(α)	(3.99)	(-0.07)	(-2.40)	(0.72)	(-1.46)	(-2.25)	(-0.14)	(-2.78)	(-3.07)
b	0.95***	**1.06*** **	**1.17*** **	1.04***	**1.12*** **	**1.20*** **	1.18***	1.12***	1.22***
t(b)	(85.20)	(81.88)	(33.92)	(78.46)	(39.06)	(26.51)	(30.98)	(26.38)	(24.74)
s	-0.09***	**0.06*** **	**0.21*** **	0.04	**0.19*** **	**0.24*** **	0.14*	**0.30*** **	**0.42*** **
t(s)	(-4.46)	(2.95)	(3.06)	(1.64)	(3.76)	(3.97)	(1.71)	(3.99)	(3.84)
h	-0.09***	-0.05*	**-0.24*** **	-0.09***	**0.10***	**0.18** **	-0.32***	-0.16*	-0.22**
t(h)	(-4.55)	(-1.94)	(-4.33)	(-3.09)	(1.82)	(2.36)	(-4.87)	(-1.96)	(-2.47)
5-factor									
α	0.09**	**-0.04**	**-0.21** *	-0.01	-0.13	**-0.46*** **	0.15	**-0.44*** **	**-0.55*** **
t(α)	(2.54)	(-0.84)	(-1.76)	(-0.22)	(-1.31)	(-2.90)	(0.91)	(-2.79)	(-2.89)
b	0.97***	**1.07*** **	**1.13*** **	1.05***	**1.11*** **	**1.22*** **	1.12***	1.10***	1.18***
t(b)	(96.12)	(83.70)	(34.93)	(79.49)	(43.00)	(26.10)	(29.01)	(24.54)	(25.78)
s	-0.08***	**0.09*** **	**0.24*** **	0.06***	**0.21*** **	**0.32*** **	0.10	**0.37*** **	**0.50*** **
t(s)	(-3.73)	(4.18)	(4.30)	(2.93)	(3.79)	(5.62)	(1.27)	(5.56)	(5.88)
h	-0.13***	-0.08***	-0.13	-0.13***	**0.10**	**0.07**	-0.15	-0.12	-0.10
t(h)	(-4.73)	(-2.93)	(-1.57)	(-4.28)	(1.44)	(0.88)	(-1.55)	(-1.17)	(-0.86)
r	0.08***	0.07***	-0.02	0.08***	0.01	0.18**	-0.19*	**0.10**	0.08
t(r)	(3.46)	(2.83)	(-0.25)	(2.61)	(0.28)	(2.42)	(-1.79)	(1.10)	(0.62)
c	0.10**	0.04	**-0.34*** **	0.06	-0.06	0.15	-0.41***	-0.24	-0.41**
t(c)	(2.37)	(1.21)	(-3.77)	(1.59)	(-0.73)	(1.20)	(-3.06)	(-1.61)	(-2.50)
q-factor									
α	0.14***	**0.01**	**-0.14**	0.03	-0.05	**-0.36** **	0.20	**-0.38** **	**-0.36** *
t(α)	(3.05)	(0.11)	(-1.19)	(0.57)	(-0.47)	(-2.14)	(1.12)	(-2.45)	(-1.87)
b	0.96***	**1.06*** **	**1.15*** **	1.05***	**1.11*** **	**1.21*** **	1.16***	1.10***	1.19***
t(b)	(80.65)	(87.51)	(37.49)	(72.80)	(47.41)	(26.56)	(29.96)	(26.06)	(25.78)
s	-0.11***	**0.05*** **	**0.17*** **	0.02	**0.16*** **	**0.24*** **	0.05	**0.32*** **	**0.36*** **
t(s)	(-6.93)	(2.70)	(2.87)	(1.06)	(3.71)	(3.66)	(0.72)	(4.83)	(3.36)
b^{ROE}	0.03	0.03	-0.01	0.05*	-0.05	-0.03	-0.10	0.10	-0.12
$t(b^{ROE})$	(1.36)	(1.35)	(-0.18)	(1.73)	(-0.94)	(-0.30)	(-1.19)	(1.20)	(-1.18)
$b^{I/A}$	-0.04	-0.07***	**-0.52*** **	-0.09**	0.00	**0.21** *	-0.59***	-0.47***	-0.58***
$t(b^{I/A})$	(-1.42)	(-2.60)	(-7.67)	(-2.53)	(0.04)	(1.67)	(-6.15)	(-3.98)	(-4.30)

Panel C: Two-way sort by number of issues and type of security, 1975-2015 (492 months)

	C1		C2			C3			
No. of issues	1	1	2	2	2	3	3	3	3
No. of equity issues	0	1	0	1	2	0	1	2	3
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Market model									
α	0.06	-0.22	-0.04	-0.14	-0.25	-0.12	-0.37**	**-0.73*** **	**-1.18*** **
t(α)	(1.03)	(-1.31)	(-0.38)	(-0.97)	(-0.93)	(-0.62)	(-1.99)	(-3.50)	(-3.12)
b	1.02***	**1.32*** **	1.10***	**1.26*** **	**1.43*** **	1.17***	1.18***	1.29***	1.50***
t(b)	(60.83)	(24.33)	(31.69)	(33.17)	(19.83)	(19.62)	(25.44)	(23.60)	(12.08)
3-factor									
α	0.08	-0.12	-0.13	-0.02	0.02	-0.26	-0.36*	-0.64***	-1.00***
t(α)	(1.33)	(-0.85)	(-1.38)	(-0.14)	(0.08)	(-1.48)	(-1.96)	(-3.15)	(-2.98)
b	1.02***	**1.17*** **	1.11***	1.18***	1.18***	1.19***	1.11***	1.17***	1.28***
t(b)	(61.66)	**(25.32)**	(36.49)	(30.98)	(18.53)	(22.81)	(23.15)	(21.06)	(13.05)
s	-0.04	**0.49*** **	0.11*	0.14*	**0.93*** **	0.18***	0.28***	**0.56*** **	**0.93*** **
t(s)	(-1.58)	**(5.79)**	(1.81)	(1.71)	(5.59)	(2.88)	(3.17)	(6.09)	(7.52)
h	-0.03	**-0.39*** **	0.18***	**-0.32*** **	**-0.63*** **	0.27***	**-0.11**	**-0.24** **	**-0.60*** **
t(h)	(-1.07)	**(-4.73)**	(2.91)	(-4.87)	(-6.17)	(2.76)	(-1.25)	(-2.14)	(-4.21)
5-factor									
α	-0.03	0.18	-0.16	0.15	**0.46***	-0.44**	-0.36**	-0.58***	-0.61*
t(α)	(-0.53)	(1.41)	(-1.63)	(0.91)	(1.85)	(-2.47)	(-2.04)	(-2.62)	(-1.83)
b	1.05***	1.09***	1.11***	1.12***	1.06***	1.23***	1.09***	1.15***	1.07***
t(b)	(70.42)	(29.44)	(40.57)	(29.01)	(18.39)	(23.20)	(21.15)	(20.03)	(9.06)
s	0.02	**0.31*** **	0.17***	0.10	**0.63*** **	0.32***	0.37***	0.54***	**0.75*** **
t(s)	(0.74)	**(5.14)**	(2.83)	(1.27)	(5.78)	(5.20)	(5.08)	(5.69)	(5.13)
h	-0.10***	**-0.31*** **	0.18**	**-0.15**	**-0.58*** **	0.14	-0.02	**-0.32*** **	**-0.42*** **
t(h)	(-3.32)	**(-3.20)**	(2.42)	(-1.55)	(-4.97)	(1.57)	(-0.20)	(-2.63)	(-2.73)
r	0.19***	**-0.57*** **	0.11*	**-0.19***	**-0.86*** **	0.33***	0.14	**-0.14**	**-0.67*** **
t(r)	(5.91)	**(-7.37)**	(1.75)	(-1.79)	(-5.72)	(3.51)	(1.54)	(-1.14)	(-4.92)
c	0.12***	**-0.21** **	-0.07	**-0.41*** **	-0.18	0.17	**-0.32***	0.04	-0.36
t(c)	(2.80)	**(-1.97)**	(-0.78)	(-3.06)	(-1.06)	(1.19)	(-1.89)	(0.22)	(-1.24)
q-factor									
α	0.01	0.26	-0.08	0.20	**0.53***	-0.33*	-0.29*	-0.54**	-0.70*
t(α)	(0.14)	(1.61)	(-0.64)	(1.12)	(1.83)	(-1.75)	(-1.71)	(-2.21)	(-1.81)
b	1.04***	1.12***	1.11***	1.16***	1.09***	1.20***	1.09***	1.16***	1.12***
t(b)	(67.38)	(22.49)	(40.66)	(29.96)	(13.79)	(23.03)	(23.36)	(17.11)	(9.26)
s	-0.03*	**0.34*** **	0.09	0.05	**0.77*** **	0.22***	0.30***	**0.54*** **	**0.88*** **
t(s)	(-1.69)	**(3.81)**	(1.54)	(0.72)	(4.15)	(2.83)	(3.80)	(5.25)	(7.81)
b^{ROE}	0.11***	**-0.33*** **	-0.03	-0.10	**-0.43*** **	0.05	0.13	-0.03	-0.23
$t(b^{ROE})$	(3.22)	**(-3.99)**	(-0.41)	(-1.19)	(-2.67)	(0.40)	(1.57)	(-0.25)	(-0.91)
$b^{I/A}$	0.01	**-0.70*** **	0.12	**-0.59*** **	**-1.14*** **	0.32**	**-0.46*** **	**-0.42** **	**-1.13*** **
$t(b^{I/A})$	(0.39)	**(-6.29)**	(1.56)	(-6.15)	(-6.33)	(1.98)	(-3.56)	(-2.42)	(-4.46)

Table VII
Calendar-Time Factor Regression Value-Weighted Results: Subperiod Analysis

See Appendices A and B and Table I for variable definitions. The dependent variable is the monthly percentage value-weighted portfolio return minus the risk free rate. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

	(1) 1975-1995 (Number of months = 252)					(2) 1996-2015 (Number of months = 240)				
	No. of equity issues≥2	No. of debt issues≥2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of large issues≥3	No. of equity issues≥2	No. of debt issues≥2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of large issues≥3
Market model										
α	-0.51***	-0.09	-0.83***	-0.23*	-0.75***	-0.68**	-0.25*	-1.20***	-0.24	-0.76***
t(α)	(-2.83)	(-0.73)	(-3.01)	(-1.79)	(-3.81)	(-2.54)	(-1.69)	(-4.32)	(-1.34)	(-2.76)
b	1.30***	1.18***	1.24***	1.19***	1.37***	1.32***	1.10***	1.46***	1.10***	1.32***
t(b)	(24.98)	(44.36)	(16.04)	(42.32)	(31.63)	(20.37)	(26.71)	(18.69)	(21.61)	(20.55)
3-factor										
α	-0.38**	-0.07	-0.45*	-0.21*	-0.55***	-0.65***	-0.30**	-1.14***	-0.32*	-0.76***
t(α)	(-2.10)	(-0.61)	(-1.71)	(-1.79)	(-3.21)	(-2.73)	(-2.09)	(-4.85)	(-1.82)	(-2.97)
b	1.12***	1.11***	0.96***	1.10***	1.18***	1.21***	1.10***	1.32***	1.11***	1.24***
t(b)	(22.28)	(41.31)	(12.08)	(34.88)	(26.30)	(22.26)	(30.31)	(20.97)	(28.09)	(18.52)
s	0.54***	0.25***	0.66***	0.31***	0.50***	0.50***	0.10	0.55***	0.12*	0.40***
t(s)	(5.28)	(5.32)	(4.23)	(5.71)	(6.44)	(6.06)	(1.62)	(4.99)	(1.91)	(3.41)
h	-0.39***	-0.11**	-0.63***	-0.13**	-0.50***	-0.31***	0.16***	-0.42***	0.26***	-0.12
t(h)	(-3.66)	(-2.38)	(-4.80)	(-2.27)	(-5.88)	(-3.36)	(2.78)	(-5.07)	(4.39)	(-1.31)
5-factor										
α	-0.26	-0.09	-0.37	-0.20	-0.40**	-0.45*	-0.27*	-0.86***	-0.30	-0.63***
t(α)	(-1.36)	(-0.72)	(-1.14)	(-1.48)	(-2.12)	(-1.96)	(-1.75)	(-3.65)	(-1.56)	(-2.61)
b	1.11***	1.11***	0.97***	1.10***	1.16***	1.10***	1.08***	1.17***	1.09***	1.16***
t(b)	(24.74)	(44.28)	(12.38)	(33.03)	(26.15)	(19.20)	(24.28)	(17.85)	(24.32)	(15.58)
s	0.50***	0.26***	0.61***	0.31***	0.45***	0.47***	0.13**	0.53***	0.19***	0.43***
t(s)	(4.99)	(5.88)	(3.78)	(5.77)	(5.71)	(5.49)	(2.46)	(5.32)	(3.10)	(4.01)
h	-0.41***	-0.10	-0.89***	-0.14*	-0.49***	-0.17	0.20***	-0.17	0.32***	0.00
t(h)	(-2.76)	(-1.27)	(-5.51)	(-1.96)	(-3.87)	(-1.32)	(2.61)	(-1.44)	(4.46)	(0.01)
r	-0.19	0.06	-0.25	-0.02	-0.22	-0.22*	0.01	-0.25*	0.08	-0.07
t(r)	(-1.16)	(0.65)	(-1.09)	(-0.18)	(-1.64)	(-1.95)	(0.19)	(-1.90)	(0.89)	(-0.45)
c	-0.13	-0.02	0.35	-0.03	-0.20	-0.36**	-0.15*	-0.62***	-0.25**	-0.41**
t(c)	(-0.62)	(-0.16)	(1.24)	(-0.27)	(-1.11)	(-2.46)	(-1.68)	(-4.51)	(-2.24)	(-2.39)
q-factor										
α	-0.34	0.13	-0.77*	-0.02	-0.57***	-0.36	-0.30**	-0.72***	-0.32*	-0.48**
t(α)	(-1.53)	(1.00)	(-1.93)	(-0.17)	(-3.05)	(-1.57)	(-2.16)	(-3.27)	(-1.74)	(-2.09)
b	1.16***	1.13***	1.06***	1.11***	1.18***	1.08***	1.12***	1.14***	1.12***	1.12***
t(b)	(23.54)	(51.78)	(13.74)	(36.01)	(28.00)	(16.82)	(27.61)	(17.27)	(23.16)	(15.15)
s	0.43***	0.17***	0.68***	0.23***	0.45***	0.40***	0.09	0.38***	0.11	0.28**
t(s)	(4.33)	(4.49)	(4.31)	(4.11)	(5.73)	(5.61)	(1.34)	(3.71)	(1.35)	(2.37)
b^{ROE}	0.04	-0.10*	0.25	-0.07	0.23*	-0.28**	0.04	-0.45***	0.03	-0.31***
$t(b^{ROE})$	(0.28)	(-1.84)	(1.05)	(-1.05)	(1.86)	(-2.31)	(0.74)	(-4.48)	(0.38)	(-2.60)
$b^{I/A}$	-0.49***	-0.30***	-0.36	-0.36***	-0.74***	-0.68***	0.05	-0.81***	0.13	-0.43***
$t(b^{I/A})$	(-3.00)	(-4.42)	(-1.50)	(-4.15)	(-6.00)	(-4.59)	(0.56)	(-6.02)	(1.14)	(-3.00)

Table VIII

Fama-MacBeth Regressions of Stock Returns (Number of Months = 492, from 1975-2015)

Cross-sectional equally weighted regressions are estimated each month. The dependent variable is the monthly return (in percent) on a firm's stock. This table reports the time-series averages of the monthly coefficients and the corresponding Newey-West t-statistics that correct for first, second, and third order autocorrelations. The control variables have values from fiscal year t ending at least three months before the month of the regression. Four additional tables are included in the Internet Appendix as Panels B-E of Table IA-14. See Appendix A and Table I for variable definitions.

	(1)	(2)	(3)		(4)	(5)	(6)
Intercept	2.13***	2.31***	2.32***	Intercept	2.33***	2.34***	2.35***
	(4.84)	(5.46)	(5.48)		(5.53)	(5.57)	(5.57)
=1 if no. of issues = 1,		-0.11***		No. of issues	-0.29***		
=0 otherwise		(-2.80)			(-8.70)		
=1 if no. of issues = 2,		-0.37***		No. of types	0.13***		
=0 otherwise		(-5.86)			(2.65)		
=1 if no. of issues = 3,		-0.58***		=1 if no. of debt issues		-0.16***	
=0 otherwise		(-5.33)		≥1, =0 otherwise		(-3.80)	
=1 if no. of issues ≥ 4,		-1.15***		=1 if no. of equity issues		-0.40***	
=0 otherwise		(-7.97)		≥1, =0 otherwise		(-5.20)	
=1 if no. of types=1 and no.			-0.11***	=1 if no. of debt issues			-0.09**
of issues =1, =0 otherwise			(-2.81)	= 1, =0 otherwise			(-2.18)
=1 if no. of types=1 and no.			-0.34***	=1 if no. of debt issues			-0.30***
of issues =2, =0 otherwise			(-5.30)	= 2, =0 otherwise			(-4.40)
=1 if no. of types=1 and no.			-0.72***	=1 if no. of debt issues			-0.62***
of issues =3, =0 otherwise			(-6.74)	= 3, =0 otherwise			(-5.34)
=1 if no. of types=2 and no.			-0.45***	=1 if no. of equity issues			-0.30***
of issues =2, =0 otherwise			(-5.09)	= 1, =0 otherwise			(-4.01)
=1 if no. of types=2 and no.			-0.51***	=1 if no. of equity issues			-0.64***
of issues =3, =0 otherwise			(-3.69)	= 2, =0 otherwise			(-5.62)
=1 if no. of types=2 and no.			-1.15***	=1 if no. of equity issues			-1.25***
of issues ≥4, =0 otherwise			(-7.99)	= 3,=0 otherwise			(-6.23)
Tobin's Q_t	-0.29***	-0.28***	-0.28***	Tobin's Q_t	-0.28***	-0.28***	-0.27***
	(-6.50)	(-6.30)	(-6.35)		(-6.26)	(-6.35)	(-6.14)
$Ln(Sales)_t$	-0.08**	-0.09***	-0.09***	$Ln(Sales)_t$	-0.09***	-0.09***	-0.09***
	(-2.56)	(-2.76)	(-2.78)		(-2.74)	(-2.92)	(-2.97)
$OIBD_t$	1.55***	1.19***	1.17***	$OIBD_t$	1.18***	1.29***	1.09***
	(4.44)	(3.62)	(3.55)		(3.57)	(3.90)	(3.30)
$Investment_t$	-1.59***	-1.07***	-1.07***	$Investment_t$	-1.08***	-1.26***	-1.06***
	(-9.19)	(-6.86)	(-6.87)		(-6.89)	(-8.06)	(-6.90)
$R\&D_t$	3.68***	3.53***	3.52***	$R\&D_t$	3.52***	3.70***	3.67***
	(4.24)	(4.06)	(4.05)		(4.05)	(4.31)	(4.27)
$Return_t$	-0.17	-0.17	-0.17	$Return_t$	-0.17	-0.17	-0.17
	(-1.46)	(-1.55)	(-1.55)		(-1.54)	(-1.53)	(-1.54)
Average Adjusted R^2	2.45%	2.63%	2.67%	Average Adjusted R^2	2.61%	2.64%	2.73%

Table IX
Fama-MacBeth Regressions of Earnings Announcement Returns

The dependent variable is the average three-day buy-and-hold return (in percent) from one day before to one day after the quarterly earnings announcement date (Compustat item RDQ) for all earnings announcements made from 92 to 457 calendar days after the end of fiscal year t. We estimate cross-sectional regressions annually for each of the calendar years from 1974-2014, using observations with the fiscal year end date that falls into the calendar year. This table reports the average of the annual coefficients and the corresponding Newey-West t-statistics that correct for first-order autocorrelation. Four additional tables are included as Panels B-E of Internet Appendix Table IA-17. See Appendix A and Table I for variable definitions.

	(1)	(2)	(3)		(4)	(5)	(6)
Intercept	0.78***	0.90***	0.91***	Intercept	0.94***	0.96***	0.96***
	(4.05)	(5.03)	(5.12)		(5.24)	(5.55)	(5.55)
=1 if no. of issues = 1,		-0.06		No. of issues	-0.19***		
=0 otherwise		(-1.38)			(-5.01)		
=1 if no. of issues = 2,		-0.33***		No. of types	0.02		
=0 otherwise		(-5.53)			(0.44)		
=1 if no. of issues = 3,		-0.54***		=1 if no. of debt issues		-0.07**	
=0 otherwise		(-5.50)		≥1, =0 otherwise		(-2.06)	
=1 if no. of issues ≥ 4,		-0.92***		=1 if no. of equity issues		-0.47***	
=0 otherwise		(-5.63)		≥1, =0 otherwise		(-6.28)	
=1 if no. of types=1 and no.			-0.06	=1 if no. of debt issues			-0.03
of issues =1, =0 otherwise			(-1.38)	= 1, =0 otherwise			(-0.92)
=1 if no. of types=1 and no.			-0.22***	=1 if no. of debt issues			-0.10**
of issues =2, =0 otherwise			(-3.88)	= 2, =0 otherwise			(-2.06)
=1 if no. of types=1 and no.			-0.61***	=1 if no. of debt issues			-0.35**
of issues =3, =0 otherwise			(-4.30)	= 3, =0 otherwise			(-2.49)
=1 if no. of types=2 and no.			-0.51***	=1 if no. of equity issues			-0.39***
of issues =2, =0 otherwise			(-5.90)	= 1, =0 otherwise			(-6.53)
=1 if no. of types=2 and no.			-0.49***	=1 if no. of equity issues			-0.62***
of issues =3, =0 otherwise			(-4.24)	= 2, =0 otherwise			(-4.28)
=1 if no. of types=2 and no.			-0.92***	=1 if no. of equity issues			-1.04***
of issues ≥4, =0 otherwise			(-5.64)	= 3,=0 otherwise			(-4.64)
Tobin's Q_t	-0.17***	-0.16***	-0.16***	Tobin's Q_t	-0.16***	-0.15***	-0.14***
	(-6.09)	(-5.57)	(-5.63)		(-5.69)	(-5.48)	(-5.05)
$Ln(Sales)_t$	-0.03	-0.04*	-0.04*	$Ln(Sales)_t$	-0.03*	-0.04**	-0.05**
	(-1.64)	(-1.89)	(-1.95)		(-1.84)	(-2.54)	(-2.57)
$OIBD_t$	0.68**	0.33	0.34	$OIBD_t$	0.35	0.40	0.22
	(2.15)	(1.15)	(1.14)		(1.20)	(1.40)	(0.75)
$Investment_t$	-0.75***	-0.29**	-0.28**	$Investment_t$	-0.30**	-0.44***	-0.29**
	(-6.03)	(-2.25)	(-2.15)		(-2.34)	(-3.34)	(-2.23)
$R\&D_t$	-0.54	-0.67	-0.69*	$R\&D_t$	-0.69	-0.50	-0.47
	(-1.30)	(-1.66)	(-1.71)		(-1.68)	(-1.18)	(-1.12)
$Return_t$	-0.14**	-0.14**	-0.14**	$Return_t$	-0.14**	-0.14**	-0.14**
	(-2.10)	(-2.19)	(-2.19)		(-2.16)	(-2.16)	(-2.13)
Average Adjusted R^2	0.83%	1.03%	1.06%	Average Adjusted R^2	0.98%	0.97%	1.08%

Internet Appendix for "The Puzzle of Frequent and Large Issues of Debt and Equity"

Rongbing Huang and Jay R. Ritter

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In Table IA-1, we list the companies that conducted an equity issue in each of the fiscal years 2005-2007 (three issues) in Panel A, those that conducted a debt issue in each of the these fiscal years (three issues) in Panel B, and the companies that conducted six issues (debt and equity is each of the three years) in Panel C.

Inspection of the table shows that the issuers share the characteristics reported in Tables II and III of our paper: equity issuers tend to be small, unprofitable firms; and both debt and equity issuers tend to have heavy investment. Inspection of the table also discloses heavy industry clustering: many of the equity issuers are biotech firms (SIC code stating with 283 or 8731) or biopharma firms (we call both biotech throughout the paper), and many of the debt issuers are oil & gas producers. Other years show clustering in other industries: in much of the 1980s and 1990s, software and hardware firms were heavily represented among equity issuers.

The $Return_{t+1}$ numbers are strongly negative for most of the stocks in this cohort of issuing firms listed, reflecting the 2008 bear market. For firms with a Dec. 31, 2007 fiscal year-end, the $Return_{t+1}$ period is April 2008-March 2009. The vast majority of the issuers had negative market-adjusted returns, as well as negative values for $Return_{t+1, t+3}$.

Tables IA-2 through IA-5 show the calendar-time regression results of *equal-weighted* (EW) portfolio returns, corresponding to Tables IV-VII in the paper that show the *value-weighted* (VW) results. Table IA-2 reports the results for equity issues, Table IA-3 reports the results for debt issues, Table IA-3 reports the results for both debt and equity issues, and Table IA-4 shows the results for two subperiods.

Tables IV and V in the paper show the VW results sorted by the recency of equity issues and debt issues, respectively. In comparison, Tables IA-6 and IA-7 report the EW results sorted by the recency of *large* equity issues and *large* debt issues, respectively.

Table IA-8 reports the VW and EW results of calendar time regressions for the portfolios double sorted by the number of *large* issues and the number of types of securities. Table IA-9 reports the calendar time VW and EW results by the number of *large* issues and security type. Table IA-10 reports the calendar time VW and EW results by the number of issues and security type when the number of issues is equal to four or five. Table IA-8 complements Panels B of Table VI, and Tables IA-9 and IA-10 complement Panel C of Table VI in the paper.

Tables IA-11 and IA-12 report the VW and EW results of calendar time regressions sorted, respectively, by the number of debt issues and the number of equity issues and by the number of *large* debt issues and the number of *large* equity issues.

Table IA-13 reports the calendar time results for some VW portfolios of microcaps and other stocks, separately.

Tables IA-14 through IA-19 report Fama-MacBeth regression results for large issues, issue recency, subperiods, microcaps vs. other stocks, and subsamples split by idiosyncratic stock return volatility, adding to Tables VIII and IX in the paper. Table IA-14 reports the results of monthly stock returns in the 12 months starting from month 4 of fiscal year t+1. Tables IA-15 and IA-16 report the results of monthly returns with lagged and non-linear control variables. Table IA-17 reports the results of earnings announcement returns. Tables IA-18 and IA-19 report the results of earnings announcement returns with lagged and non-linear control variables.

Fu and Huang (2016) report calendar-time regressions with VW post-SEO abnormal returns of -16.2% per year during 1980-2002 and -0.36% per year during 2003-2012. Our Tables IA-20 and IA-21 report the calendar-time regression results for 2003-2012 and several other subperiods. Table IA-22 reports the Fama-MacBeth results for the subperiods of 2003-2012 and 2003-2015.

Table IA-1: List of frequent issuers in the fiscal years from 2005-2007

This table shows the lists of frequent issuers in the fiscal years from 2005-2007 as well as their characteristics and subsequent stock returns. Panel A shows the list of 96 firms with three equity issues. Panel B shows the list of 69 firms with three debt issues. Panel C shows the list of 5 firms with three equity issues and three debt issues. SIC code is the four-digit historical SIC code. Net sales is expressed in $millions in 2007 (not adjusted for inflation). Invest/assets, OIBD/assets, R&D/assets are investment, OIBD, and R&D in 2007, respectively, scaled by beginning-of-2007 assets. $MAR_{t+1, t+3}$ is the same as Market adjusted return $_{t+1, t+3}$ in the paper, and MAR_{t+1} is the same as Market adjusted return $_{t+1}$. The three-year and one-year raw and market adjusted stock returns are measured from the fourth month of fiscal year 2008. See Appendix A and Table I for detailed variable definitions.

Panel A. Firms with three equity issues from 2005-2007

Company Name	SIC code	Net sales	Invest /assets	OIBD /assets	R&D /assets	$Return_{t+1, t+3}$ (%)	$Return_{t+1}$ (%)	$MAR_{t+1, t+3}$ (%)	MAR_{t+1} (%)
ACADIA PHARMACEUTICALS INC	2836	7.56	0	-0.69	0.32	-81.65	-87.99	-90.3	-48.45
ACUSPHERE INC	2834	2.67	0.01	-0.45	0.38	-86.96	-86.96	-53.99	-53.99
ADVANTAGE OIL & GAS LTD	1311	447.7	0.1	0.14	0	-6.83	-75.09	-15.48	-35.55
AGENNIX AG	2834	26.75	0.02	-0.68	0.53	-68.98	-68.98	-24.72	-24.72
ALAMOS GOLD INC	1000	152.06	0.09	-0.02	0	31.34	-16.91	22.69	22.63
ALANCO TECHNOLOGIES INC	7380	18.47	-0.02	-0.13	0.03	-88.92	-34.73	-71.45	-12.3
ALERE INC	2835	839.54	1.65	0.1	0.22	22.31	-15.9	13.65	23.64
ALLIS-CHALMERS ENERGY INC	1381	570.97	0.15	0.2	0	-50.64	-84.63	-56.41	-45.09
ALNYLAM PHARMACEUTICALS INC	2834	50.9	0.07	-0.36	0.5	-61.4	-25.89	-70.05	13.64
ALTAIR NANOTECHNOLOGIES INC	3690	9.11	-0.15	-0.72	0.24	-84.98	-59.32	-93.64	-19.78
AMAG PHARMACEUTICALS INC	2835	2.55	4.58	-0.88	0.25	-59.18	-10.14	-67.84	29.39
AMERICAN ORIENTAL BIOENGR	2834	160.48	0.38	0.31	0	-82.32	-50.85	-90.98	-11.31
AMTECH SYSTEMS INC	3559	45.98	0.19	0.1	0.02	101.01	-71.46	103.33	-34.06
ARENA PHARMACEUTICALS INC	8731	19.33	0.04	-0.32	0.32	-80.43	-56.45	-89.08	-16.92
ARENA RESOURCES INC	1311	100.09	0.99	0.43	0	-10.83	-35.49	4.96	4.05
ARIAD PHARMACEUTICALS INC	2836	3.58	0.04	-1.14	0.78	114.84	-62.64	106.18	-23.1
ARROWHEAD PHARMACEUTICALS	8731	1.21	0.02	-0.77	0.61	-71.83	-74.08	-69.51	-36.68
ASPYRA INC	7373	10.27	0.05	-0.16	0.12	-70	-40	-54.09	-0.46
AUSTRAL PACIFIC ENERGY LTD	1311	5.92	0.64	-0.21	0	-39.39	-39.39	-35.54	-35.54
AUXILIUM PHARMA INC	2834	95.73	0.06	-0.56	0.56	-28.14	-16.61	-36.8	22.92
AVANIR PHARMACEUTICALS INC	2834	9.23	-0.83	-0.32	0.18	221.71	-68.2	224.03	-30.8
BARRIER THERAPEUTICS INC	2834	24.08	0	-0.83	0.42	17.23	17.23	21.37	21.37
BIODELIVERY SCIENCES INTL	2834	0.2	0.39	-2.13	1.45	56.39	54.19	47.73	93.72
BIOPURE CORP	2836	2.56	0.01	-0.67	0.21	-85.29	-76.47	-57.24	-36.23
BLUE COAT SYSTEMS INC	3572	305.44	0.13	0.13	0.21	26.34	20.71	17.6	38.73
CANO PETROLEUM INC	1311	28.35	0.27	0.01	0	-95.87	-69.2	-78.39	-46.77
CARRIZO OIL & GAS INC	1311	125.79	0.46	0.17	0	-39.29	-84.77	-47.95	-45.24
CATASYS INC	8093	44	0.12	-0.82	0.06	-77.97	-82.74	-64	-43.2
CENTRAL EUROPEAN MEDIA	4833	839.99	0.13	0.15	0	-75.49	-86.47	-84.14	-46.93
CHEMGENEX PHARMACEUTICALS	2834	1.08	-0.03	-0.42	0.27	-11.76	-3.11	28.08	19.31
CLAUDE RESOURCES INC	1040	32.95	0.4	0	0	153.13	-36.47	144.47	3.07
CLINICAL DATA INC	8071	34.03	0.06	-0.48	0.21	120.91	-24.63	107.19	2.51
COGENTIX MEDICAL INC	3842	13.86	0.03	-0.26	0.16	157.62	-76.49	141.95	-49.36
CYTOGEN CORP	2835	20.22	0.04	-0.66	0.11	2.79	2.79	-0.24	-0.24
CYTORI THERAPEUTICS INC	2836	6.05	-0.08	-1.18	0.81	55.4	-67.19	46.75	-27.65
CYTRX CORP	2836	7.46	0.04	-0.83	0.6	-24.62	-68.38	-33.27	-28.84
DRDGOLD LTD	1040	296.39	0.11	0	0	-33.4	-45.58	-15.92	-23.15
DUNE ENERGY INC	1311	84.33	9.11	0.58	0	-98.42	-92.66	-85.1	-53.12
DYAX CORP	2836	26.1	-0.4	-0.49	0.65	-69	-52	-77.65	-12.46
ELITE PHARMACEUTICALS INC	2834	1.41	0.57	-1.09	0.6	-74.07	-74.07	-47.12	-47.12

EMISPHERE TECHNOLOGIES INC	2834	4.08	0.01	-1.12	0.75	-41.34	-61.45	-13.19	-21.92
ENBRIDGE ENERGY PRTNRS -LP	1311	7282.6	0.34	0.09	0	72.82	-30.52	64.17	9.02
ENERPLUS CORP	1311	1201.16	0.15	0.2	0	-2.93	-55.3	-11.58	-15.76
ENLIVEN MARKETING TECH CORP	7372	18.73	0.21	-0.26	0.12	-18.67	-18.67	-0.57	-0.57
ENVIRONMENTAL POWER CORP	4991	1.18	0.07	-0.07	0	-95.26	-91.87	-91.19	-52.34
EXELIXIS INC	8731	113.47	0.07	-0.36	0.57	55.21	-38.43	46.56	1.11
FOCUS ENHANCEMENTS INC	3576	29.97	0.03	-0.5	0.53	-90.57	-90.57	-80.49	-80.49
GENTA INC	2836	0.58	0	-0.57	0.26	5.51	5.51	2.17	2.17
GERON CORP	2836	7.62	0.01	-0.28	0.25	3.22	-11.27	-5.44	28.27
GMX RESOURCES INC	1311	67.88	0.93	0.23	0	-82.58	-81.5	-91.23	-41.96
GOODRICH PETROLEUM CORP	1311	111.31	0.46	0.11	0	-24.16	-30.81	-32.81	8.73
GREAT BASIN GOLD LTD	1000	2.7	0.56	-0.4	0	-27.3	-63.51	-35.95	-23.97
GTX INC	2834	7.13	0.01	-0.34	0.3	-83.13	-34.84	-91.78	4.69
HALOZYME THERAPEUTICS INC	2836	3.8	0.05	-0.6	0.45	12.92	-4.04	4.27	35.5
HARVEST ENERGY TRUST	1311	4069.6	0.09	0.14	0	-46.09	-80.36	-32.54	-40.82
HEMISPHERX BIOPHARMA INC	2836	1.06	0.01	-0.58	0.33	-34.15	-23.94	-42.81	15.59
IMAGEWARE SYSTEMS INC	7373	8.49	0.07	-0.56	0.49	-35.92	-35.92	-40.14	-40.14
INOVIO PHARMACEUTICALS INC	3845	4.81	0.02	-0.4	0.27	23.33	-58.89	14.68	-19.35
INSMED INC	2836	7.53	0.02	-0.71	0.67	10.3	46.97	1.65	86.51
LJ INTERNATIONAL INC	3910	152.04	0.03	0.07	0	37.84	-75.68	29.18	-36.14
MANNKIND CORP	2834	0.01	0.15	-0.54	0.48	-40.32	-44.13	-48.97	-4.59
MARINA BIOTECH INC -OLD	2834	18.14	-0.06	-0.67	0.71	-92.96	-72.84	-101.61	-33.3
MARKWEST ENERGY PARTNERS LP	1311	602.88	0.28	0.11	0	106.81	-58.51	98.16	-18.98
MARTIN MIDSTREAM PARTNERS LP	5172	765.82	0.28	0.11	0	73.45	-30.79	64.79	8.74
MDI INC	3861	9.2	-0.08	-0.67	0.01	-92.88	-92.88	-46.54	-46.54
MEDICURE INC	2834	2.25	0.01	-0.65	0.48	N/A	NA	NA	NA
MEMORY PHARMA CORP	2834	11.52	0.01	-0.56	0.63	28.94	28.94	60.99	60.99
MICROVISION INC	3679	10.48	-0.23	-0.73	0.42	-48.64	-45.53	-57.29	-5.99
MIDDLEBROOK PHARMACEUTICALS	2834	10.46	0.03	-0.83	0.52	-96.71	-66.5	-87.62	-26.97
NANOGEN INC	8731	38.18	0.08	-0.29	0.22	-87.97	-87.97	-45.32	-45.32
NICE LTD	7373	517.37	0.3	0.09	0.08	24.29	-15.02	15.64	24.52
NORDIC AMERICAN TANKERS LTD	4400	186.99	0.03	0.12	0	6.22	11.57	-2.44	51.1
NUO THERAPEUTICS INC	3841	1.94	0	-0.51	0	-33.78	-62.16	-37.56	-22.63
ODYSSEY MARINE EXPLORATION	4400	6.15	0.02	-0.74	0	-40.46	-37.25	-49.11	2.29
ORTHOVITA INC	3841	58.05	0.44	-0.18	0.1	-14.4	4	-23.05	43.54
PARALLEL PETROLEUM CORP	1311	116.03	0.38	0.18	0	-83.95	-93	-69.32	-53.46
PARKERVISION INC	3663	0.28	0.05	-0.66	0.4	-90.64	-76.59	-99.29	-37.06
PEREGRINE PHARMACEUTICLS INC	2835	6.09	0.03	-1.03	0.79	-10.56	122.22	-19.3	140.24
PHARMACOPEIA INC	2836	21.41	0.09	-0.76	0.59	-53.85	-53.85	-16.66	-16.66
POINTER TELOCATION LTD	7500	51.63	0.24	0.12	0.02	5.01	-38.28	-3.64	1.26
PROVIDENT ENERGY LTD	1311	2572.27	0.5	0.18	0	41.63	-58.86	32.97	-19.33
RADIENT PHARMACEUTICALS CORP	2835	15.01	0.29	-0.03	0	-86.15	-78.92	-94.8	-39.38
RAINMAKER SYSTEMS INC	8741	73.52	0.3	0.12	0	-63.28	-79.1	-71.93	-39.57
RENTECH INC	2870	132.32	0.26	-0.32	0.29	-26.16	-60.47	-23.84	-23.06
SANGAMO BIOSCIENCES INC	2836	9.1	0.02	-0.44	0.46	-26.31	-60.44	-34.97	-20.91
SAREPTA THERAPEUTICS INC	2836	10.99	0.05	-0.76	0.85	-16.22	-61.62	-24.87	-22.08
SMF ENERGY CORP	5172	203.38	0.03	-0.01	0	-77.44	-71.97	-59.97	-49.54
SONDE RESOURCES CORP	1311	39.93	0.17	0.07	0	-92.71	-92.64	-101.36	-42.9
SYNVISTA THERAPEUTICS INC	2834	0.05	0.18	-4.3	2.68	-96.28	-96.28	-55.29	-55.29
TERCICA INC	2834	30.98	0.31	-0.28	0.14	49.25	49.25	80.3	80.3
TETON ENERGY CORP	1311	6.25	0.01	-0.15	0	-99.1	-91.67	-84.61	-52.13
TITAN PHARMACEUTICALS INC	2834	0.02	-0.02	-1.21	0.81	-97.86	-97.86	-60.96	-60.96
VELOCITY EXPRESS CORP	4210	410.1	0.7	-0.03	0	-97.66	-96.42	-67.32	-73.99
VERMILLION INC	2835	0.04	0.51	-0.85	0.36	-74.77	-41.73	-83.43	-30.34
XRS CORP	3571	30.68	0.04	-0.15	0.2	-29.87	-37.92	-27.54	-0.52
ZIX CORP	7370	24.11	0.07	-0.42	0.26	-1.76	-74.81	-10.42	-35.27

Panel B. Firms with three debt issues from 2005-2007

Company Name	SIC code	Net sales	Invest /assets	OIBD /assets	R&D /assets	Return$_{t+1,\ t+3}$ (%)	Return$_{t+1}$ (%)	MAR$_{t+1,\ t+3}$ (%)	MAR$_{t+1}$ (%)
AFFILIATED COMPUTER SERVICES	7374	5769.11	0.1	0.18	0	15.67	-1.8	41.39	20.63
ALLIANCE DATA SYSTEMS CORP	7374	2291.19	0.2	0.17	0	75.4	-26.25	66.75	13.29
AMERCO	7510	2049.17	0.1	0.12	0	113.63	-19.75	97.96	7.38
ANIXTER INTL INC	5063	5852.9	0.03	0.18	0	13.26	-50.95	4.6	-11.41
APAC CUSTOMER SERVICES INC	7389	224.68	0.14	0.07	0	597.67	294.19	589.02	333.72
ATP OIL & GAS CORP	1311	599.32	0.59	0.3	0	-46.61	-84.45	-55.26	-44.92
B&H OCEAN CARRIERS LTD	4400	112.42	0.19	0.09	0	-64.47	-80.53	-73.12	-41
BILL BARRETT CORP	1311	390.27	0.27	0.2	0	-16.61	-53.06	-25.26	-13.52
BIODELIVERY SCIENCES INTL	2834	0.2	0.39	-2.13	1.45	56.39	54.19	47.73	93.72
BOS BETTER ONLINE SOLUTIONS	3674	23.77	0.19	-0.05	0.03	-63.11	-72.17	-71.76	-32.64
CALIFORNIA COASTAL CMNTYS	1531	47	0	-0.1	0	-77.76	-86.5	-73.38	-46.97
CARRIZO OIL & GAS INC	1311	125.79	0.46	0.17	0	-39.29	-84.77	-47.95	-45.24
CHENIERE ENERGY INC	1311	0.65	0.17	-0.06	0	-52.01	-75.7	-60.66	-36.16
CHESAPEAKE ENERGY CORP	1311	7800	0.32	0.19	0	-25.55	-61.94	-34.2	-22.4
CRACKER BARREL OLD CTRY STOR	5812	2351.58	-0.11	0.13	0	56.04	-46.15	68.41	-10.35
CROSSTEX ENERGY INC	1311	3860.43	0.19	0.09	0	-68.34	-94.2	-76.99	-54.67
DENBURY RESOURCES INC	1311	966.42	0.36	0.3	0	-16.15	-47.78	-24.8	-8.25
DUNE ENERGY INC	1311	84.33	9.11	0.58	0	-98.42	-92.66	-85.1	-53.12
DXP ENTERPRISES INC	5080	444.55	1.09	0.32	0	14.59	-50.44	5.93	-10.91
EDGE PETROLEUM CORP	1311	160.9	1.6	0.35	0	-97.23	-96.43	-80.7	-56.89
ENERGY TRANSFER PARTNERS -LP	1311	6792.04	0.4	0.18	0	25.92	-33.96	33.03	8.79
ENTERCOM COMMUNICATIONS	4832	468.35	0.16	0.08	0	11.04	-87.64	2.38	-48.1
EPL OIL & GAS INC	1311	454.65	0.24	0.21	0	-96.94	-98.48	-105.6	-59.29
FEIHE INTERNATIONAL INC	2020	165.97	0.84	0.19	0	-15.07	80.3	-23.72	119.83
FORTUNE INDUSTRIES INC	8700	158.35	0.11	0.02	0.01	-82.03	-89.52	-74.92	-46.76
FRONTIER AIRLINES HOLDINGS	4512	1398.98	0.27	0	0	NA	NA	NA	NA
GALAXY ENERGY CORP	1311	0.48	0.04	-0.17	0	-18.16	-18.16	-15	-15
GENERAL CABLE CORP/DE	3350	4614.8	0.34	0.19	0	-32.25	-68.54	-40.91	-29
GMX RESOURCES INC	1311	67.88	0.93	0.23	0	-82.58	-81.5	-91.23	-41.96
GREENBRIER COMPANIES INC	3743	1223.83	0.33	0.15	0	-9.32	-72.62	-2.21	-29.86
GULFPORT ENERGY CORP	1311	106.16	1.23	0.36	0	228.08	-79.19	219.42	-39.65
HELIX ENERGY SOLUTIONS GROUP	1389	1767.45	0.24	0.17	0	-45.07	-83.07	-53.72	-43.53
INTERNET GOLD-GOLDEN LINES	4899	305.76	0.43	0.15	0	239.13	-44.77	230.48	-5.24
JETBLUE AIRWAYS CORP	4512	2842	0.17	0.07	0	9.28	-36.25	0.63	3.28
K-SEA TRANSPORTATION -LP	4400	226.57	0.17	0.16	0	-86.09	-43.45	-68.62	-21.02
LATAM AIRLINES GROUP SA	4512	3524.92	0.29	0.19	0	102.93	-35.77	94.28	3.77
LEAP WIRELESS INTL INC	4812	1630.8	0.13	0.09	0	-70.21	-30.45	-78.87	9.09
LIFE TIME FITNESS INC	7997	655.79	0.42	0.2	0	9.51	-63.3	0.86	-23.76
MACQUARIE INFRASTRUCTURE CP	4581	831.39	0.31	0.04	0	-3.34	-94.04	-11.99	-54.5
MILLICOM INTL CELLULAR SA	4812	2630.61	0.18	0.31	0	9.85	-60.18	1.19	-20.65
MTR GAMING GROUP INC	7990	429.89	0.33	0.12	0	-65.88	-87.53	-74.53	-48
MULTIMEDIA GAMES HOLDING CO	7990	121.92	0.13	0.2	0	-25.94	-69.29	-23.61	-31.89
MYLAN NV	2834	2178.76	1.67	0.12	0.33	94.07	11.95	85.41	51.48
NATURE VISION INC	3861	9.61	-0.07	-0.11	0.01	-88.24	-70	-66.02	-30.46
NESTOR INC	7373	11.51	0.19	-0.16	0.02	-26.2	-26.2	-28	-28
NGAS RESOURCES INC	1311	70.2	0.29	0.1	0	-87.74	-78.63	-96.4	-39.1
NOVAMED INC	8011	128.62	0.26	0.22	0	15.44	-39.74	6.78	-0.2
ONSTREAM MEDIA CORP	7370	12.12	0.94	-0.26	0	-84.52	-65.48	-82.2	-28.07
ORIGIN AGRITECH LTD	100	65.31	0.11	-0.14	0.03	60.85	-69.73	63.17	-32.33
PARALLEL PETROLEUM CORP	1311	116.03	0.38	0.18	0	-83.95	-93	-69.32	-53.46
PEACE ARCH ENTMT GROUP INC	7822	61.79	0.23	-0.02	0	-96.33	-96.61	-73.19	-53.86
PENN VIRGINIA CORP	1311	840.55	0.42	0.2	0	-62.97	-75.15	-71.62	-35.61
PETROHAWK ENERGY CORP	1311	883.41	0.2	0.15	0	22.63	-0.15	13.98	39.39

POOL CORP	5090	1928.37	0.02	0.19	0	31.92	-29.73	23.26	9.81
PREMIERE GLOBAL SERVICES INC	4899	559.71	0.17	0.2	0.03	-52.19	-42.35	-60.84	-2.82
PSYCHIATRIC SOLUTIONS INC	8093	1481.95	0.34	0.15	0	5.98	-51.84	9.75	-12.3
READING INTL INC -CL A	7830	119.24	0.15	0.06	0	-47.63	-62.07	-56.28	-22.53
SMITHFIELD FOODS INC	2011	11351.2	0.07	0.09	0	2.44	-38.33	-6.3	-20.31
SOURCE INTERLINK COS INC	7822	2254.25	1.2	0.09	0	-92.31	-93.64	-56.75	-59.9
SPORT SUPPLY GROUP INC	5961	236.86	0.19	0.11	0	54.97	23.73	74.77	46.16
SUNOPTA INC	2000	804.49	0.13	0.05	0	51.79	-64.68	43.13	-25.15
TATA MOTORS LTD	3711	9126.2	0.27	0.13	0.04	154.36	-8.51	138.69	18.62
TOWER SEMICONDUCTOR LTD	3674	230.85	0.15	0.08	0.02	33.66	-78.22	25.01	-38.68
TRINITY INDUSTRIES	3743	3832.8	0.16	0.19	0	43.94	-64.77	35.28	-25.24
TSAKOS ENERGY NAVIGATION LTD	4412	500.62	0.19	0.13	0	-57.88	-51.28	-66.54	-11.74
US SHIPPING PARTNERS LP	4400	176.73	0.13	0.1	0	-94.89	-94.89	-64.3	-64.3
VECTOR GROUP LTD	2111	379.16	0.07	0.21	0.01	55.27	-12.1	46.62	27.44
WEATHERFORD INTL PLC	1381	7832.06	0.22	0.22	0.02	-38.51	-69.29	-47.16	-29.76
WILLIS LEASE FINANCE CORP	7359	121.9	0.22	0.13	0	-1.68	-19.75	-10.34	19.78
WYNN RESORTS LTD	7990	2687.52	0.28	0.14	0	35.82	-80.84	27.17	-41.31

Panel C. Firms with three equity issues and three debt issues from 2005-2007

Company Name	SIC code	Net sales	Invest /assets	OIBD /assets	R&D /assets	$Return_{t+1,t+3}$ (%)	$Return_{t+1}$ (%)	$MAR_{t+1,t+3}$ (%)	MAR_{t+1} (%)
BIODELIVERY SCIENCES INTL	2834	0.2	0.39	-2.13	1.45	56.39	54.19	47.73	93.72
CARRIZO OIL & GAS INC	1311	125.79	0.46	0.17	0	-39.29	-84.77	-47.95	-45.24
DUNE ENERGY INC	1311	84.33	9.11	0.58	0	-98.42	-92.66	-85.1	-53.12
GMX RESOURCES INC	1311	67.88	0.93	0.23	0	-82.58	-81.5	-91.23	-41.96
PARALLEL PETROLEUM CORP	1311	116.03	0.38	0.18	0	-83.95	-93	-69.32	-53.46

Table IA-2: Calendar-time regressions of *equal-weighted* returns: Equity Issues
See Appendices A and B and Table I for variable definitions and factor model descriptions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

Panel A: Frequency and size of equity issues, 1975-2015 (Number of months = 492)

	(A1) No. of all equity issues				(A2) No. of large equity issues			
	=0	=1	≥1	≥2	=0	=1	≥1	≥2
Market model								
α	0.53***	-0.06	-0.26	-0.75***	0.50***	-0.15	-0.34*	-0.99***
t(α)	(3.64)	(-0.34)	(-1.29)	(-3.05)	(3.41)	(-0.78)	(-1.66)	(-3.74)
b	1.08***	1.33***	1.36***	1.43***	1.09***	1.35***	1.39***	1.44***
t(b)	(25.56)	(27.93)	(27.43)	(24.02)	(26.02)	(27.14)	(26.44)	(24.42)
3-factor								
α	0.27***	-0.24**	-0.40***	-0.81***	0.25***	-0.31**	-0.47***	-0.99***
t(α)	(3.52)	(-2.01)	(-3.05)	(-4.62)	(3.14)	(-2.43)	(-3.43)	(-5.19)
b	1.01***	1.18***	1.18***	1.19***	1.02***	1.19***	1.20***	1.21***
t(b)	(38.88)	(29.79)	(28.64)	(23.24)	(39.00)	(28.19)	(27.02)	(22.04)
s	0.76***	0.99***	1.06***	1.18***	0.77***	1.02***	1.09***	1.18***
t(s)	(10.15)	(11.53)	(13.61)	(14.65)	(10.24)	(11.12)	(13.07)	(13.40)
h	0.35***	0.10	-0.00	-0.25***	0.35***	0.04	-0.05	-0.34***
t(h)	(6.50)	(1.22)	(-0.03)	(-2.77)	(6.31)	(0.48)	(-0.56)	(-3.36)
5-factor								
α	0.26***	-0.06	-0.15	-0.46**	0.24***	-0.12	-0.21	-0.60***
t(α)	(2.95)	(-0.45)	(-1.05)	(-2.45)	(2.68)	(-0.83)	(-1.39)	(-2.95)
b	1.01***	1.13***	1.11***	1.09***	1.01***	1.13***	1.12***	1.11***
t(b)	(36.18)	(27.07)	(26.48)	(21.86)	(35.84)	(25.99)	(25.37)	(20.68)
s	0.80***	0.93***	0.95***	0.99***	0.80***	0.95***	0.97***	0.95***
t(s)	(16.83)	(12.03)	(12.40)	(12.69)	(16.69)	(11.37)	(11.71)	(11.80)
h	0.23***	0.05	-0.04	-0.28**	0.22***	-0.01	-0.08	-0.36***
t(h)	(3.59)	(0.39)	(-0.30)	(-2.26)	(3.43)	(-0.10)	(-0.61)	(-2.82)
r	0.04	-0.32***	-0.45***	-0.69***	0.03	-0.34***	-0.48***	-0.78***
t(r)	(0.61)	(-3.16)	(-4.96)	(-7.34)	(0.39)	(-3.24)	(-5.03)	(-8.07)
c	0.03	-0.12	-0.16	-0.16	0.03	-0.13	-0.18	-0.13
t(c)	(0.34)	(-0.74)	(-0.95)	(-0.84)	(0.28)	(-0.75)	(-0.99)	(-0.63)
q-factor								
α	0.45***	0.24	0.16	-0.16	0.43***	0.19	0.11	-0.28
t(α)	(3.94)	(1.54)	(0.92)	(-0.69)	(3.76)	(1.19)	(0.63)	(-1.11)
b	0.98***	1.11***	1.10***	1.10***	0.98***	1.11***	1.11***	1.13***
t(b)	(30.29)	(27.63)	(26.94)	(19.84)	(30.44)	(26.49)	(25.69)	(18.37)
s	0.67***	0.78***	0.82***	0.89***	0.67***	0.80***	0.84***	0.89***
t(s)	(8.20)	(10.03)	(13.07)	(13.48)	(8.23)	(10.19)	(13.17)	(11.70)
b^{ROE}	-0.26***	-0.58***	-0.66***	-0.78***	-0.27***	-0.60***	-0.69***	-0.85***
$t(b^{ROE})$	(-3.88)	(-6.68)	(-7.02)	(-5.96)	(-4.06)	(-6.62)	(-7.02)	(-5.87)
$b^{I/A}$	0.25***	-0.19	-0.34***	-0.62***	0.23**	-0.26**	-0.40***	-0.69***
$t(b^{I/A})$	(2.64)	(-1.63)	(-2.80)	(-4.21)	(2.46)	(-2.22)	(-3.29)	(-4.24)

Panel B: Recency of equity issues, 1975-2015 (Number of months = 492)

Equity issues (t,t-1,t-2)	(0,0,0)	(0,0,1)	(0,1,0)	(1,0,0)	(0,1,1)	(1,0,1)	(1,1,0)	(1,1,1)	(1,1,0) or (1,1,1)
Market model									
α	0.53***	0.19	-0.01	-0.40**	-0.65**	-0.49	-1.06***	-1.74***	-1.31***
t(α)	(3.64)	(0.89)	(-0.08)	(-2.19)	(-2.25)	(-1.63)	(-3.77)	(-5.73)	(-4.77)
b	1.08***	1.29***	1.31***	1.35***	1.32***	1.34***	1.46***	1.40***	1.47***
t(b)	(25.56)	(24.19)	(29.02)	(27.87)	(22.00)	(22.10)	(20.61)	(16.91)	(20.43)
3-factor									
α	0.27***	-0.05	-0.16	-0.50***	-0.63***	-0.42*	-0.95***	-1.56***	-1.19***
t(α)	(3.52)	(-0.32)	(-1.27)	(-4.05)	(-2.61)	(-1.72)	(-4.43)	(-6.57)	(-5.96)
b	1.01***	1.16***	1.16***	1.18***	1.15***	1.12***	1.22***	1.15***	1.21***
t(b)	(38.88)	(25.10)	(29.09)	(30.00)	(18.71)	(18.12)	(19.58)	(15.02)	(19.57)
s	0.76***	1.01***	0.91***	1.00***	1.13***	1.15***	1.12***	1.21***	1.19***
t(s)	(10.15)	(11.33)	(11.12)	(11.30)	(11.92)	(10.00)	(12.34)	(11.41)	(13.30)
h	0.35***	0.22**	0.06	-0.07	-0.08	-0.27***	-0.35***	-0.43***	-0.39***
t(h)	(6.50)	(2.49)	(0.80)	(-0.78)	(-0.68)	(-2.62)	(-2.95)	(-3.47)	(-3.45)
5-factor									
α	0.26***	0.09	0.02	-0.30*	-0.28	-0.19	-0.41	-1.12***	-0.74***
t(α)	(2.95)	(0.58)	(0.14)	(-1.85)	(-1.18)	(-0.82)	(-1.51)	(-4.43)	(-3.16)
b	1.01***	1.11***	1.10***	1.11***	1.04***	1.06***	1.06***	1.01***	1.07***
t(b)	(36.18)	(24.32)	(26.58)	(24.66)	(17.25)	(18.51)	(16.50)	(13.26)	(16.76)
s	0.80***	0.95***	0.84***	0.92***	0.91***	0.97***	0.90***	0.97***	0.98***
t(s)	(16.83)	(10.60)	(11.88)	(12.94)	(8.84)	(10.97)	(9.75)	(9.35)	(10.78)
h	0.23***	0.11	0.04	-0.09	-0.10	-0.46***	-0.16	-0.37**	-0.31**
t(h)	(3.59)	(0.82)	(0.34)	(-0.88)	(-0.62)	(-3.45)	(-1.14)	(-2.33)	(-2.26)
r	0.04	-0.29***	-0.30***	-0.34***	-0.72***	-0.59***	-0.84***	-0.83***	-0.79***
t(r)	(0.61)	(-2.59)	(-3.16)	(-2.98)	(-5.88)	(-5.10)	(-6.87)	(-6.24)	(-6.48)
c	0.03	0.01	-0.18	-0.18	-0.11	0.22	-0.58**	-0.26	-0.34
t(c)	(0.34)	(0.06)	(-1.27)	(-0.94)	(-0.58)	(1.37)	(-2.00)	(-0.92)	(-1.28)
q-factor									
α	0.45***	0.43**	0.28*	-0.05	0.13	-0.01	-0.09	-0.66**	-0.38
t(α)	(3.94)	(2.53)	(1.92)	(-0.24)	(0.53)	(-0.05)	(-0.26)	(-2.17)	(-1.30)
b	0.98***	1.08***	1.09***	1.12***	1.01***	1.06***	1.07***	0.97***	1.08***
t(b)	(30.29)	(24.11)	(26.79)	(25.89)	(16.14)	(14.30)	(16.50)	(13.71)	(16.18)
s	0.67***	0.80***	0.72***	0.81***	0.82***	0.97***	0.83***	0.83***	0.90***
t(s)	(8.20)	(9.73)	(9.38)	(9.56)	(10.94)	(8.68)	(11.34)	(9.76)	(11.54)
b^{ROE}	-0.26***	-0.63***	-0.51***	-0.53***	-0.94***	-0.60***	-0.90***	-1.15***	-0.91***
$t(b^{ROE})$	(-3.88)	(-6.14)	(-7.01)	(-4.28)	(-9.18)	(-4.07)	(-4.57)	(-6.88)	(-4.92)
$b^{I/A}$	0.25***	-0.00	-0.26**	-0.36**	-0.48***	-0.39***	-0.91***	-0.88***	-0.84***
$t(b^{I/A})$	(2.64)	(-0.03)	(-2.57)	(-2.09)	(-3.58)	(-3.35)	(-3.91)	(-4.40)	(-3.93)

Table IA-3: Calendar-time regressions of *equal-weighted* returns: Debt Issues
See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

Panel A: Frequency and size of debt issues, 1975-2015 (Number of months = 492)

	(A1) No. of all debt issues				(A2) No. of large debt issues			
	=0	=1	≥1	≥2	=0	=1	≥1	≥2
Market model								
α	0.50***	0.29*	0.15	-0.15	0.47***	0.18	0.05	-0.41**
t(α)	(3.36)	(1.82)	(0.89)	(-0.82)	(3.21)	(1.09)	(0.29)	(-1.99)
b	1.13***	1.17***	1.18***	1.22***	1.13***	1.20***	1.22***	1.28***
t(b)	(29.98)	(26.08)	(25.60)	(24.03)	(29.31)	(26.06)	(25.96)	(24.44)
3-factor								
α	0.31***	0.04	-0.11	-0.43***	0.27***	-0.07	-0.21*	-0.66***
t(α)	(3.84)	(0.41)	(-1.15)	(-3.48)	(3.35)	(-0.74)	(-1.95)	(-4.61)
b	1.01***	1.08***	1.10***	1.14***	1.02***	1.10***	1.12***	1.18***
t(b)	(40.22)	(35.80)	(34.45)	(30.45)	(40.40)	(34.75)	(33.77)	(28.71)
s	0.87***	0.83***	0.84***	0.86***	0.84***	0.87***	0.87***	0.90***
t(s)	(15.79)	(10.67)	(9.75)	(8.57)	(14.39)	(10.01)	(9.58)	(8.50)
h	0.17***	0.32***	0.34***	0.38***	0.21***	0.32***	0.32***	0.31***
t(h)	(3.14)	(5.26)	(5.09)	(4.76)	(4.03)	(4.67)	(4.53)	(3.88)
5-factor								
α	0.42***	0.08	-0.07	-0.39***	0.35***	-0.03	-0.15	-0.60***
t(α)	(4.50)	(0.75)	(-0.63)	(-2.87)	(3.76)	(-0.22)	(-1.27)	(-3.89)
b	0.98***	1.05***	1.07***	1.11***	0.99***	1.08***	1.09***	1.14***
t(b)	(34.41)	(33.00)	(32.06)	(29.07)	(34.62)	(32.03)	(31.36)	(27.04)
s	0.81***	0.85***	0.86***	0.90***	0.80***	0.89***	0.90***	0.92***
t(s)	(16.71)	(16.21)	(15.32)	(13.76)	(16.75)	(15.45)	(14.84)	(12.57)
h	0.06	0.23***	0.26***	0.32***	0.10	0.24***	0.24***	0.26**
t(h)	(0.89)	(3.02)	(3.12)	(3.18)	(1.57)	(2.82)	(2.74)	(2.35)
r	-0.23***	-0.04	-0.02	0.01	-0.17***	-0.03	-0.04	-0.05
t(r)	(-3.64)	(-0.56)	(-0.26)	(0.15)	(-2.66)	(-0.41)	(-0.41)	(-0.49)
c	0.02	-0.05	-0.08	-0.15	0.02	-0.08	-0.10	-0.15
t(c)	(0.21)	(-0.40)	(-0.65)	(-1.08)	(0.20)	(-0.66)	(-0.82)	(-1.11)
q-factor								
α	0.62***	0.30**	0.16	-0.12	0.56***	0.21	0.09	-0.31*
t(α)	(5.22)	(2.34)	(1.21)	(-0.80)	(4.72)	(1.48)	(0.64)	(-1.92)
b	0.96***	1.03***	1.05***	1.08***	0.97***	1.05***	1.07***	1.12***
t(b)	(35.93)	(30.04)	(28.54)	(25.51)	(35.11)	(29.05)	(28.19)	(24.42)
s	0.71***	0.71***	0.71***	0.72***	0.70***	0.74***	0.74***	0.74***
t(s)	(13.59)	(8.40)	(7.65)	(6.68)	(12.05)	(8.05)	(7.65)	(6.63)
b^{ROE}	-0.42***	-0.35***	-0.36***	-0.37***	-0.39***	-0.36***	-0.37***	-0.43***
$t(b^{ROE})$	(-6.15)	(-4.68)	(-4.63)	(-4.40)	(-5.84)	(-4.53)	(-4.78)	(-5.17)
$b^{I/A}$	-0.00	0.16	0.15	0.14	0.06	0.12	0.11	0.06
$t(b^{I/A})$	(-0.04)	(1.51)	(1.43)	(1.23)	(0.60)	(1.09)	(0.97)	(0.53)

Panel B: Recency of debt issues, 1975-2015 (Number of months = 492)

Debt issues (t,t-1,t-2)	(0,0,0)	(0,0,1)	(0,1,0)	(1,0,0)	(0,1,1)	(1,0,1)	(1,1,0)	(1,1,1)	(1,1,0) or (1,1,1)
Market model									
α	0.50***	0.45***	0.34**	0.08	0.17	-0.12	-0.25	-0.60***	-0.40**
t(α)	(3.36)	(2.72)	(2.07)	(0.48)	(0.83)	(-0.63)	(-1.29)	(-2.88)	(-2.09)
b	1.13***	1.16***	1.16***	1.17***	1.20***	1.22***	1.19***	1.28***	1.23***
t(b)	(29.98)	(24.66)	(24.89)	(27.01)	(20.77)	(23.66)	(22.64)	(25.90)	(25.39)
3-factor									
α	0.31***	0.18*	0.09	-0.15	-0.15	-0.40***	-0.53***	-0.82***	-0.65***
t(α)	(3.84)	(1.78)	(0.94)	(-1.56)	(-1.02)	(-3.03)	(-4.03)	(-4.88)	(-4.91)
b	1.01***	1.08***	1.07***	1.08***	1.12***	1.14***	1.11***	1.18***	1.14***
t(b)	(40.22)	(31.66)	(34.81)	(33.47)	(26.72)	(29.67)	(28.12)	(26.88)	(30.32)
s	0.87***	0.85***	0.83***	0.80***	0.90***	0.84***	0.84***	0.77***	0.82***
t(s)	(15.79)	(9.03)	(11.56)	(10.87)	(8.52)	(9.19)	(7.74)	(7.87)	(8.10)
h	0.17***	0.37***	0.32***	0.27***	0.44***	0.38***	0.38***	0.25***	0.33***
t(h)	(3.14)	(5.26)	(5.13)	(4.52)	(4.72)	(5.22)	(4.43)	(2.87)	(4.19)
5-factor									
α	0.42***	0.22*	0.15	-0.12	-0.13	-0.34**	-0.51***	-0.74***	-0.60***
t(α)	(4.50)	(1.84)	(1.31)	(-1.05)	(-0.79)	(-2.41)	(-3.59)	(-4.26)	(-4.27)
b	0.98***	1.05***	1.05***	1.06***	1.10***	1.11***	1.08***	1.15***	1.11***
t(b)	(34.41)	(29.51)	(31.82)	(32.21)	(26.14)	(28.44)	(27.07)	(24.79)	(28.10)
s	0.81***	0.87***	0.84***	0.81***	0.95***	0.87***	0.91***	0.79***	0.87***
t(s)	(16.71)	(13.35)	(15.54)	(16.52)	(12.78)	(13.81)	(13.21)	(9.53)	(12.64)
h	0.06	0.28***	0.23***	0.18**	0.36***	0.33***	0.34***	0.21*	0.29***
t(h)	(0.89)	(3.14)	(2.83)	(2.38)	(3.16)	(3.28)	(3.32)	(1.77)	(2.92)
r	-0.23***	-0.03	-0.08	-0.03	0.04	-0.04	0.09	-0.07	0.02
t(r)	(-3.64)	(-0.29)	(-1.10)	(-0.34)	(0.35)	(-0.45)	(1.00)	(-0.80)	(0.23)
c	0.02	-0.06	-0.03	-0.04	-0.11	-0.14	-0.20	-0.15	-0.19
t(c)	(0.21)	(-0.44)	(-0.25)	(-0.34)	(-0.64)	(-1.09)	(-1.40)	(-1.02)	(-1.43)
q-factor									
α	0.62***	0.43***	0.39***	0.10	0.13	-0.09	-0.24	-0.45**	-0.33**
t(α)	(5.22)	(2.96)	(3.00)	(0.76)	(0.71)	(-0.64)	(-1.40)	(-2.44)	(-2.02)
b	0.96***	1.03***	1.02***	1.04***	1.07***	1.09***	1.05***	1.13***	1.09***
t(b)	(35.93)	(25.53)	(31.87)	(29.84)	(23.59)	(25.27)	(22.69)	(24.47)	(25.07)
s	0.71***	0.72***	0.70***	0.67***	0.77***	0.71***	0.73***	0.61***	0.69***
t(s)	(13.59)	(7.17)	(9.15)	(8.62)	(6.76)	(7.05)	(6.21)	(6.01)	(6.31)
b^{ROE}	-0.42***	-0.35***	-0.39***	-0.34***	-0.38***	-0.37***	-0.32***	-0.43***	-0.37***
$t(b^{ROE})$	(-6.15)	(-4.18)	(-5.34)	(-4.24)	(-3.59)	(-4.85)	(-3.33)	(-4.79)	(-4.48)
$b^{I/A}$	-0.00	0.21*	0.15	0.12	0.26*	0.14	0.11	-0.00	0.06
$t(b^{I/A})$	(-0.04)	(1.75)	(1.50)	(1.19)	(1.85)	(1.39)	(0.84)	(-0.03)	(0.53)

Table IA-4: Calendar-time regressions of *equal-weighted* returns: Equity and debt issues
See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

Panel A: One-way sort by number of security issues, 1975-2015 (Number of months = 492)

	(A1) No. of all issues					(A2) No. of large issues				
	=0	=1	=2	≥3	≥4	=0	=1	=2	≥3	≥4
Market model										
α	0.64***	0.41***	0.03	-0.63***	-1.16***	0.58***	0.32*	-0.15	-0.99***	-1.68***
t(α)	(4.66)	(2.67)	(0.16)	(-2.97)	(-5.16)	(4.15)	(1.93)	(-0.78)	(-4.31)	(-6.31)
b	1.06***	1.16***	1.25***	1.35***	1.35***	1.07***	1.20***	1.31***	1.42***	1.41***
t(b)	(27.75)	(27.44)	(26.09)	(26.72)	(25.41)	(27.12)	(27.29)	(26.97)	(25.23)	(21.13)
3-factor										
α	0.42***	0.17**	-0.21*	-0.81***	-1.27***	0.35***	0.07	-0.35***	-1.14***	-1.70***
t(α)	(5.80)	(2.00)	(-1.84)	(-5.33)	(-7.21)	(4.70)	(0.79)	(-2.71)	(-6.86)	(-7.65)
b	0.97***	1.07***	1.13***	1.20***	1.20***	0.99***	1.10***	1.17***	1.24***	1.26***
t(b)	(41.64)	(38.92)	(31.03)	(27.37)	(23.73)	(40.83)	(36.46)	(29.34)	(25.28)	(19.11)
s	0.76***	0.85***	0.94***	0.99***	0.94***	0.76***	0.89***	1.00***	1.07***	0.97***
t(s)	(12.02)	(11.69)	(11.71)	(10.44)	(9.12)	(11.44)	(10.98)	(11.99)	(10.92)	(8.83)
h	0.28***	0.30***	0.25***	0.09	-0.02	0.31***	0.28***	0.14*	0.00	-0.05
t(h)	(5.79)	(5.33)	(3.15)	(1.08)	(-0.23)	(6.20)	(4.35)	(1.72)	(0.01)	(-0.49)
5-factor										
α	0.43***	0.22**	-0.10	-0.61***	-1.01***	0.35***	0.14	-0.20	-0.88***	-1.32***
t(α)	(5.16)	(2.27)	(-0.80)	(-3.65)	(-5.30)	(4.12)	(1.29)	(-1.46)	(-4.89)	(-5.37)
b	0.97***	1.05***	1.09***	1.13***	1.12***	0.99***	1.07***	1.12***	1.16***	1.14***
t(b)	(36.31)	(35.18)	(28.95)	(25.06)	(20.48)	(36.31)	(32.51)	(27.55)	(23.33)	(16.16)
s	0.77***	0.84***	0.92***	0.94***	0.85***	0.77***	0.89***	0.96***	0.98***	0.78***
t(s)	(17.09)	(16.32)	(14.22)	(11.66)	(9.18)	(16.95)	(15.20)	(13.73)	(11.00)	(6.71)
h	0.14**	0.20***	0.16	0.08	0.03	0.18***	0.18**	0.07	0.01	0.00
t(h)	(2.45)	(2.71)	(1.59)	(0.63)	(0.24)	(2.91)	(2.21)	(0.63)	(0.07)	(0.02)
r	-0.03	-0.09	-0.17**	-0.31***	-0.41***	-0.01	-0.10	-0.24***	-0.42***	-0.70***
t(r)	(-0.50)	(-1.17)	(-2.04)	(-2.94)	(-3.58)	(-0.21)	(-1.21)	(-2.61)	(-3.92)	(-4.93)
c	0.07	-0.00	-0.07	-0.22	-0.33*	0.07	-0.03	-0.11	-0.27	-0.25
t(c)	(0.70)	(-0.01)	(-0.48)	(-1.31)	(-1.72)	(0.63)	(-0.25)	(-0.77)	(-1.43)	(-0.95)
q-factor										
α	0.61***	0.43***	0.18	-0.31*	-0.65***	0.53***	0.37***	0.07	-0.53***	-0.88***
t(α)	(5.60)	(3.65)	(1.21)	(-1.70)	(-3.33)	(4.89)	(2.81)	(0.45)	(-2.68)	(-3.41)
b	0.94***	1.02***	1.07***	1.12***	1.12***	0.96***	1.04***	1.10***	1.15***	1.13***
t(b)	(32.99)	(33.28)	(29.29)	(25.32)	(21.63)	(32.28)	(31.37)	(27.87)	(23.32)	(17.93)
s	0.66***	0.72***	0.77***	0.78***	0.70***	0.66***	0.75***	0.82***	0.82***	0.65***
t(s)	(10.05)	(9.25)	(9.71)	(8.97)	(6.93)	(9.32)	(8.92)	(10.60)	(9.68)	(6.30)
b^{ROE}	-0.27***	-0.36***	-0.49***	-0.58***	-0.68***	-0.28***	-0.40***	-0.51***	-0.69***	-0.95***
$t(b^{ROE})$	(-4.41)	(-5.41)	(-5.99)	(-6.02)	(-6.58)	(-4.38)	(-5.29)	(-6.42)	(-6.54)	(-7.05)
$b^{I/A}$	0.17*	0.15	0.02	-0.24**	-0.43***	0.21**	0.10	-0.13	-0.41***	-0.47***
$t(b^{I/A})$	(1.96)	(1.61)	(0.15)	(-2.03)	(-3.50)	(2.31)	(0.96)	(-1.25)	(-3.20)	(-3.00)

Panel B: Two-way sort by number of types of securities and number of issues, 1975-2015 (Number of months = 492)

No. of types of securities	0	1	2	1			2		
No. of issues	0	1-3	2-6	1	2	3	2	3	≥4
Market model									
α	0.64***	0.28*	-0.43**	0.41***	0.10	-0.50**	-0.12	-0.36	-1.16***
t(α)	(4.66)	(1.76)	(-2.13)	(2.67)	(0.54)	(-2.36)	(-0.67)	(-1.54)	(-5.16)
b	1.06***	1.18***	1.35***	1.16***	1.21***	1.28***	1.32***	1.37***	1.35***
t(b)	(27.75)	(27.37)	(26.11)	(27.44)	(24.85)	(27.62)	(26.53)	(24.37)	(25.41)
3-factor									
α	0.42***	0.04	-0.61***	0.17**	-0.15	-0.70***	-0.32**	-0.54***	-1.27***
t(α)	(5.80)	(0.44)	(-4.23)	(2.00)	(-1.35)	(-4.60)	(-2.52)	(-3.07)	(-7.21)
b	0.97***	1.08***	1.20***	1.07***	1.10***	1.15***	1.19***	1.21***	1.20***
t(b)	(41.64)	(37.21)	(27.25)	(38.92)	(30.99)	(26.09)	(27.93)	(25.30)	(23.73)
s	0.76***	0.88***	0.98***	0.85***	0.93***	0.96***	0.95***	1.02***	0.94***
t(s)	(12.02)	(12.10)	(10.17)	(11.69)	(12.67)	(9.44)	(9.54)	(10.41)	(9.12)
h	0.28***	0.29***	0.11	0.30***	0.29***	0.15*	0.16*	0.11	-0.02
t(h)	(5.79)	(4.69)	(1.19)	(5.33)	(3.73)	(1.73)	(1.84)	(1.07)	(-0.23)
5-factor									
α	0.43***	0.11	-0.43***	0.22**	-0.06	-0.55***	-0.18	-0.38*	-1.01***
t(α)	(5.16)	(1.08)	(-2.60)	(2.27)	(-0.51)	(-3.29)	(-1.22)	(-1.90)	(-5.30)
b	0.97***	1.05***	1.14***	1.05***	1.07***	1.10***	1.14***	1.16***	1.12***
t(b)	(36.31)	(33.93)	(24.85)	(35.18)	(29.34)	(23.79)	(25.03)	(23.88)	(20.48)
s	0.77***	0.86***	0.93***	0.84***	0.91***	0.90***	0.92***	0.98***	0.85***
t(s)	(17.09)	(16.08)	(11.50)	(16.32)	(15.11)	(10.34)	(11.66)	(11.57)	(9.18)
h	0.14**	0.19**	0.09	0.20***	0.19*	0.06	0.11	0.09	0.03
t(h)	(2.45)	(2.37)	(0.75)	(2.71)	(1.91)	(0.48)	(0.96)	(0.63)	(0.24)
r	-0.03	-0.12	-0.27***	-0.09	-0.16**	-0.29**	-0.21*	-0.24**	-0.41***
t(r)	(-0.50)	(-1.58)	(-2.62)	(-1.17)	(-2.04)	(-2.43)	(-1.89)	(-2.30)	(-3.58)
c	0.07	-0.01	-0.23	-0.00	-0.03	-0.03	-0.15	-0.23	-0.33*
t(c)	(0.70)	(-0.12)	(-1.28)	(-0.01)	(-0.26)	(-0.21)	(-0.90)	(-1.21)	(-1.72)
q-factor									
α	0.61***	0.33***	-0.11	0.43***	0.19	-0.30*	0.14	-0.09	-0.65***
t(α)	(5.60)	(2.72)	(-0.59)	(3.65)	(1.34)	(-1.67)	(0.81)	(-0.40)	(-3.33)
b	0.94***	1.03***	1.13***	1.02***	1.04***	1.09***	1.11***	1.14***	1.12***
t(b)	(32.99)	(33.09)	(25.15)	(33.28)	(29.89)	(24.84)	(24.94)	(23.59)	(21.63)
s	0.66***	0.74***	0.77***	0.72***	0.78***	0.77***	0.75***	0.82***	0.70***
t(s)	(10.05)	(9.71)	(8.69)	(9.25)	(10.56)	(8.08)	(7.81)	(10.10)	(6.93)
b^{ROE}	-0.27***	-0.40***	-0.59***	-0.36***	-0.46***	-0.51***	-0.56***	-0.53***	-0.68***
$t(b^{ROE})$	(-4.41)	(-5.69)	(-5.93)	(-5.41)	(-5.83)	(-5.02)	(-5.85)	(-4.73)	(-6.58)
$b^{I/A}$	0.17*	0.12	-0.23*	0.15	0.08	-0.07	-0.13	-0.22	-0.43***
$t(b^{I/A})$	(1.96)	(1.24)	(-1.81)	(1.61)	(0.80)	(-0.59)	(-1.01)	(-1.57)	(-3.50)

Panel C: Two-way sort by number of issues and security type, 1975-2015 (Number of months = 492)

No. of issues	1	1	2	2	2	3	3	3	3
No. of equity issues	0	1	0	1	2	0	1	2	3
CAPM									
α	0.49***	0.16	0.23	-0.12	-0.58*	-0.16	-0.35	-0.59**	-1.54***
t(α)	(3.19)	(0.83)	(1.33)	(-0.67)	(-1.86)	(-0.75)	(-1.53)	(-2.02)	(-3.55)
b	1.10***	1.34***	1.14***	1.32***	1.40***	1.18***	1.32***	1.40***	1.62***
t(b)	(23.34)	(26.04)	(21.01)	(26.53)	(20.07)	(22.89)	(23.63)	(23.20)	(14.11)
3-factor									
α	0.21**	0.02	-0.09	-0.32**	-0.39*	-0.42***	-0.60***	-0.52**	-1.40***
t(α)	(2.39)	(0.14)	(-0.78)	(-2.52)	(-1.65)	(-2.61)	(-3.19)	(-2.23)	(-4.60)
b	1.04***	1.16***	1.08***	1.19***	1.14***	1.12***	1.21***	1.20***	1.33***
t(b)	(36.14)	(26.75)	(29.42)	(27.93)	(17.18)	(26.61)	(25.24)	(19.68)	(14.61)
s	0.75***	1.08***	0.81***	0.95***	1.29***	0.72***	0.94***	1.09***	1.41***
t(s)	(9.33)	(15.35)	(7.98)	(9.54)	(10.30)	(7.33)	(7.99)	(11.02)	(10.38)
h	0.42***	-0.02	0.49***	0.16*	-0.46***	0.38***	0.27**	-0.22**	-0.53***
t(h)	(7.29)	(-0.19)	(6.17)	(1.84)	(-4.22)	(4.37)	(2.48)	(-2.31)	(-3.57)
5-factor									
α	0.18*	0.29**	-0.12	-0.18	0.07	-0.47***	-0.50**	-0.21	-0.83**
t(α)	(1.86)	(2.18)	(-1.01)	(-1.22)	(0.31)	(-2.87)	(-2.47)	(-0.84)	(-2.42)
b	1.03***	1.09***	1.08***	1.14***	1.01***	1.12***	1.16***	1.12***	1.03***
t(b)	(36.12)	(25.86)	(29.14)	(25.03)	(18.23)	(26.41)	(24.06)	(18.36)	(9.77)
s	0.81***	0.93***	0.89***	0.92***	0.98***	0.79***	0.97***	0.91***	1.13***
t(s)	(17.24)	(12.01)	(14.52)	(11.66)	(11.84)	(10.41)	(11.34)	(10.26)	(7.95)
h	0.31***	-0.09	0.39***	0.11	-0.50***	0.25**	0.27*	-0.29**	-0.29*
t(h)	(4.72)	(-0.80)	(4.24)	(0.96)	(-3.74)	(2.25)	(1.89)	(-2.10)	(-1.66)
r	0.10	-0.55***	0.14	-0.21*	-0.96***	0.12	-0.05	-0.63***	-1.00***
t(r)	(1.34)	(-6.21)	(1.54)	(-1.89)	(-8.80)	(1.42)	(-0.43)	(-5.78)	(-5.95)
c	-0.01	-0.04	-0.05	-0.15	-0.04	0.06	-0.29	-0.02	-0.51
t(c)	(-0.07)	(-0.26)	(-0.39)	(-0.90)	(-0.22)	(0.51)	(-1.61)	(-0.08)	(-1.50)
q-factor									
α	0.37***	0.59***	0.12	0.14	0.40	-0.26	-0.22	0.07	-0.47
t(α)	(2.98)	(3.59)	(0.79)	(0.81)	(1.41)	(-1.52)	(-1.03)	(0.24)	(-1.13)
b	1.00***	1.07***	1.04***	1.11***	1.00***	1.09***	1.14***	1.12***	0.90***
t(b)	(28.18)	(25.83)	(23.56)	(24.94)	(13.44)	(23.76)	(22.83)	(16.53)	(7.95)
s	0.67***	0.83***	0.71***	0.75***	1.00***	0.64***	0.78***	0.86***	1.03***
t(s)	(7.30)	(14.34)	(6.18)	(7.81)	(8.08)	(6.18)	(6.93)	(10.43)	(9.35)
b^{ROE}	-0.24***	-0.70***	-0.29***	-0.56***	-0.96***	-0.23***	-0.41***	-0.75***	-1.25***
$t(b^{ROE})$	(-3.21)	(-7.61)	(-3.15)	(-5.85)	(-7.48)	(-2.72)	(-3.82)	(-4.79)	(-4.83)
$b^{I/A}$	0.31***	-0.31**	0.34***	-0.13	-0.86***	0.28***	-0.07	-0.46***	-1.15***
$t(b^{I/A})$	(3.15)	(-2.53)	(2.71)	(-1.01)	(-5.67)	(2.62)	(-0.46)	(-2.98)	(-4.56)

Table IA-5: Calendar-time regressions of *equal-weighted* returns: Subperiod analysis
See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

	(1) 1975-1995 (Number of months = 252)					(2) 1996-2015 (Number of months = 240)				
	No. of equity issues≥2	No. of debt issues≥2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of large issues≥3	No. of equity issues≥2	No. of debt issues≥2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of large issues≥3
Market model										
α	-0.77***	-0.11	-1.57***	-0.33	-0.90***	-0.72*	-0.19	-1.07**	-0.47	-1.06***
t(α)	(-2.95)	(-0.47)	(-5.29)	(-1.36)	(-3.33)	(-1.68)	(-0.66)	(-2.43)	(-1.59)	(-2.85)
b	1.34***	1.20***	1.31***	1.22***	1.37***	1.52***	1.23***	1.60***	1.24***	1.47***
t(b)	(16.22)	(15.50)	(14.07)	(17.03)	(16.10)	(18.11)	(18.91)	(15.82)	(19.02)	(19.93)
3-factor										
α	-0.93***	-0.50***	-1.37***	-0.67***	-1.18***	-0.72**	-0.34	-1.05***	-0.61***	-1.12***
t(α)	(-4.95)	(-4.30)	(-5.79)	(-5.79)	(-6.61)	(-2.43)	(-1.63)	(-3.52)	(-2.66)	(-3.97)
b	1.11***	1.06***	1.05***	1.07***	1.17***	1.29***	1.16***	1.35***	1.17***	1.30***
t(b)	(19.68)	(28.93)	(14.79)	(30.83)	(21.39)	(17.52)	(22.39)	(16.43)	(21.68)	(18.79)
s	1.19***	1.18***	1.17***	1.16***	1.26***	1.13***	0.69***	1.16***	0.64***	0.94***
t(s)	(12.46)	(17.71)	(9.48)	(16.36)	(12.58)	(10.27)	(6.87)	(9.87)	(6.33)	(7.76)
h	-0.11	0.26***	-0.27**	0.20***	0.06	-0.37***	0.38***	-0.50***	0.34***	-0.09
t(h)	(-0.98)	(3.56)	(-2.19)	(3.05)	(0.70)	(-3.14)	(3.89)	(-3.47)	(3.36)	(-0.76)
5-factor										
α	-0.71***	-0.41***	-1.11***	-0.58***	-0.91***	-0.27	-0.30	-0.51	-0.55**	-0.83***
t(α)	(-3.90)	(-3.54)	(-4.37)	(-4.58)	(-5.13)	(-0.83)	(-1.32)	(-1.46)	(-2.29)	(-2.70)
b	1.09***	1.05***	1.04***	1.05***	1.13***	1.06***	1.13***	1.08***	1.13***	1.15***
t(b)	(20.38)	(33.51)	(15.47)	(32.14)	(23.77)	(13.96)	(18.72)	(11.72)	(17.47)	(15.06)
s	1.13***	1.15***	1.10***	1.12***	1.19***	0.88***	0.72***	0.93***	0.68***	0.81***
t(s)	(12.42)	(19.45)	(9.14)	(18.02)	(13.53)	(7.59)	(8.80)	(7.32)	(7.65)	(6.45)
h	-0.30**	0.17*	-0.54***	0.13*	0.03	-0.22	0.33**	-0.21	0.31**	-0.01
t(h)	(-2.09)	(1.88)	(-3.52)	(1.82)	(0.22)	(-1.28)	(2.43)	(-1.14)	(2.23)	(-0.07)
r	-0.47***	-0.14	-0.53**	-0.14	-0.44***	-0.81***	-0.01	-0.84***	-0.03	-0.50***
t(r)	(-3.05)	(-1.58)	(-2.54)	(-1.41)	(-3.02)	(-6.93)	(-0.17)	(-5.93)	(-0.31)	(-4.08)
c	0.02	-0.00	0.21	-0.06	-0.32	-0.21	-0.17	-0.51	-0.21	-0.21
t(c)	(0.09)	(-0.00)	(0.78)	(-0.45)	(-1.55)	(-0.80)	(-0.90)	(-1.44)	(-1.13)	(-0.82)
q-factor										
α	-0.63***	-0.03	-1.18***	-0.18	-0.51**	0.05	-0.11	-0.14	-0.35	-0.52*
t(α)	(-3.25)	(-0.21)	(-4.23)	(-1.27)	(-2.57)	(0.15)	(-0.45)	(-0.39)	(-1.33)	(-1.75)
b	1.17***	1.07***	1.15***	1.07***	1.18***	0.91***	1.05***	0.91***	1.04***	1.00***
t(b)	(20.58)	(33.84)	(16.58)	(32.60)	(25.07)	(10.34)	(13.79)	(9.13)	(13.56)	(11.51)
s	1.01***	1.02***	1.08***	1.00***	1.03***	0.80***	0.52***	0.77***	0.47***	0.65***
t(s)	(11.41)	(19.80)	(8.29)	(17.49)	(13.65)	(9.74)	(4.17)	(8.43)	(3.83)	(5.81)
b^{ROE}	-0.35**	-0.46***	-0.26	-0.44***	-0.55***	-1.15***	-0.43***	-1.28***	-0.46***	-0.94***
$t(b^{ROE})$	(-2.22)	(-4.93)	(-1.15)	(-4.88)	(-4.11)	(-7.13)	(-3.25)	(-5.83)	(-3.47)	(-6.21)
$b^{I/A}$	-0.24	-0.02	-0.24	-0.15*	-0.46***	-0.72***	0.21	-0.97***	0.15	-0.35**
$t(b^{I/A})$	(-1.63)	(-0.29)	(-1.20)	(-1.67)	(-3.30)	(-4.72)	(1.56)	(-4.52)	(1.16)	(-2.46)

Table IA-6. Calendar-time regressions: Recency of *large* equity issues, 1975-2015 (Number of months = 492)

See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

Panel A: Value-weighted results

Large equity issues (t,t-1,t-2)	(0,0,0)	(0,0,1)	(0,1,0)	(1,0,0)	(0,1,1)	(1,0,1)	(1,1,0)	(1,1,1)	(1,1,0) or (1,1,1)
Market model									
α	0.06*	0.09	-0.31*	-0.29*	-0.83***	-0.62**	-1.19***	-1.43***	-1.25***
t(α)	(1.72)	(0.54)	(-1.80)	(-1.82)	(-3.00)	(-2.37)	(-4.32)	(-4.39)	(-5.22)
b	0.99***	1.27***	1.25***	1.31***	1.29***	1.33***	1.47***	1.32***	1.42***
t(b)	(104.39)	(25.80)	(28.02)	(28.59)	(16.97)	(21.73)	(19.38)	(14.87)	(20.37)
3-factor									
α	0.09***	0.17	-0.18	-0.18	-0.74***	-0.44*	-1.02***	-1.22***	-1.06***
t(α)	(2.78)	(1.01)	(-1.37)	(-1.28)	(-2.72)	(-1.94)	(-4.39)	(-3.99)	(-5.28)
b	0.99***	1.16***	1.08***	1.19***	1.20***	1.15***	1.27***	1.15***	1.23***
t(b)	(95.69)	(25.30)	(27.39)	(25.30)	(15.82)	(19.00)	(19.11)	(14.67)	(20.54)
s	-0.06***	0.35***	0.55***	0.35***	0.38***	0.80***	0.73***	0.63***	0.67***
t(s)	(-3.22)	(5.17)	(6.66)	(4.56)	(3.17)	(6.90)	(7.51)	(3.24)	(5.94)
h	-0.05***	-0.30***	-0.48***	-0.37***	-0.21*	-0.41***	-0.48***	-0.52***	-0.51***
t(h)	(-3.15)	(-3.48)	(-7.16)	(-5.38)	(-1.74)	(-3.94)	(-4.27)	(-3.99)	(-5.40)
5-factor									
α	0.02	0.34*	0.09	-0.01	-0.49*	-0.31	-0.60**	-0.91***	-0.69***
t(α)	(0.76)	(1.89)	(0.61)	(-0.06)	(-1.91)	(-1.41)	(-2.56)	(-2.76)	(-3.27)
b	1.01***	1.11***	1.00***	1.12***	1.11***	1.12***	1.13***	1.03***	1.10***
t(b)	(115.57)	(26.43)	(26.90)	(27.34)	(14.47)	(19.85)	(16.97)	(12.82)	(18.85)
s	-0.03*	0.28***	0.42***	0.35***	0.36***	0.66***	0.63***	0.53***	0.59***
t(s)	(-1.79)	(3.30)	(7.01)	(5.33)	(3.05)	(6.76)	(6.00)	(3.34)	(5.78)
h	-0.10***	-0.24**	-0.39***	-0.19**	0.01	-0.59***	-0.19	-0.34**	-0.25**
t(h)	(-4.84)	(-2.22)	(-4.86)	(-1.98)	(0.04)	(-4.64)	(-1.52)	(-2.30)	(-2.29)
r	0.11***	-0.31***	-0.45***	-0.14	-0.24	-0.41***	-0.46***	-0.41*	-0.41***
t(r)	(6.59)	(-2.89)	(-5.59)	(-1.63)	(-1.15)	(-3.17)	(-4.27)	(-1.79)	(-3.14)
c	0.09***	-0.17	-0.29**	-0.50***	-0.54**	0.30	-0.78***	-0.46**	-0.71***
t(c)	(3.18)	(-1.09)	(-2.23)	(-3.80)	(-2.20)	(1.53)	(-4.86)	(-1.99)	(-5.16)
q-factor									
α	0.07**	0.42**	0.15	0.03	-0.31	-0.19	-0.54**	-0.65**	-0.59***
t(α)	(2.07)	(2.29)	(0.97)	(0.19)	(-1.24)	(-0.71)	(-2.15)	(-2.00)	(-2.82)
b	1.00***	1.13***	1.03***	1.16***	1.11***	1.10***	1.19***	1.03***	1.15***
t(b)	(103.72)	(23.05)	(22.56)	(28.58)	(16.00)	(15.93)	(17.31)	(13.05)	(19.24)
s	-0.07***	0.24***	0.44***	0.31***	0.28**	0.74***	0.60***	0.37*	0.53***
t(s)	(-5.41)	(3.28)	(4.56)	(4.94)	(2.33)	(6.31)	(6.04)	(1.95)	(4.91)

b^{ROE}	0.05***	-0.23**	-0.22**	-0.06	-0.28*	-0.25*	-0.32***	-0.64***	-0.34***
$t(b^{ROE})$	(3.09)	(-2.52)	(-2.44)	(-0.74)	(-1.68)	(-1.67)	(-2.86)	(-5.63)	(-3.56)
$b^{I/A}$	-0.02	-0.50***	-0.87***	-0.71***	-0.71***	-0.66***	-1.00***	-0.86***	-0.97***
$t(b^{I/A})$	(-1.21)	(-4.12)	(-7.24)	(-7.53)	(-3.57)	(-3.43)	(-6.42)	(-4.14)	(-7.25)

Panel B: Equal-weighted results

Large equity issues (t,t-1,t-2)	(0,0,0)	(0,0,1)	(0,1,0)	(1,0,0)	(0,1,1)	(1,0,1)	(1,1,0)	(1,1,1)	(1,1,0) or (1,1,1)
Market model									
α	0.50***	0.21	-0.14	-0.57***	-0.82**	-0.65**	-1.12***	-1.84***	-1.47***
t(α)	(3.41)	(0.96)	(-0.73)	(-2.95)	(-2.54)	(-2.01)	(-3.55)	(-4.97)	(-4.88)
b	1.09***	1.30***	1.33***	1.36***	1.39***	1.35***	1.50***	1.40***	1.48***
t(b)	(26.02)	(23.45)	(28.44)	(26.59)	(20.57)	(21.28)	(18.27)	(14.82)	(18.95)
3-factor									
α	0.25***	-0.01	-0.27*	-0.63***	-0.75***	-0.52**	-0.99***	-1.60***	-1.33***
t(α)	(3.14)	(-0.05)	(-1.94)	(-4.77)	(-2.71)	(-2.07)	(-4.12)	(-5.55)	(-6.09)
b	1.02***	1.16***	1.17***	1.17***	1.21***	1.12***	1.26***	1.13***	1.22***
t(b)	(39.00)	(23.68)	(28.71)	(27.85)	(16.78)	(18.58)	(17.84)	(12.69)	(17.46)
s	0.77***	1.04***	0.94***	1.01***	1.13***	1.24***	1.18***	1.33***	1.25***
t(s)	(10.24)	(10.80)	(11.58)	(10.38)	(9.85)	(10.07)	(12.46)	(11.25)	(13.29)
h	0.35***	0.17*	-0.01	-0.15*	-0.10	-0.31***	-0.40***	-0.49***	-0.44***
t(h)	(6.31)	(1.86)	(-0.09)	(-1.80)	(-0.66)	(-3.16)	(-2.92)	(-3.47)	(-3.61)
5-factor									
α	0.24***	0.14	-0.06	-0.41**	-0.34	-0.24	-0.41	-1.08***	-0.80***
t(α)	(2.68)	(0.89)	(-0.40)	(-2.42)	(-1.22)	(-0.98)	(-1.39)	(-3.66)	(-3.21)
b	1.01***	1.11***	1.10***	1.10***	1.08***	1.04***	1.07***	0.96***	1.06***
t(b)	(35.84)	(22.90)	(26.22)	(22.74)	(14.87)	(18.85)	(15.09)	(11.17)	(15.62)
s	0.80***	0.98***	0.86***	0.93***	0.92***	1.03***	0.94***	1.01***	0.99***
t(s)	(16.69)	(10.19)	(11.57)	(12.10)	(7.47)	(10.70)	(9.80)	(8.64)	(11.03)
h	0.22***	0.06	-0.01	-0.16	-0.06	-0.46***	-0.19	-0.42**	-0.35**
t(h)	(3.43)	(0.40)	(-0.06)	(-1.42)	(-0.30)	(-3.62)	(-1.29)	(-2.39)	(-2.41)
r	0.03	-0.32***	-0.34***	-0.36***	-0.75***	-0.68***	-0.88***	-1.01***	-0.89***
t(r)	(0.39)	(-2.63)	(-3.64)	(-2.99)	(-5.26)	(-6.05)	(-7.16)	(-7.26)	(-7.75)
c	0.03	0.02	-0.22	-0.23	-0.18	0.17	-0.63**	-0.17	-0.39
t(c)	(0.28)	(0.10)	(-1.56)	(-1.16)	(-0.78)	(1.01)	(-2.11)	(-0.49)	(-1.39)
q-factor									
α	0.43***	0.49***	0.22	-0.18	0.13	0.01	-0.04	-0.61*	-0.39
t(α)	(3.76)	(2.79)	(1.46)	(-0.80)	(0.44)	(0.05)	(-0.10)	(-1.76)	(-1.25)
b	0.98***	1.08***	1.10***	1.11***	1.02***	1.01***	1.08***	0.89***	1.06***
t(b)	(30.44)	(22.35)	(27.02)	(23.48)	(13.44)	(16.57)	(14.92)	(11.68)	(14.62)
s	0.67***	0.81***	0.74***	0.82***	0.81***	1.04***	0.84***	0.91***	0.89***
t(s)	(8.23)	(9.43)	(10.30)	(9.27)	(8.95)	(8.96)	(10.78)	(9.27)	(11.53)
b^{ROE}	-0.27***	-0.66***	-0.53***	-0.53***	-1.06***	-0.75***	-0.99***	-1.29***	-1.03***
$t(b^{ROE})$	(-4.06)	(-5.96)	(-7.21)	(-3.97)	(-8.62)	(-7.00)	(-4.92)	(-6.88)	(-5.41)
$b^{I/A}$	0.23**	-0.06	-0.36***	-0.45**	-0.54***	-0.54***	-1.00***	-0.95***	-0.96***
$t(b^{I/A})$	(2.46)	(-0.48)	(-3.62)	(-2.54)	(-3.29)	(-4.34)	(-4.17)	(-3.94)	(-4.38)

Table IA-7. Calendar-time regressions: Recency of *large* debt issues, 1975-2015 (Number of months = 492)

See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

Panel A: Value-weighted results

Large debt issues (t,t-1,t-2)	(0,0,0)	(0,0,1)	(0,1,0)	(1,0,0)	(0,1,1)	(1,0,1)	(1,1,0)	(1,1,1)	(1,1,0) or (1,1,1)
Market model									
α	0.04	0.11	0.09	-0.13	-0.10	-0.45**	-0.34*	-1.03***	-0.50***
t(α)	(1.03)	(1.19)	(0.99)	(-1.35)	(-0.45)	(-2.58)	(-1.90)	(-3.67)	(-2.99)
b	0.99***	1.11***	1.08***	1.09***	1.24***	1.20***	1.18***	1.42***	1.26***
t(b)	(97.12)	(38.19)	(46.71)	(39.19)	(18.96)	(27.53)	(23.90)	(20.42)	(29.29)
3-factor									
α	0.08**	0.13	0.12	-0.07	-0.14	-0.39**	-0.35**	-1.02***	-0.49***
t(α)	(2.39)	(1.49)	(1.28)	(-0.69)	(-0.64)	(-2.37)	(-2.03)	(-3.52)	(-2.95)
b	0.98***	1.06***	1.04***	1.07***	1.17***	1.14***	1.13***	1.34***	1.21***
t(b)	(90.65)	(40.24)	(50.55)	(39.15)	(18.49)	(27.56)	(20.66)	(17.63)	(24.52)
s	-0.05***	0.19***	0.12***	0.02	0.37***	0.18**	0.22*	0.37***	0.22**
t(s)	(-2.95)	(4.80)	(3.43)	(0.40)	(4.16)	(2.12)	(1.89)	(4.22)	(2.32)
h	-0.08***	-0.11**	-0.09	-0.15**	-0.03	-0.20***	-0.03	-0.12	-0.09
t(h)	(-4.06)	(-1.97)	(-1.58)	(-2.40)	(-0.28)	(-2.67)	(-0.33)	(-0.97)	(-1.04)
5-factor									
α	0.04	0.10	0.04	-0.16	-0.22	-0.37**	-0.43**	-0.96***	-0.54***
t(α)	(1.34)	(1.03)	(0.39)	(-1.52)	(-1.05)	(-2.22)	(-2.44)	(-3.40)	(-3.25)
b	1.00***	1.06***	1.06***	1.08***	1.18***	1.12***	1.14***	1.31***	1.20***
t(b)	(101.62)	(40.94)	(56.76)	(42.13)	(18.44)	(28.05)	(20.78)	(17.41)	(24.06)
s	-0.05**	0.23***	0.17***	0.09*	0.45***	0.23**	0.34***	0.41***	0.31***
t(s)	(-2.16)	(5.17)	(4.55)	(1.71)	(5.32)	(2.49)	(3.75)	(4.33)	(4.11)
h	-0.11***	-0.11*	-0.17***	-0.18**	-0.12	-0.15	-0.01	-0.06	-0.07
t(h)	(-3.86)	(-1.85)	(-3.42)	(-2.55)	(-1.09)	(-1.60)	(-0.12)	(-0.34)	(-0.63)
r	0.05***	0.11*	0.13**	0.20***	0.18	0.03	0.28***	0.01	0.19**
t(r)	(2.65)	(1.80)	(2.36)	(3.44)	(1.50)	(0.25)	(2.62)	(0.06)	(2.13)
c	0.07*	-0.08	0.12*	0.02	0.06	-0.19	-0.18	-0.25	-0.17
t(c)	(1.81)	(-0.78)	(1.91)	(0.27)	(0.39)	(-1.15)	(-1.17)	(-0.96)	(-1.23)
q-factor									
α	0.09**	0.17	0.09	-0.18	-0.19	-0.30*	-0.32*	-0.80***	-0.43**
t(α)	(2.47)	(1.56)	(0.88)	(-1.61)	(-0.95)	(-1.76)	(-1.74)	(-2.65)	(-2.54)
b	0.99***	1.06***	1.05***	1.10***	1.18***	1.13***	1.13***	1.32***	1.20***
t(b)	(90.54)	(41.49)	(51.83)	(42.54)	(18.76)	(26.77)	(20.77)	(19.01)	(24.88)
s	-0.08***	0.17***	0.12***	0.04	0.38***	0.17**	0.21**	0.30***	0.20**
t(s)	(-5.28)	(4.85)	(3.56)	(0.87)	(4.49)	(2.05)	(2.08)	(2.90)	(2.39)
b^{ROE}	0.01	0.05	0.07	0.17***	0.12	0.02	0.07	-0.16	0.03
$t(b^{ROE})$	(0.59)	(0.73)	(1.51)	(2.81)	(1.09)	(0.25)	(0.66)	(-1.00)	(0.31)
$b^{I/A}$	-0.06**	-0.25***	-0.11	-0.11*	-0.11	-0.41***	-0.19	-0.34*	-0.26**
$t(b^{I/A})$	(-2.52)	(-2.94)	(-1.28)	(-1.90)	(-0.84)	(-3.27)	(-1.43)	(-1.67)	(-2.15)

Panel B: Equal-weighted results

Large debt issues (t,t-1,t-2)	(0,0,0)	(0,0,1)	(0,1,0)	(1,0,0)	(0,1,1)	(1,0,1)	(1,1,0)	(1,1,1)	(1,1,0) or (1,1,1)
Market model									
α	0.47***	0.36**	0.26	-0.09	-0.03	-0.35*	-0.60***	-1.29***	-0.80***
t(α)	(3.21)	(2.02)	(1.49)	(-0.53)	(-0.13)	(-1.74)	(-2.64)	(-4.80)	(-3.64)
b	1.13***	1.19***	1.19***	1.21***	1.27***	1.25***	1.24***	1.34***	1.29***
t(b)	(29.31)	(23.57)	(23.98)	(28.59)	(22.41)	(25.82)	(20.71)	(19.86)	(23.13)
3-factor									
α	0.27***	0.09	-0.01	-0.30***	-0.32*	-0.57***	-0.85***	-1.49***	-1.04***
t(α)	(3.35)	(0.77)	(-0.05)	(-2.88)	(-1.85)	(-3.72)	(-4.82)	(-6.22)	(-6.00)
b	1.02***	1.10***	1.09***	1.11***	1.18***	1.16***	1.14***	1.25***	1.19***
t(b)	(40.40)	(29.80)	(32.47)	(33.32)	(27.15)	(28.57)	(22.40)	(18.61)	(24.66)
s	0.84***	0.88***	0.89***	0.81***	0.93***	0.85***	0.88***	0.87***	0.87***
t(s)	(14.39)	(9.01)	(10.97)	(9.33)	(9.27)	(8.72)	(6.86)	(7.45)	(7.40)
h	0.21***	0.35***	0.34***	0.24***	0.39***	0.27***	0.31***	0.23**	0.27***
t(h)	(4.03)	(4.44)	(4.67)	(3.88)	(4.71)	(3.70)	(3.06)	(2.08)	(2.82)
5-factor									
α	0.35***	0.12	0.06	-0.25**	-0.27	-0.49***	-0.81***	-1.32***	-0.96***
t(α)	(3.76)	(0.88)	(0.49)	(-2.14)	(-1.44)	(-3.04)	(-4.41)	(-5.36)	(-5.31)
b	0.99***	1.08***	1.06***	1.09***	1.15***	1.13***	1.11***	1.19***	1.14***
t(b)	(34.62)	(28.12)	(30.36)	(31.52)	(26.06)	(26.18)	(21.80)	(16.14)	(22.71)
s	0.80***	0.92***	0.90***	0.83***	0.94***	0.86***	0.95***	0.85***	0.91***
t(s)	(16.75)	(13.57)	(14.26)	(15.08)	(11.74)	(11.27)	(11.89)	(7.45)	(11.04)
h	0.10	0.26***	0.25***	0.18**	0.27**	0.22**	0.30**	0.26	0.27**
t(h)	(1.57)	(2.69)	(2.75)	(2.17)	(2.48)	(2.05)	(2.30)	(1.36)	(2.02)
r	-0.17***	0.00	-0.09	-0.02	-0.09	-0.10	0.09	-0.21	-0.02
t(r)	(-2.66)	(0.00)	(-1.05)	(-0.27)	(-0.87)	(-1.00)	(0.73)	(-1.40)	(-0.18)
c	0.02	-0.07	-0.06	-0.10	-0.01	-0.14	-0.29*	-0.28	-0.27
t(c)	(0.20)	(-0.47)	(-0.46)	(-0.89)	(-0.07)	(-1.09)	(-1.77)	(-0.97)	(-1.58)
q-factor									
α	0.56***	0.35**	0.31**	-0.02	-0.01	-0.25	-0.49**	-0.95***	-0.63***
t(α)	(4.72)	(2.09)	(2.27)	(-0.15)	(-0.03)	(-1.63)	(-2.33)	(-3.46)	(-3.07)
b	0.97***	1.05***	1.03***	1.06***	1.13***	1.10***	1.08***	1.17***	1.12***
t(b)	(35.11)	(24.93)	(30.79)	(28.44)	(24.99)	(24.23)	(18.81)	(17.41)	(21.19)
s	0.70***	0.76***	0.75***	0.68***	0.78***	0.72***	0.73***	0.68***	0.71***
t(s)	(12.05)	(7.33)	(8.90)	(7.50)	(7.35)	(6.78)	(5.47)	(5.22)	(5.70)
b^{ROE}	-0.39***	-0.34***	-0.41***	-0.34***	-0.45***	-0.37***	-0.39***	-0.58***	-0.45***
$t(b^{ROE})$	(-5.84)	(-3.66)	(-5.23)	(-4.54)	(-5.05)	(-4.81)	(-3.66)	(-3.90)	(-4.63)
$b^{I/A}$	0.06	0.17	0.14	0.04	0.23**	0.02	-0.01	-0.13	-0.06
$t(b^{I/A})$	(0.60)	(1.26)	(1.36)	(0.39)	(2.05)	(0.16)	(-0.05)	(-0.83)	(-0.43)

Table IA-8: Calendar-time regressions: Two-way sort by number of types of securities and number of *large* issues, 1975-2015 (Number of months = 492)

See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

Panel A. Value-weighted returns

No. of types of securities	0	1	2	1			2		
No. of large issues	0	1-3	2-6	1	2	3	2	3	≥4
Market model									
α	0.06	0.02	-0.45***	0.06	-0.16	-0.68***	-0.17	-0.72***	-1.03***
t(α)	(1.52)	(0.24)	(-3.14)	(0.84)	(-1.16)	(-3.01)	(-1.07)	(-3.59)	(-4.13)
b	0.97***	1.11***	1.30***	1.09***	1.22***	1.37***	1.29***	1.30***	1.38***
t(b)	(101.57)	(61.22)	(38.10)	(62.69)	(27.80)	(35.81)	(34.58)	(24.89)	(22.10)
3-factor									
α	0.09***	0.06	-0.36***	0.10	-0.18	-0.66***	-0.05	-0.66***	-0.99***
t(α)	(2.73)	(0.91)	(-2.66)	(1.64)	(-1.38)	(-3.15)	(-0.31)	(-3.49)	(-4.11)
b	0.98***	1.06***	1.20***	1.04***	1.14***	1.25***	1.20***	1.18***	1.29***
t(b)	(91.33)	(63.26)	(30.83)	(67.43)	(27.20)	(33.07)	(29.00)	(22.05)	(19.05)
s	-0.09***	0.17***	0.30***	0.15***	0.36***	0.51***	0.22**	0.47***	0.41***
t(s)	(-4.32)	(6.27)	(3.43)	(5.74)	(5.27)	(6.35)	(2.25)	(5.27)	(3.29)
h	-0.06***	-0.15***	-0.32***	-0.15***	-0.08	-0.20**	-0.36***	-0.30***	-0.16
t(h)	(-2.98)	(-4.68)	(-5.41)	(-4.90)	(-1.04)	(-2.33)	(-5.10)	(-3.93)	(-1.47)
5-factor									
α	0.03	0.03	-0.24*	0.06	-0.16	-0.60***	0.14	-0.58***	-0.88***
t(α)	(1.04)	(0.47)	(-1.77)	(0.98)	(-1.24)	(-2.73)	(0.71)	(-3.12)	(-3.77)
b	0.99***	1.06***	1.15***	1.05***	1.13***	1.22***	1.12***	1.13***	1.24***
t(b)	(104.31)	(62.64)	(31.94)	(64.95)	(29.89)	(25.95)	(27.99)	(21.91)	(18.12)
s	-0.07***	0.19***	0.32***	0.17***	0.40***	0.54***	0.20**	0.53***	0.41***
t(s)	(-3.47)	(7.56)	(4.80)	(7.14)	(5.13)	(7.00)	(2.16)	(6.20)	(3.65)
h	-0.09***	-0.19***	-0.18**	-0.20***	-0.09	-0.18*	-0.15	-0.20**	-0.11
t(h)	(-3.69)	(-4.96)	(-2.08)	(-5.67)	(-0.90)	(-1.86)	(-1.63)	(-2.10)	(-0.69)
r	0.09***	0.05	-0.07	0.06	0.03	-0.03	-0.18	0.02	-0.11
t(r)	(4.50)	(1.29)	(-0.71)	(1.53)	(0.35)	(-0.28)	(-1.38)	(0.26)	(-0.62)
c	0.09***	0.03	-0.41***	0.07	-0.11	-0.19	-0.52***	-0.39***	-0.21
t(c)	(2.61)	(0.67)	(-3.88)	(1.39)	(-0.81)	(-0.96)	(-4.14)	(-2.78)	(-0.89)
q-factor									
α	0.08**	0.07	-0.16	0.10	-0.08	-0.55**	0.20	-0.47**	-0.69***
t(α)	(2.22)	(1.09)	(-1.17)	(1.48)	(-0.54)	(-2.25)	(1.01)	(-2.44)	(-2.97)
b	0.99***	1.06***	1.18***	1.05***	1.12***	1.21***	1.16***	1.14***	1.26***
t(b)	(92.51)	(52.49)	(32.43)	(51.84)	(31.89)	(26.67)	(26.96)	(21.44)	(20.05)
s	-0.10***	0.15***	0.23***	0.13***	0.34***	0.52***	0.13	0.43***	0.30**
t(s)	(-6.61)	(4.73)	(3.22)	(3.91)	(5.77)	(6.52)	(1.48)	(5.19)	(2.39)
b^{ROE}	0.04*	0.04	-0.06	0.05	-0.03	0.04	-0.10	-0.03	-0.27**
$t(b^{ROE})$	(1.79)	(1.23)	(-0.83)	(1.39)	(-0.33)	(0.29)	(-1.16)	(-0.31)	(-1.98)
$b^{I/A}$	-0.01	-0.21***	-0.63***	-0.18***	-0.28***	-0.54***	-0.70***	-0.68***	-0.37**
$t(b^{I/A})$	(-0.58)	(-5.93)	(-8.02)	(-4.65)	(-3.00)	(-3.28)	(-7.25)	(-6.66)	(-2.14)

Panel B. Equal-weighted returns

No. of types of securities	0	1	2	1			2		
No. of large issues	0	1-3	2-6	1	2	3	2	3	≥4
Market model									
α	0.58***	0.19	-0.63***	0.32*	-0.07	-1.08***	-0.30	-0.68***	-1.68***
t(α)	(4.15)	(1.12)	(-3.03)	(1.93)	(-0.35)	(-4.14)	(-1.55)	(-2.75)	(-6.31)
b	1.07***	1.23***	1.38***	1.20***	1.29***	1.41***	1.35***	1.41***	1.41***
t(b)	(27.12)	(27.88)	(25.74)	(27.29)	(26.37)	(24.63)	(25.64)	(23.96)	(21.13)
3-factor									
α	0.35***	-0.04	-0.79***	0.08	-0.28**	-1.19***	-0.48***	-0.85***	-1.70***
t(α)	(4.70)	(-0.40)	(-5.33)	(0.79)	(-2.01)	(-6.07)	(-3.48)	(-4.36)	(-7.65)
b	0.99***	1.11***	1.22***	1.10***	1.14***	1.21***	1.20***	1.24***	1.26***
t(b)	(40.83)	(35.61)	(26.26)	(36.46)	(28.94)	(22.21)	(26.27)	(23.58)	(19.11)
s	0.76***	0.93***	1.00***	0.89***	1.02***	1.19***	0.96***	1.04***	0.97***
t(s)	(11.44)	(12.12)	(9.92)	(10.99)	(13.94)	(12.40)	(9.08)	(9.65)	(8.83)
h	0.31***	0.24***	0.06	0.28***	0.16*	-0.07	0.12	0.06	-0.05
t(h)	(6.20)	(3.58)	(0.69)	(4.35)	(1.94)	(-0.68)	(1.30)	(0.53)	(-0.49)
5-factor									
α	0.35***	0.06	-0.60***	0.14	-0.13	-0.90***	-0.34**	-0.67***	-1.32***
t(α)	(4.12)	(0.51)	(-3.58)	(1.29)	(-0.92)	(-4.29)	(-2.16)	(-3.21)	(-5.37)
b	0.99***	1.08***	1.16***	1.07***	1.10***	1.12***	1.15***	1.18***	1.14***
t(b)	(36.31)	(32.14)	(24.32)	(32.51)	(27.59)	(20.20)	(24.44)	(22.68)	(16.16)
s	0.77***	0.91***	0.95***	0.89***	0.96***	1.07***	0.95***	1.01***	0.78***
t(s)	(16.95)	(15.41)	(11.00)	(15.20)	(14.59)	(11.41)	(11.38)	(10.37)	(6.71)
h	0.18***	0.15*	0.05	0.18**	0.06	-0.07	0.08	0.04	0.00
t(h)	(2.91)	(1.69)	(0.41)	(2.21)	(0.56)	(-0.53)	(0.69)	(0.25)	(0.02)
r	-0.01	-0.17**	-0.29***	-0.10	-0.28***	-0.53***	-0.19	-0.24**	-0.70***
t(r)	(-0.21)	(-2.02)	(-2.68)	(-1.21)	(-3.34)	(-4.56)	(-1.60)	(-2.31)	(-4.93)
c	0.07	-0.05	-0.23	-0.03	-0.04	-0.25	-0.19	-0.23	-0.25
t(c)	(0.63)	(-0.37)	(-1.32)	(-0.24)	(-0.33)	(-1.23)	(-1.16)	(-1.25)	(-0.95)
q-factor									
α	0.53***	0.30**	-0.27	0.37***	0.12	-0.59**	-0.04	-0.33	-0.88***
t(α)	(4.89)	(2.20)	(-1.48)	(2.81)	(0.79)	(-2.48)	(-0.25)	(-1.50)	(-3.41)
b	0.96***	1.05***	1.14***	1.04***	1.08***	1.11***	1.13***	1.16***	1.13***
t(b)	(32.28)	(32.02)	(24.63)	(31.37)	(27.90)	(19.70)	(24.42)	(21.13)	(17.93)
s	0.66***	0.78***	0.78***	0.75***	0.84***	0.97***	0.78***	0.82***	0.65***
t(s)	(9.32)	(10.05)	(8.70)	(8.92)	(12.43)	(11.12)	(7.89)	(9.19)	(6.30)
b^{ROE}	-0.28***	-0.44***	-0.61***	-0.40***	-0.52***	-0.66***	-0.50***	-0.59***	-0.95***
$t(b^{ROE})$	(-4.38)	(-5.89)	(-6.18)	(-5.29)	(-6.89)	(-5.03)	(-5.26)	(-5.43)	(-7.05)
$b^{I/A}$	0.21**	0.04	-0.29**	0.10	-0.08	-0.52***	-0.20	-0.29**	-0.47***
$t(b^{I/A})$	(2.31)	(0.37)	(-2.41)	(0.96)	(-0.81)	(-3.27)	(-1.57)	(-2.22)	(-3.00)

Table IA-9: Two-way sort by number of large issues and type of security, 1975-2015 (Number of months = 492)

See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

Panel A. Value-weighted returns

No. of large issues	1	1	2	2	2	3	3	3	3
No. of large equity issues	0	1	0	1	2	0	1	2	3
CAPM									
α	0.10	-0.07	-0.10	-0.17	-0.59**	-0.32	-0.51**	-1.25***	-1.78***
t(α)	(1.46)	(-0.39)	(-0.65)	(-1.07)	(-2.05)	(-1.02)	(-2.21)	(-5.13)	(-4.26)
b	1.05***	1.29***	1.15***	1.29***	1.47***	1.26***	1.27***	1.35***	1.49***
t(b)	(54.61)	(22.87)	(22.64)	(34.58)	(18.88)	(16.77)	(19.97)	(22.13)	(12.01)
3-factor									
α	0.12*	0.07	-0.16	-0.05	-0.27	-0.40	-0.49**	-1.10***	-1.59***
t(α)	(1.82)	(0.56)	(-1.07)	(-0.31)	(-1.10)	(-1.36)	(-2.08)	(-4.94)	(-4.55)
b	1.02***	1.11***	1.12***	1.20***	1.19***	1.23***	1.18***	1.19***	1.24***
t(b)	(56.90)	(23.91)	(23.97)	(29.00)	(15.67)	(20.70)	(17.24)	(20.91)	(12.70)
s	0.06**	0.57***	0.25***	0.22**	1.01***	0.37***	0.37***	0.68***	1.08***
t(s)	(2.19)	(5.98)	(2.99)	(2.25)	(4.70)	(3.47)	(3.17)	(7.75)	(7.11)
h	-0.08*	-0.51***	0.06	-0.36***	-0.73***	0.07	-0.16*	-0.35***	-0.66***
t(h)	(-1.95)	(-6.98)	(0.64)	(-5.10)	(-6.66)	(0.45)	(-1.72)	(-3.89)	(-4.73)
5-factor									
α	0.01	0.37***	-0.26*	0.14	0.25	-0.60*	-0.42*	-0.99***	-1.07***
t(α)	(0.20)	(3.17)	(-1.66)	(0.71)	(0.97)	(-1.91)	(-1.92)	(-4.25)	(-3.03)
b	1.05***	1.03***	1.13***	1.12***	1.04***	1.25***	1.13***	1.15***	0.97***
t(b)	(59.92)	(27.36)	(27.20)	(27.99)	(16.23)	(18.80)	(16.62)	(19.76)	(8.04)
s	0.12***	0.39***	0.36***	0.20**	0.68***	0.55***	0.46***	0.68***	0.81***
t(s)	(4.74)	(6.09)	(4.20)	(2.16)	(5.30)	(4.88)	(4.74)	(7.03)	(5.96)
h	-0.16***	-0.45***	0.02	-0.15	-0.65***	-0.07	-0.01	-0.34***	-0.42***
t(h)	(-4.10)	(-5.02)	(0.22)	(-1.63)	(-5.13)	(-0.45)	(-0.11)	(-2.80)	(-2.67)
r	0.19***	-0.58***	0.24**	-0.18	-1.00***	0.43**	0.09	-0.09	-0.92***
t(r)	(5.37)	(-7.04)	(2.58)	(-1.38)	(-5.44)	(2.10)	(0.77)	(-0.82)	(-5.91)
c	0.13***	-0.21*	-0.05	-0.52***	-0.21	0.07	-0.50**	-0.22	-0.41
t(c)	(2.70)	(-1.87)	(-0.34)	(-4.14)	(-1.10)	(0.24)	(-2.49)	(-1.35)	(-1.38)
q-factor									
α	0.04	0.46***	-0.15	0.20	0.36	-0.50	-0.27	-0.82***	-1.17***
t(α)	(0.53)	(3.02)	(-0.92)	(1.01)	(1.21)	(-1.48)	(-1.16)	(-3.33)	(-2.75)
b	1.05***	1.06***	1.12***	1.16***	1.07***	1.21***	1.14***	1.14***	1.02***
t(b)	(56.65)	(19.99)	(28.10)	(26.96)	(11.80)	(18.37)	(16.22)	(18.65)	(7.75)
s	0.07***	0.42***	0.26***	0.13	0.86***	0.47***	0.34***	0.60***	1.02***
t(s)	(3.02)	(3.85)	(3.36)	(1.48)	(3.68)	(3.91)	(2.89)	(7.27)	(7.09)
b^{ROE}	0.14***	-0.34***	0.05	-0.10	-0.52***	0.27	-0.05	-0.18*	-0.37
$t(b^{ROE})$	(3.64)	(-3.87)	(0.52)	(-1.16)	(-3.17)	(1.50)	(-0.47)	(-1.82)	(-1.47)
$b^{I/A}$	-0.04	-0.84***	-0.04	-0.70***	-1.32***	-0.16	-0.57***	-0.72***	-1.30***
$t(b^{I/A})$	(-1.16)	(-7.58)	(-0.37)	(-7.25)	(-6.73)	(-0.64)	(-4.18)	(-5.57)	(-5.13)

Panel B. Equal-weighted returns

No. of large issues	1	1	2	2	2	3	3	3	3
No. of large equity issues	0	1	0	1	2	0	1	2	3
CAPM									
α	0.40**	0.10	0.05	-0.30	-0.53*	-0.64**	-0.53**	-1.12***	-1.89***
t(α)	(2.46)	(0.50)	(0.23)	(-1.55)	(-1.67)	(-2.10)	(-2.21)	(-3.47)	(-4.18)
b	1.14***	1.36***	1.19***	1.35***	1.45***	1.26***	1.35***	1.40***	1.61***
t(b)	(23.87)	(24.62)	(21.15)	(25.64)	(21.06)	(18.43)	(23.63)	(21.43)	(14.19)
3-factor									
α	0.11	-0.03	-0.26*	-0.48***	-0.33	-0.99***	-0.72***	-1.02***	-1.73***
t(α)	(1.15)	(-0.23)	(-1.88)	(-3.48)	(-1.42)	(-3.92)	(-3.59)	(-3.98)	(-5.34)
b	1.07***	1.16***	1.12***	1.20***	1.20***	1.26***	1.23***	1.20***	1.30***
t(b)	(35.72)	(24.65)	(27.15)	(26.27)	(18.19)	(21.06)	(22.80)	(19.62)	(14.27)
s	0.80***	1.11***	0.84***	0.96***	1.31***	0.89***	0.91***	1.16***	1.47***
t(s)	(8.88)	(13.32)	(7.78)	(9.08)	(10.81)	(7.29)	(7.13)	(11.62)	(10.68)
h	0.42***	-0.05	0.44***	0.12	-0.42***	0.46***	0.21*	-0.22*	-0.62***
t(h)	(6.46)	(-0.50)	(5.49)	(1.30)	(-3.48)	(3.75)	(1.95)	(-1.91)	(-4.24)
5-factor									
α	0.10	0.23	-0.29**	-0.34**	0.16	-1.00***	-0.62***	-0.69**	-1.11***
t(α)	(0.87)	(1.63)	(-2.05)	(-2.16)	(0.65)	(-4.08)	(-2.89)	(-2.56)	(-3.24)
b	1.06***	1.09***	1.12***	1.15***	1.05***	1.23***	1.18***	1.10***	0.97***
t(b)	(34.28)	(24.00)	(27.04)	(24.44)	(17.84)	(20.33)	(21.53)	(17.65)	(9.92)
s	0.86***	0.97***	0.91***	0.95***	1.02***	1.01***	0.94***	0.98***	1.14***
t(s)	(16.41)	(10.76)	(13.73)	(11.38)	(11.87)	(9.03)	(9.85)	(10.15)	(7.98)
h	0.32***	-0.12	0.32***	0.08	-0.41***	0.40**	0.20	-0.26*	-0.37**
t(h)	(4.36)	(-0.90)	(3.21)	(0.69)	(-2.80)	(2.51)	(1.36)	(-1.82)	(-2.18)
r	0.09	-0.53***	0.12	-0.19	-0.94***	0.17*	-0.07	-0.64***	-1.12***
t(r)	(1.09)	(-5.62)	(1.23)	(-1.60)	(-8.54)	(1.77)	(-0.56)	(-6.11)	(-7.45)
c	-0.05	-0.06	-0.01	-0.19	-0.16	-0.20	-0.25	-0.06	-0.47
t(c)	(-0.40)	(-0.34)	(-0.07)	(-1.16)	(-0.81)	(-0.91)	(-1.40)	(-0.29)	(-1.42)
q-factor									
α	0.30**	0.55***	-0.05	-0.04	0.50*	-0.72***	-0.31	-0.30	-0.76*
t(α)	(2.16)	(3.12)	(-0.34)	(-0.25)	(1.76)	(-2.67)	(-1.39)	(-1.05)	(-1.83)
b	1.03***	1.08***	1.08***	1.13***	1.04***	1.18***	1.16***	1.04***	0.85***
t(b)	(27.43)	(24.27)	(22.34)	(24.42)	(13.92)	(19.53)	(19.54)	(16.24)	(7.70)
s	0.70***	0.85***	0.74***	0.78***	1.02***	0.82***	0.74***	0.89***	1.10***
t(s)	(7.00)	(13.69)	(6.18)	(7.89)	(8.77)	(5.95)	(5.90)	(11.31)	(9.93)
b^{ROE}	-0.26***	-0.72***	-0.30***	-0.50***	-0.97***	-0.23**	-0.47***	-0.90***	-1.28***
$t(b^{ROE})$	(-3.30)	(-7.05)	(-3.69)	(-5.26)	(-7.26)	(-2.12)	(-4.58)	(-7.52)	(-5.16)
$b^{I/A}$	0.28**	-0.35***	0.31***	-0.20	-0.87***	0.15	-0.10	-0.57***	-1.25***
$t(b^{I/A})$	(2.46)	(-2.78)	(2.77)	(-1.57)	(-5.41)	(0.92)	(-0.70)	(-3.66)	(-5.10)

Table IA-10: Calendar-time regressions: Two-way sort by number of issues (⩾4) and security type, 1975-2015 (Number of months = 492)

See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

	Value-Weighted Portfolios					Equal-Weighted Portfolios				
#of issues	4	4	4	5	5	4	4	4	5	5
# of equity issues	1	2	3	2	3	1	2	3	2	3
CAPM										
α	-0.23	-0.76***	-1.14**	-1.02*	-1.67**	-0.76**	-1.30***	-1.29***	-1.83***	-2.09***
t(α)	(-0.75)	(-2.61)	(-2.52)	(-1.75)	(-2.41)	(-2.55)	(-4.57)	(-2.80)	(-3.69)	(-3.87)
b	1.42***	1.06***	1.38***	1.53***	1.50***	1.36***	1.27***	1.42***	1.40***	1.48***
t(b)	(19.33)	(14.71)	(11.39)	(12.12)	(6.14)	(19.63)	(21.61)	(14.61)	(14.70)	(11.98)
3-factor										
α	-0.26	-0.78***	-0.96**	-1.11*	-1.51**	-0.92***	-1.38***	-1.08***	-1.85***	-1.85***
t(α)	(-0.83)	(-2.79)	(-2.25)	(-1.81)	(-1.99)	(-3.27)	(-5.92)	(-2.74)	(-3.87)	(-3.88)
b	1.36***	1.01***	1.16***	1.52***	1.35***	1.28***	1.15***	1.16***	1.28***	1.22***
t(b)	(17.00)	(13.60)	(10.66)	(10.14)	(6.31)	(18.55)	(19.88)	(12.62)	(12.15)	(11.02)
s	0.37***	0.38*	0.91***	0.51***	0.53	0.77***	0.99***	1.12***	0.82***	0.99***
t(s)	(2.82)	(1.96)	(5.11)	(3.51)	(1.43)	(5.94)	(6.32)	(6.39)	(4.43)	(8.36)
h	-0.02	0.01	-0.55**	0.20	-0.25	0.21	0.15	-0.62***	-0.01	-0.37*
t(h)	(-0.13)	(0.10)	(-2.42)	(0.79)	(-0.73)	(1.64)	(1.40)	(-3.12)	(-0.06)	(-1.83)
5-factor										
α	-0.28	-0.87***	-0.79*	-0.96*	-1.44*	-0.74**	-1.12***	-0.76**	-1.16**	-1.56***
t(α)	(-0.86)	(-3.04)	(-1.69)	(-1.66)	(-1.88)	(-2.59)	(-4.43)	(-2.01)	(-1.98)	(-3.28)
b	1.34***	1.01***	1.09***	1.49***	1.28***	1.21***	1.06***	1.03***	1.07***	1.03***
t(b)	(16.55)	(14.27)	(10.07)	(9.96)	(5.90)	(16.65)	(16.87)	(11.02)	(8.00)	(7.95)
s	0.46***	0.58***	0.78***	0.49***	0.75***	0.75***	0.95***	0.88***	0.69***	0.89***
t(s)	(2.92)	(3.84)	(4.31)	(2.70)	(2.72)	(5.60)	(7.32)	(5.54)	(3.66)	(6.87)
h	0.02	0.05	-0.63**	0.24	-0.05	0.27	0.23	-0.63**	0.52*	-0.08
t(h)	(0.08)	(0.35)	(-2.58)	(0.69)	(-0.13)	(1.44)	(1.51)	(-2.05)	(1.96)	(-0.30)
r	0.14	0.40**	-0.47**	-0.21	0.37	-0.21*	-0.30*	-0.78***	-0.63***	-0.53***
t(r)	(0.92)	(2.36)	(-2.06)	(-0.66)	(1.09)	(-1.78)	(-1.91)	(-4.28)	(-3.33)	(-2.64)
c	-0.22	-0.30	0.12	-0.09	-1.04**	-0.34	-0.40**	0.07	-1.07*	-0.59*
t(c)	(-0.80)	(-1.16)	(0.35)	(-0.23)	(-2.24)	(-1.46)	(-2.23)	(0.18)	(-1.96)	(-1.74)
q-factor										
α	0.04	-0.79***	-0.30	-0.95*	-1.27*	-0.37	-0.86***	-0.22	-0.71	-1.35***
t(α)	(0.13)	(-2.65)	(-0.57)	(-1.70)	(-1.74)	(-1.28)	(-3.53)	(-0.49)	(-1.00)	(-2.73)
b	1.31***	1.00***	0.98***	1.49***	1.23***	1.19***	1.05***	0.90***	1.04***	1.00***
t(b)	(18.34)	(13.43)	(10.57)	(11.93)	(5.78)	(19.12)	(15.06)	(8.85)	(7.14)	(7.82)
s	0.31**	0.43**	0.57***	0.47***	0.39	0.58***	0.79***	0.76***	0.41**	0.79***
t(s)	(2.25)	(2.30)	(3.93)	(3.16)	(1.04)	(4.24)	(4.97)	(5.02)	(2.24)	(6.46)
b^{ROE}	-0.26	0.19	-0.86***	-0.14	-0.07	-0.60***	-0.55***	-1.12***	-1.04***	-0.77***
$t(b^{ROE})$	(-1.24)	(1.20)	(-4.16)	(-0.51)	(-0.29)	(-4.45)	(-4.18)	(-6.00)	(-3.39)	(-3.66)
$b^{I/A}$	-0.28	-0.29	-0.84**	0.05	-0.97**	-0.12	-0.29**	-1.04***	-0.61*	-0.72***
$t(b^{I/A})$	(-1.17)	(-1.22)	(-2.26)	(0.14)	(-2.35)	(-0.72)	(-1.97)	(-3.92)	(-1.82)	(-2.64)

Table IA-11: Calendar-time regressions: Two-way sort by number of debt issues and number of equity issues, 1975-2015 (Number of months = 492)

See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

Panel A. Value-weighted returns

No. of debt issues	=0			≥1			≥2		
No. of equity issues	=0	≥1	≥2	0	≥1	≥2	=0	≥1	≥2
Market model									
α	0.10**	-0.23	-0.39	0.03	-0.36***	-0.75***	-0.04	-0.47***	-0.94***
t(α)	(2.26)	(-1.40)	(-1.49)	(0.54)	(-2.94)	(-4.27)	(-0.40)	(-2.74)	(-3.74)
b	0.95***	1.33***	1.41***	1.03***	1.24***	1.27***	1.11***	1.23***	1.25***
t(b)	(89.23)	(24.65)	(20.02)	(69.84)	(40.80)	(29.90)	(32.48)	(31.34)	(21.06)
3-factor									
α	0.15***	-0.12	-0.13	0.03	-0.29**	-0.69***	-0.13	-0.44***	-0.87***
t(α)	(3.99)	(-0.90)	(-0.56)	(0.50)	(-2.40)	(-4.11)	(-1.46)	(-2.64)	(-3.60)
b	0.95***	1.17***	1.18***	1.04***	1.17***	1.16***	1.12***	1.15***	1.14***
t(b)	(85.20)	(25.78)	(18.32)	(70.06)	(33.92)	(25.81)	(38.05)	(26.72)	(18.43)
s	-0.09***	0.55***	0.90***	-0.01	0.21***	0.40***	0.12**	0.28***	0.43***
t(s)	(-4.46)	(6.01)	(5.51)	(-0.48)	(3.06)	(3.98)	(1.99)	(3.03)	(2.78)
h	-0.09***	-0.43***	-0.61***	0.01	-0.24***	-0.26***	0.18***	-0.16**	-0.22*
t(h)	(-4.55)	(-5.42)	(-6.09)	(0.23)	(-4.33)	(-3.01)	(3.08)	(-2.01)	(-1.94)
5-factor									
α	0.09**	0.21*	0.31	-0.07	-0.21*	-0.66***	-0.18*	-0.42***	-0.83***
t(α)	(2.54)	(1.78)	(1.31)	(-1.27)	(-1.76)	(-4.05)	(-1.88)	(-2.70)	(-3.60)
b	0.97***	1.08***	1.05***	1.06***	1.13***	1.13***	1.13***	1.12***	1.10***
t(b)	(96.12)	(30.96)	(19.60)	(78.31)	(34.93)	(25.30)	(41.92)	(26.62)	(18.49)
s	-0.08***	0.35***	0.60***	0.04**	0.24***	0.46***	0.18***	0.38***	0.56***
t(s)	(-3.73)	(5.66)	(5.62)	(2.09)	(4.30)	(6.08)	(3.28)	(5.84)	(4.84)
h	-0.13***	-0.35***	-0.57***	-0.04*	-0.13	-0.19*	0.17**	-0.04	-0.08
t(h)	(-4.73)	(-3.84)	(-5.25)	(-1.66)	(-1.57)	(-1.77)	(2.49)	(-0.42)	(-0.54)
r	0.08***	-0.63***	-0.89***	0.17***	-0.02	0.07	0.13**	0.14	0.17
t(r)	(3.46)	(-8.48)	(-6.33)	(6.84)	(-0.25)	(0.68)	(2.35)	(1.46)	(1.03)
c	0.10**	-0.22**	-0.14	0.08**	-0.34***	-0.29**	-0.05	-0.40***	-0.49**
t(c)	(2.37)	(-2.13)	(-0.81)	(2.55)	(-3.77)	(-2.15)	(-0.54)	(-2.80)	(-2.46)
q-factor									
α	0.14***	0.28*	0.35	-0.02	-0.14	-0.57***	-0.10	-0.32**	-0.72***
t(α)	(3.05)	(1.80)	(1.24)	(-0.43)	(-1.19)	(-3.36)	(-0.87)	(-2.10)	(-3.05)
b	0.96***	1.11***	1.09***	1.05***	1.15***	1.15***	1.12***	1.13***	1.12***
t(b)	(80.65)	(22.20)	(13.91)	(81.00)	(37.49)	(24.58)	(42.03)	(28.14)	(17.92)
s	-0.11***	0.39***	0.76***	-0.01	0.17***	0.35***	0.11*	0.28***	0.41***
t(s)	(-6.93)	(4.02)	(4.18)	(-0.38)	(2.87)	(4.05)	(1.83)	(3.22)	(2.78)
b^{ROE}	0.03	-0.34***	-0.42**	0.09***	-0.01	-0.02	-0.01	0.05	-0.01
$t(b^{ROE})$	(1.36)	(-3.72)	(-2.55)	(3.17)	(-0.18)	(-0.21)	(-0.10)	(0.61)	(-0.05)
$b^{I/A}$	-0.04	-0.79***	-1.06***	0.03	-0.52***	-0.51***	0.13*	-0.51***	-0.57***
$t(b^{I/A})$	(-1.42)	(-6.84)	(-5.99)	(1.16)	(-7.67)	(-4.27)	(1.67)	(-4.17)	(-3.41)

Panel B. Equal-weighted returns

No. of debt issues	=0			≥1			≥2		
No. of equity issues	=0	≥1	≥2	0	≥1	≥2	=0	≥1	≥2
Market model									
α	0.64***	-0.04	-0.82***	0.40**	-0.43**	-0.93***	0.17	-0.72***	-1.49***
t(α)	(4.66)	(-0.17)	(-2.68)	(2.49)	(-2.13)	(-3.86)	(1.00)	(-3.29)	(-5.95)
b	1.06***	1.37***	1.42***	1.11***	1.35***	1.39***	1.15***	1.35***	1.33***
t(b)	(27.75)	(26.12)	(20.11)	(23.14)	(26.11)	(24.86)	(21.93)	(24.76)	(22.83)
3-factor									
α	0.42***	-0.15	-0.64***	0.10	-0.61***	-1.00***	-0.14	-0.93***	-1.53***
t(α)	(5.80)	(-1.02)	(-2.89)	(1.12)	(-4.23)	(-5.50)	(-1.21)	(-5.42)	(-7.47)
b	0.97***	1.15***	1.16***	1.05***	1.20***	1.19***	1.09***	1.22***	1.18***
t(b)	(41.64)	(26.19)	(17.97)	(35.13)	(27.25)	(23.64)	(30.62)	(26.05)	(21.06)
s	0.76***	1.16***	1.33***	0.77***	0.98***	1.04***	0.80***	0.94***	0.96***
t(s)	(12.02)	(16.62)	(11.76)	(8.86)	(10.17)	(12.20)	(8.07)	(8.60)	(8.25)
h	0.28***	-0.13	-0.44***	0.44***	0.11	-0.16*	0.47***	0.19**	-0.03
t(h)	(5.79)	(-1.52)	(-4.07)	(6.99)	(1.19)	(-1.83)	(6.27)	(2.02)	(-0.28)
5-factor									
α	0.43***	0.20	-0.15	0.07	-0.43***	-0.73***	-0.18	-0.76***	-1.24***
t(α)	(5.16)	(1.37)	(-0.66)	(0.71)	(-2.60)	(-3.69)	(-1.48)	(-4.05)	(-5.54)
b	0.97***	1.07***	1.02***	1.05***	1.14***	1.11***	1.09***	1.15***	1.08***
t(b)	(36.31)	(26.54)	(18.35)	(34.96)	(24.85)	(20.71)	(30.55)	(23.99)	(17.37)
s	0.77***	0.96***	1.03***	0.83***	0.93***	0.92***	0.87***	0.92***	0.87***
t(s)	(17.09)	(13.59)	(12.43)	(16.53)	(11.50)	(10.84)	(14.75)	(10.86)	(8.52)
h	0.14**	-0.18*	-0.44***	0.33***	0.09	-0.18	0.36***	0.23*	0.08
t(h)	(2.45)	(-1.70)	(-3.49)	(4.60)	(0.75)	(-1.42)	(4.13)	(1.79)	(0.57)
r	-0.03	-0.70***	-0.97***	0.11	-0.27***	-0.50***	0.14	-0.20*	-0.42***
t(r)	(-0.50)	(-8.89)	(-9.45)	(1.43)	(-2.62)	(-4.73)	(1.61)	(-1.75)	(-3.13)
c	0.07	-0.09	-0.15	-0.01	-0.23	-0.17	-0.03	-0.37**	-0.43**
t(c)	(0.70)	(-0.52)	(-0.72)	(-0.13)	(-1.28)	(-0.86)	(-0.26)	(-2.11)	(-2.11)
q-factor									
α	0.61***	0.49***	0.19	0.27**	-0.11	-0.42*	0.06	-0.45**	-0.93***
t(α)	(5.60)	(2.71)	(0.67)	(2.14)	(-0.59)	(-1.87)	(0.43)	(-2.29)	(-4.02)
b	0.94***	1.06***	1.01***	1.02***	1.13***	1.13***	1.05***	1.14***	1.08***
t(b)	(32.99)	(24.63)	(14.14)	(27.30)	(25.15)	(20.40)	(24.65)	(23.51)	(17.09)
s	0.66***	0.88***	1.02***	0.68***	0.77***	0.81***	0.70***	0.74***	0.72***
t(s)	(10.05)	(16.07)	(9.52)	(6.93)	(8.69)	(10.96)	(6.30)	(6.83)	(6.17)
b^{ROE}	-0.27***	-0.77***	-0.98***	-0.25***	-0.59***	-0.69***	-0.28***	-0.52***	-0.68***
$t(b^{ROE})$	(-4.41)	(-7.86)	(-6.75)	(-3.28)	(-5.93)	(-5.11)	(-3.31)	(-5.35)	(-5.06)
$b^{I/A}$	0.17*	-0.48***	-0.89***	0.32***	-0.23*	-0.47***	0.33***	-0.20	-0.43***
$t(b^{I/A})$	(1.96)	(-3.65)	(-5.29)	(3.07)	(-1.81)	(-3.26)	(2.87)	(-1.53)	(-2.95)

Table IA-12: Calendar-time regressions: Two-way sort by number of *large* debt issues and number of *large* equity issues, 1975-2015 (Number of months = 492)

See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

Panel A. Value-weighted returns

No. of large debt issues	=0			≥1			≥2		
No. of large equity issues	=0	≥1	≥2	0	≥1	≥2	=0	≥1	≥2
Market model									
α	0.06	-0.16	-0.72***	0.07	-0.45***	-1.05***	-0.11	-0.69***	-1.18***
t(α)	(1.52)	(-0.94)	(-2.60)	(0.98)	(-3.14)	(-4.99)	(-0.70)	(-3.34)	(-4.06)
b	0.97***	1.32***	1.48***	1.06***	1.30***	1.33***	1.17***	1.32***	1.28***
t(b)	(101.57)	(23.00)	(19.28)	(54.50)	(38.10)	(25.75)	(22.98)	(27.63)	(18.20)
3-factor									
α	0.09***	-0.02	-0.43*	0.09	-0.36***	-0.95***	-0.16	-0.67***	-1.09***
t(α)	(2.73)	(-0.15)	(-1.84)	(1.27)	(-2.66)	(-4.82)	(-1.10)	(-3.36)	(-3.81)
b	0.98***	1.12***	1.21***	1.04***	1.20***	1.21***	1.14***	1.23***	1.19***
t(b)	(91.33)	(23.32)	(16.08)	(57.14)	(30.83)	(21.68)	(24.59)	(22.95)	(15.76)
s	-0.09***	0.63***	1.02***	0.07***	0.30***	0.46***	0.24***	0.37***	0.35**
t(s)	(-4.32)	(5.94)	(5.03)	(2.66)	(3.43)	(3.83)	(3.03)	(3.12)	(2.37)
h	-0.06***	-0.55***	-0.70***	-0.07*	-0.32***	-0.28***	0.04	-0.18**	-0.21*
t(h)	(-2.98)	(-7.32)	(-6.91)	(-1.72)	(-5.41)	(-3.18)	(0.45)	(-2.03)	(-1.91)
5-factor									
α	0.03	0.33***	0.07	-0.02	-0.24*	-0.84***	-0.26*	-0.61***	-0.95***
t(α)	(1.04)	(2.87)	(0.29)	(-0.25)	(-1.77)	(-4.36)	(-1.79)	(-3.27)	(-3.39)
b	0.99***	1.03***	1.06***	1.06***	1.15***	1.16***	1.15***	1.19***	1.13***
t(b)	(104.31)	(27.11)	(16.29)	(60.67)	(31.94)	(19.85)	(28.36)	(22.67)	(14.11)
s	-0.07***	0.44***	0.70***	0.14***	0.32***	0.49***	0.36***	0.45***	0.36***
t(s)	(-3.47)	(6.25)	(5.59)	(5.66)	(4.80)	(4.84)	(4.33)	(4.81)	(2.80)
h	-0.09***	-0.46***	-0.62***	-0.15***	-0.18**	-0.19	0.01	-0.05	-0.10
t(h)	(-3.69)	(-5.08)	(-5.02)	(-3.75)	(-2.08)	(-1.49)	(0.06)	(-0.45)	(-0.58)
r	0.09***	-0.64***	-0.96***	0.20***	-0.07	-0.07	0.26***	0.07	-0.12
t(r)	(4.50)	(-7.64)	(-5.59)	(5.42)	(-0.71)	(-0.46)	(2.77)	(0.52)	(-0.57)
c	0.09***	-0.26**	-0.24	0.10**	-0.41***	-0.32**	-0.05	-0.43**	-0.33
t(c)	(2.61)	(-2.32)	(-1.24)	(2.15)	(-3.88)	(-1.97)	(-0.36)	(-2.56)	(-1.18)
q-factor									
α	0.08**	0.40***	0.13	0.01	-0.16	-0.71***	-0.17	-0.47**	-0.76***
t(α)	(2.22)	(2.66)	(0.46)	(0.17)	(-1.17)	(-3.74)	(-1.02)	(-2.46)	(-2.72)
b	0.99***	1.06***	1.09***	1.06***	1.18***	1.18***	1.13***	1.20***	1.14***
t(b)	(92.51)	(19.31)	(12.07)	(58.44)	(32.43)	(20.67)	(29.87)	(23.02)	(15.03)
s	-0.10***	0.48***	0.89***	0.08***	0.23***	0.38***	0.26***	0.33***	0.24
t(s)	(-6.61)	(4.04)	(4.04)	(3.72)	(3.22)	(3.45)	(3.62)	(2.86)	(1.62)
b^{ROE}	0.04*	-0.35***	-0.44***	0.13***	-0.06	-0.15	0.08	-0.07	-0.29*
$t(b^{ROE})$	(1.79)	(-3.71)	(-2.71)	(3.73)	(-0.83)	(-1.45)	(0.84)	(-0.66)	(-1.67)
$b^{I/A}$	-0.01	-0.94***	-1.29***	-0.06	-0.63***	-0.57***	-0.08	-0.52***	-0.50**
$t(b^{I/A})$	(-0.58)	(-8.20)	(-6.99)	(-1.64)	(-8.02)	(-4.42)	(-0.62)	(-4.04)	(-2.55)

Panel B. Equal-weighted returns

No. of large debt issues	=0			≥1			≥2		
No. of large equity issues	=0	≥1	≥2	0	≥1	≥2	=0	≥1	≥2
Market model									
α	0.58***	-0.08	-0.83***	0.32*	-0.63***	-1.39***	-0.03	-1.03***	-2.03***
t(α)	(4.15)	(-0.36)	(-2.68)	(1.90)	(-3.03)	(-5.04)	(-0.14)	(-4.48)	(-6.66)
b	1.07***	1.40***	1.48***	1.15***	1.38***	1.40***	1.21***	1.39***	1.37***
t(b)	(27.12)	(25.19)	(21.00)	(23.80)	(25.74)	(22.92)	(22.14)	(24.62)	(17.77)
3-factor									
α	0.35***	-0.18	-0.65***	0.03	-0.79***	-1.34***	-0.32**	-1.22***	-2.01***
t(α)	(4.70)	(-1.23)	(-2.92)	(0.28)	(-5.33)	(-6.13)	(-2.33)	(-6.64)	(-7.42)
b	0.99***	1.17***	1.21***	1.08***	1.22***	1.21***	1.13***	1.25***	1.23***
t(b)	(40.83)	(24.82)	(18.65)	(34.80)	(26.26)	(20.84)	(28.02)	(25.15)	(16.53)
s	0.76***	1.19***	1.35***	0.80***	1.00***	1.06***	0.84***	0.94***	0.95***
t(s)	(11.44)	(15.07)	(11.98)	(8.69)	(9.92)	(10.99)	(7.92)	(8.57)	(7.82)
h	0.31***	-0.15	-0.46***	0.42***	0.06	-0.20*	0.42***	0.14*	-0.05
t(h)	(6.20)	(-1.53)	(-3.89)	(6.26)	(0.69)	(-1.92)	(5.01)	(1.67)	(-0.46)
5-factor									
α	0.35***	0.16	-0.15	0.01	-0.60***	-1.00***	-0.36**	-1.01***	-1.61***
t(α)	(4.12)	(1.03)	(-0.64)	(0.07)	(-3.58)	(-4.20)	(-2.51)	(-5.09)	(-5.28)
b	0.99***	1.08***	1.06***	1.07***	1.16***	1.11***	1.13***	1.18***	1.09***
t(b)	(36.31)	(24.76)	(17.78)	(33.88)	(24.32)	(18.31)	(28.19)	(22.38)	(13.45)
s	0.77***	1.00***	1.05***	0.87***	0.95***	0.88***	0.92***	0.90***	0.77***
t(s)	(16.95)	(12.21)	(12.63)	(16.04)	(11.00)	(8.94)	(13.64)	(9.99)	(6.32)
h	0.18***	-0.19	-0.42***	0.32***	0.05	-0.20	0.30***	0.19	0.08
t(h)	(2.91)	(-1.46)	(-3.11)	(4.08)	(0.41)	(-1.37)	(2.88)	(1.51)	(0.51)
r	-0.01	-0.67***	-0.94***	0.10	-0.29***	-0.65***	0.12	-0.28**	-0.67***
t(r)	(-0.21)	(-8.02)	(-8.86)	(1.19)	(-2.68)	(-5.76)	(1.31)	(-2.40)	(-3.93)
c	0.07	-0.13	-0.23	-0.04	-0.23	-0.15	-0.01	-0.36*	-0.39
t(c)	(0.63)	(-0.72)	(-1.05)	(-0.35)	(-1.32)	(-0.65)	(-0.07)	(-1.96)	(-1.33)
q-factor									
α	0.53***	0.47**	0.18	0.22	-0.27	-0.61**	-0.12	-0.66***	-1.13***
t(α)	(4.89)	(2.44)	(0.61)	(1.59)	(-1.48)	(-2.36)	(-0.77)	(-3.30)	(-3.69)
b	0.96***	1.08***	1.05***	1.04***	1.14***	1.10***	1.09***	1.17***	1.05***
t(b)	(32.28)	(23.50)	(13.81)	(27.05)	(24.63)	(17.48)	(23.42)	(22.78)	(14.49)
s	0.66***	0.91***	1.03***	0.71***	0.78***	0.76***	0.75***	0.71***	0.60***
t(s)	(9.32)	(16.16)	(9.43)	(6.90)	(8.70)	(9.86)	(6.40)	(6.52)	(4.92)
b^{ROE}	-0.28***	-0.79***	-0.96***	-0.26***	-0.61***	-0.89***	-0.29***	-0.63***	-1.06***
$t(b^{ROE})$	(-4.38)	(-7.43)	(-6.08)	(-3.41)	(-6.18)	(-5.97)	(-3.59)	(-6.44)	(-6.94)
$b^{I/A}$	0.21**	-0.51***	-0.93***	0.28**	-0.29**	-0.56***	0.27**	-0.25**	-0.51***
$t(b^{I/A})$	(2.31)	(-3.80)	(-5.10)	(2.53)	(-2.41)	(-3.50)	(2.44)	(-1.98)	(-2.77)

Table IA-13: Calendar-time regressions of *value-weighted* returns: Microcaps and other stocks, 1975-2015 (Number of months = 492)

A firm is defined as a microcap if its market capitalization at the end of fiscal year t is less than or equal to the 20th percentile of the market capitalizations of all NYSE-listed stocks with Compustat data on their fiscal year end date that is no more than one year before and no later than the firm's fiscal year end date. See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

	(1) Microcaps (66,923 firm years)					(2) Other stocks (61,883 firm years)				
	No. of equity issues⩾2	No. of debt issues⩾2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of large issues⩾3	No. of equity issues⩾2	No. of debt issues⩾2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of large issues⩾3
Market model										
α	-0.92***	-0.12	-1.74***	-0.41*	-0.99***	-0.59***	-0.16*	-0.90***	-0.23**	-0.70***
t(α)	(-2.92)	(-0.54)	(-5.43)	(-1.79)	(-3.83)	(-3.57)	(-1.68)	(-4.36)	(-1.99)	(-4.05)
b	1.39***	1.23***	1.40***	1.23***	1.44***	1.28***	1.14***	1.33***	1.14***	1.34***
t(b)	(21.98)	(22.27)	(18.07)	(23.10)	(18.46)	(30.80)	(47.47)	(22.98)	(40.10)	(33.15)
3-factor										
α	-0.83***	-0.45***	-1.56***	-0.71***	-1.22***	-0.49***	-0.19**	-0.74***	-0.29**	-0.63***
t(α)	(-3.78)	(-3.80)	(-6.89)	(-4.94)	(-7.25)	(-3.08)	(-2.03)	(-3.77)	(-2.50)	(-3.86)
b	1.10***	1.10***	1.13***	1.11***	1.22***	1.16***	1.13***	1.18***	1.14***	1.24***
t(b)	(18.16)	(34.85)	(19.03)	(29.62)	(20.67)	(29.45)	(48.86)	(20.97)	(41.14)	(27.00)
s	1.56***	1.14***	1.45***	1.06***	1.41***	0.38***	0.09*	0.48***	0.12*	0.33***
t(s)	(8.42)	(15.36)	(13.70)	(10.83)	(15.28)	(4.49)	(1.74)	(4.59)	(1.96)	(3.19)
h	-0.36***	0.40***	-0.39***	0.37***	0.08	-0.35***	0.05	-0.46***	0.10*	-0.28***
t(h)	(-3.77)	(6.98)	(-3.71)	(5.58)	(0.71)	(-4.84)	(1.04)	(-6.11)	(1.80)	(-3.55)
5-factor										
α	-0.45**	-0.45***	-1.01***	-0.73***	-1.01***	-0.37**	-0.24**	-0.49**	-0.34***	-0.58***
t(α)	(-2.16)	(-3.94)	(-4.79)	(-5.20)	(-6.16)	(-2.38)	(-2.43)	(-2.43)	(-2.82)	(-3.80)
b	1.00***	1.09***	0.96***	1.10***	1.16***	1.11***	1.13***	1.09***	1.13***	1.20***
t(b)	(19.70)	(37.33)	(18.16)	(31.25)	(21.69)	(28.49)	(48.52)	(20.38)	(40.82)	(27.14)
s	1.29***	1.18***	1.13***	1.13***	1.32***	0.38***	0.16***	0.44***	0.21***	0.39***
t(s)	(14.77)	(23.57)	(13.96)	(17.65)	(12.04)	(5.25)	(4.23)	(4.63)	(4.78)	(4.82)
h	-0.55***	0.23***	-0.35***	0.23**	-0.07	-0.25***	0.06	-0.27***	0.14**	-0.17*
t(h)	(-4.43)	(3.04)	(-3.49)	(2.55)	(-0.41)	(-2.61)	(1.36)	(-2.81)	(2.38)	(-1.69)
r	-0.87***	0.04	-1.03***	0.10	-0.42***	-0.10	0.14**	-0.26**	0.19***	0.07
t(r)	(-5.04)	(0.53)	(-10.21)	(1.22)	(-4.60)	(-1.02)	(2.44)	(-2.19)	(3.22)	(0.63)
c	0.16	0.03	-0.16	-0.04	-0.00	-0.33***	-0.10	-0.51***	-0.16*	-0.37**
t(c)	(0.97)	(0.30)	(-0.85)	(-0.33)	(-0.02)	(-2.67)	(-1.40)	(-3.68)	(-1.81)	(-2.58)
q-factor										
α	-0.28	-0.30***	-0.74***	-0.60***	-0.82***	-0.29*	-0.17*	-0.39*	-0.26**	-0.48***
t(α)	(-1.13)	(-2.69)	(-3.06)	(-4.10)	(-4.34)	(-1.85)	(-1.76)	(-1.94)	(-2.08)	(-3.08)
b	1.01***	1.07***	0.94***	1.08***	1.15***	1.15***	1.13***	1.14***	1.13***	1.22***
t(b)	(13.20)	(30.09)	(17.70)	(24.24)	(20.28)	(27.06)	(49.50)	(21.12)	(38.71)	(28.14)
s	1.36***	1.06***	1.17***	1.00***	1.23***	0.31***	0.10*	0.37***	0.13**	0.29***
t(s)	(7.23)	(12.12)	(12.15)	(9.23)	(17.42)	(4.55)	(1.86)	(3.79)	(2.13)	(3.26)
b^{ROE}	-0.69***	-0.22***	-0.99***	-0.15**	-0.52***	-0.08	0.05	-0.25**	0.06	-0.00
$t(b^{ROE})$	(-4.39)	(-3.49)	(-6.87)	(-2.15)	(-4.28)	(-0.85)	(1.06)	(-2.40)	(0.87)	(-0.02)
$b^{I/A}$	-0.69***	0.23***	-0.82***	0.19**	-0.20*	-0.65***	-0.05	-0.78***	-0.02	-0.60***
$t(b^{I/A})$	(-4.50)	(3.07)	(-4.89)	(2.01)	(-1.74)	(-5.78)	(-0.67)	(-6.16)	(-0.24)	(-5.34)

Table IA-14: Fama-MacBeth regressions of stock returns (Panel A is included as Table VIII in the paper and reproduced here for convenience)

Cross-sectional regressions are estimated each month. The dependent variable is the monthly return (in percent) on a firm's stock. This table reports the time-series averages of the monthly coefficients and the corresponding Newey-West *t*-statistics that correct for first, second, and third order autocorrelations in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels. Panel D reports the results separately for 1975-1995 and 1996-2015. Panel E reports the results for the subsamples of microcaps and other stocks. Panel F reports the results for the subsamples split by comparing a firm's idiosyncratic stock return volatility in fiscal year t with the median idiosyncratic stock return volatility, which is computed using fiscal year t's volatility for all firms with a fiscal year ends no later than this firm and using fiscal year t-1's volatility for other firms. See Appendix A, Table I, and Table IA-13 for the definitions of microcaps and other variables.

Panel A: All Issues (Number of months = 492, from 1975-2015)

	(1)	(2)	(3)		(4)	(5)	(6)
Intercept	2.13***	2.31***	2.32***	Intercept	2.33***	2.34***	2.35***
	(4.84)	(5.46)	(5.48)		(5.53)	(5.57)	(5.57)
=1 if no. of issues = 1,		-0.11***		No. of issues	-0.29***		
=0 otherwise		(-2.80)			(-8.70)		
=1 if no. of issues = 2,		-0.37***		No. of types	0.13***		
=0 otherwise		(-5.86)			(2.65)		
=1 if no. of issues = 3,		-0.58***		=1 if no. of debt issues		-0.16***	
=0 otherwise		(-5.33)		≥1, =0 otherwise		(-3.80)	
=1 if no. of issues ≥ 4,		-1.15***		=1 if no. of equity issues		-0.40***	
=0 otherwise		(-7.97)		≥1, =0 otherwise		(-5.20)	
=1 if no. of types=1 and no.			-0.11***	=1 if no. of debt issues			-0.09**
of issues =1, =0 otherwise			(-2.81)	= 1, =0 otherwise			(-2.18)
=1 if no. of types=1 and no.			-0.34***	=1 if no. of debt issues			-0.30***
of issues =2, =0 otherwise			(-5.30)	= 2, =0 otherwise			(-4.40)
=1 if no. of types=1 and no.			-0.72***	=1 if no. of debt issues			-0.62***
of issues =3, =0 otherwise			(-6.74)	= 3, =0 otherwise			(-5.34)
=1 if no. of types=2 and no.			-0.45***	=1 if no. of equity issues			-0.30***
of issues =2, =0 otherwise			(-5.09)	= 1, =0 otherwise			(-4.01)
=1 if no. of types=2 and no.			-0.51***	=1 if no. of equity issues			-0.64***
of issues =3, =0 otherwise			(-3.69)	= 2, =0 otherwise			(-5.62)
=1 if no. of types=2 and no.			-1.15***	=1 if no. of equity issues			-1.25***
of issues ≥4, =0 otherwise			(-7.99)	= 3,=0 otherwise			(-6.23)
Tobin's Q_t	-0.29***	-0.28***	-0.28***	Tobin's Q_t	-0.28***	-0.28***	-0.27***
	(-6.50)	(-6.30)	(-6.35)		(-6.26)	(-6.35)	(-6.14)
$Ln(Sales)_t$	-0.08**	-0.09***	-0.09***	$Ln(Sales)_t$	-0.09***	-0.09***	-0.09***
	(-2.56)	(-2.76)	(-2.78)		(-2.74)	(-2.92)	(-2.97)
$OIBD_t$	1.55***	1.19***	1.17***	$OIBD_t$	1.18***	1.29***	1.09***
	(4.44)	(3.62)	(3.55)		(3.57)	(3.90)	(3.30)
$Investment_t$	-1.59***	-1.07***	-1.07***	$Investment_t$	-1.08***	-1.26***	-1.06***
	(-9.19)	(-6.86)	(-6.87)		(-6.89)	(-8.06)	(-6.90)
$R\&D_t$	3.68***	3.53***	3.52***	$R\&D_t$	3.52***	3.70***	3.67***
	(4.24)	(4.06)	(4.05)		(4.05)	(4.31)	(4.27)
$Return_t$	-0.17	-0.17	-0.17	$Return_t$	-0.17	-0.17	-0.17
	(-1.46)	(-1.55)	(-1.55)		(-1.54)	(-1.53)	(-1.54)
Average Adjusted R^2	2.45%	2.63%	2.67%	Average Adjusted R^2	2.61%	2.64%	2.73%

Panel B: Large issues (Number of months = 492, from 1975-2015)

	(6)	(7)	(8)
Intercept	2.31***	2.28***	2.31***
	(5.44)	(5.35)	(5.45)
=1 if no. of large debt issues ≥ 1, =0 otherwise	-0.17***		
	(-3.60)		
=1 if no. of large equity issues ≥ 1, =0 otherwise	-0.44***		
	(-5.34)		
=1 if no. of large issues = 1, =0 otherwise		-0.13***	
		(-2.80)	
=1 if no. of large issues = 2, =0 otherwise		-0.43***	
		(-5.14)	
=1 if no. of large issues = 3, =0 otherwise		-0.81***	
		(-6.12)	
=1 if no. of large issues ≥ 4, =0 otherwise		-1.45***	
		(-8.11)	
=1 if no. of large debt issues = 1, =0 otherwise			-0.11**
			(-2.47)
=1 if no. of large debt issues = 2, =0 otherwise			-0.35***
			(-3.98)
=1 if no. of large debt issues = 3, =0 otherwise			-1.04***
			(-5.40)
=1 if no. of large equity issues = 1, =0 otherwise			-0.35***
			(-4.40)
=1 if no. of large equity issues = 2, =0 otherwise			-0.72***
			(-5.31)
=1 if no. of large equity issues = 3, =0 otherwise			-1.43***
			(-5.98)
Tobin's Q_t	-0.27***	-0.27***	-0.26***
	(-6.16)	(-6.04)	(-5.89)
$Ln(Sales)_t$	-0.09***	-0.09***	-0.10***
	(-3.08)	(-2.95)	(-3.14)
$OIBD_t$	1.30***	1.17***	1.09***
	(3.89)	(3.53)	(3.23)
$Investment_t$	-1.23***	-1.03***	-1.03***
	(-7.66)	(-6.47)	(-6.63)
$R\&D_t$	3.73***	3.61***	3.75***
	(4.36)	(4.16)	(4.33)
$Return_t$	-0.17	-0.17	-0.18
	(-1.58)	(-1.57)	(-1.60)
Average Adjusted R^2	2.63%	2.65%	2.74%

Panel C: Issue recency (Number of months = 492, from 1975-2015)

	(9)		(10)
Intercept	2.33***	Intercept	2.30***
	(5.56)		(5.44)
Debt issue (0,0,1)	0.04	Large debt issue (0,0,1)	0.01
	(0.63)		(0.17)
Debt issue (0,1,0)	-0.07	Large debt issue (0,1,0)	-0.08
	(-1.32)		(-1.45)
Debt issue (1,0,0)	-0.24***	Large debt issue (1,0,0)	-0.29***
	(-4.30)		(-4.75)
Debt issue (0,1,1)	-0.15*	Large debt issue (0,1,1)	-0.19
	(-1.66)		(-1.51)
Debt issue (1,0,1)	-0.32***	Large debt issue (1,0,1)	-0.37***
	(-3.53)		(-3.03)
Debt issue (1,1,0)	-0.47***	Large debt issue (1,1,0)	-0.66***
	(-5.46)		(-5.24)
Debt issue (1,1,1)	-0.65***	Large debt issue (1,1,1)	-1.08***
	(-5.62)		(-5.65)
Equity issue (0,0,1)	-0.17	Large equity issue (0,0,1)	-0.13
	(-1.63)		(-1.15)
Equity issue (0,1,0)	-0.26***	Large equity issue (0,1,0)	-0.34***
	(-3.01)		(-3.62)
Equity issue (1,0,0)	-0.51***	Large equity issue (1,0,0)	-0.63***
	(-5.98)		(-6.65)
Equity issue (0,1,1)	-0.76***	Large equity issue (0,1,1)	-0.64***
	(-3.93)		(-2.66)
Equity issue (1,0,1)	-0.32	Large equity issue (1,0,1)	-0.65***
	(-1.39)		(-3.44)
Equity issue (1,1,0)	-0.92***	Large equity issue (1,1,0)	-0.62***
	(-5.87)		(-2.91)
Equity issue (1,1,1)	-1.30***	Large equity issue (1,1,1)	-1.47***
	(-6.44)		(-6.11)
Tobin's Q_t	-0.27***	Tobin's Q_t	-0.26***
	(-6.09)		(-5.91)
$Ln(Sales)_t$	-0.09***	$Ln(Sales)_t$	-0.10***
	(-2.97)		(-3.16)
$OIBD_t$	1.06***	$OIBD_t$	1.05***
	(3.23)		(3.12)
$Investment_t$	-0.84***	$Investment_t$	-0.79***
	(-5.24)		(-4.88)
$R\&D_t$	3.68***	$R\&D_t$	3.81***
	(4.29)		(4.38)
$Return_t$	-0.16	$Return_t$	-0.17
	(-1.48)		(-1.54)
Average Adjusted R^2	2.85%	Average Adjusted R^2	2.88%

Panel D: Two subperiods (on the basis of the calendar year of the stock return month)

	1975-1995 (Number of months = 252)			1996-2015 (Number of months = 240)		
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	2.88***	2.89***	2.88***	1.78***	1.71***	1.78***
	(5.09)	(5.10)	(5.09)	(2.87)	(2.73)	(2.87)
=1 if no. of debt issues ≥1, =0 otherwise	-0.20***			-0.13**		
	(-3.25)			(-2.12)		
=1 if no. of equity issues ≥1, =0 otherwise	-0.27***			-0.55***		
	(-3.17)			(-4.21)		
=1 if no. of issues = 1, =0 otherwise		-0.13**			-0.08	
		(-2.46)			(-1.49)	
=1 if no. of issues = 2, =0 otherwise		-0.37***			-0.37***	
		(-4.33)			(-3.95)	
=1 if no. of issues = 3, =0 otherwise		-0.47***			-0.70***	
		(-3.01)			(-4.60)	
=1 if no. of issues ≥ 4, =0 otherwise		-1.06***			-1.23***	
		(-5.46)			(-5.78)	
=1 if no. of debt issues = 1, =0 otherwise			-0.12**			-0.05
			(-2.39)			(-0.79)
=1 if no. of debt issues = 2, =0 otherwise			-0.33***			-0.26***
			(-3.29)			(-2.95)
=1 if no. of debt issues = 3, =0 otherwise			-0.53***			-0.72***
			(-3.73)			(-3.88)
=1 if no. of equity issues = 1, =0 otherwise			-0.18**			-0.43***
			(-2.10)			(-3.49)
=1 if no. of equity issues = 2, =0 otherwise			-0.56***			-0.73***
			(-3.99)			(-4.01)
=1 if no. of equity issues = 3, =0 otherwise			-1.12***			-1.38***
			(-3.47)			(-5.99)
Tobin's Q_t	-0.37***	-0.37***	-0.36***	-0.18***	-0.18***	-0.17***
	(-5.20)	(-5.14)	(-5.08)	(-3.91)	(-3.89)	(-3.71)
$Ln(Sales)_t$	-0.11**	-0.12***	-0.12***	-0.07	-0.06	-0.07
	(-2.58)	(-2.61)	(-2.63)	(-1.52)	(-1.27)	(-1.54)
$OIBD_t$	1.31***	1.23***	1.18**	1.27***	1.15**	1.00**
	(2.83)	(2.70)	(2.57)	(2.68)	(2.41)	(2.09)
$Investment_t$	-1.39***	-1.22***	-1.20***	-1.12***	-0.92***	-0.90***
	(-5.76)	(-5.00)	(-5.03)	(-5.75)	(-4.78)	(-4.81)
$R\&D_t$	3.88***	3.75***	3.87***	3.50***	3.30***	3.46***
	(2.99)	(2.88)	(2.96)	(3.15)	(2.88)	(3.12)
$Return_t$	-0.07	-0.07	-0.07	-0.27	-0.27	-0.27
	(-0.62)	(-0.64)	(-0.65)	(-1.42)	(-1.42)	(-1.41)
Average Adjusted R^2	2.39%	2.39%	2.47%	2.90%	2.88%	3.02%

Panel E: Subsamples of microcaps and other stocks

	(1) Microcaps			(2) Other stocks		
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	2.33***	2.28***	2.32***	1.63***	1.61***	1.67***
	(6.20)	(6.01)	(6.18)	(4.01)	(3.96)	(4.11)
=1 if no. of debt issues ⩾1, =0 otherwise	-0.24***			-0.09**		
	(-4.14)			(-2.08)		
=1 if no. of equity issues ≥1, =0 otherwise	-0.50***			-0.27***		
	(-5.32)			(-3.67)		
=1 if no. of issues = 1, =0 otherwise		-0.19***			-0.01	
		(-3.21)			(-0.37)	
=1 if no. of issues = 2, =0 otherwise		-0.49***			-0.24***	
		(-5.92)			(-4.00)	
=1 if no. of issues = 3, =0 otherwise		-0.77***			-0.34***	
		(-5.54)			(-3.49)	
=1 if no. of issues ≥ 4, =0 otherwise		-1.40***			-0.82***	
		(-6.90)			(-5.17)	
=1 if no. of debt issues = 1, =0 otherwise			-0.15**			-0.03
			(-2.57)			(-0.76)
=1 if no. of debt issues = 2, =0 otherwise			-0.38***			-0.21***
			(-4.22)			(-3.12)
=1 if no. of debt issues = 3, =0 otherwise			-1.00***			-0.31**
			(-5.93)			(-2.26)
=1 if no. of equity issues = 1, =0 otherwise			-0.42***			-0.17**
			(-4.44)			(-2.37)
=1 if no. of equity issues = 2, =0 otherwise			-0.58***			-0.55***
			(-3.26)			(-4.92)
=1 if no. of equity issues = 3, =0 otherwise			-1.10***			-1.04***
			(-3.80)			(-4.50)
Tobin's Q_t	-0.19**	-0.19**	-0.18**	-0.22***	-0.23***	-0.22***
	(-2.19)	(-2.30)	(-2.15)	(-4.92)	(-5.00)	(-4.84)
$Ln(Sales)_t$	-0.08	-0.07	-0.08	-0.02	-0.02	-0.03
	(-1.64)	(-1.42)	(-1.63)	(-0.77)	(-0.74)	(-0.97)
$OIBD_t$	1.47***	1.34***	1.26***	1.16***	1.09***	0.98***
	(3.83)	(3.50)	(3.27)	(3.53)	(3.30)	(2.94)
$Investment_t$	-1.45***	-1.26***	-1.24***	-0.97***	-0.79***	-0.77***
	(-7.83)	(-6.24)	(-6.56)	(-5.34)	(-4.54)	(-4.38)
$R\&D_t$	4.43***	4.27***	4.37***	3.07***	2.93***	3.10***
	(4.45)	(4.26)	(4.39)	(3.41)	(3.23)	(3.39)
$Return_t$	-0.34***	-0.34***	-0.33***	0.07	0.08	0.08
	(-2.71)	(-2.76)	(-2.74)	(0.71)	(0.76)	(0.77)
Average Adjusted R^2	1.88%	1.88%	2.01%	4.19%	4.24%	4.41%

Panel F: Subsamples split by idiosyncratic stock return volatility: Limits to arbitrage

	High idiosyncratic volatility			Low idiosyncratic volatility		
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	2.64***	2.61***	2.62***	1.71***	1.70***	1.72***
	(6.23)	(6.12)	(6.18)	(5.43)	(5.41)	(5.47)
=1 if no. of debt issues ≥1, =0 otherwise	-0.27***			-0.09**		
	(-4.14)			(-2.49)		
=1 if no. of equity issues ≥1, =0 otherwise	-0.53***			-0.27***		
	(-6.16)			(-4.19)		
=1 if no. of issues = 1, =0 otherwise		-0.21***			-0.06*	
		(-3.28)			(-1.75)	
=1 if no. of issues = 2, =0 otherwise		-0.57***			-0.22***	
		(-6.72)			(-3.91)	
=1 if no. of issues = 3, =0 otherwise		-0.85***			-0.30***	
		(-6.72)			(-2.79)	
=1 if no. of issues ≥ 4, =0 otherwise		-1.53***			-0.60***	
		(-8.85)			(-3.85)	
=1 if no. of debt issues = 1, =0 otherwise			-0.13**			-0.06*
			(-2.17)			(-1.88)
=1 if no. of debt issues = 2, =0 otherwise			-0.48***			-0.13**
			(-4.86)			(-2.26)
=1 if no. of debt issues = 3, =0 otherwise			-0.99***			-0.25**
			(-5.93)			(-2.06)
=1 if no. of equity issues = 1, =0 otherwise			-0.39***			-0.22***
			(-4.74)			(-3.33)
=1 if no. of equity issues = 2, =0 otherwise			-0.78***			-0.48***
			(-5.62)			(-4.22)
=1 if no. of equity issues = 3, =0 otherwise			-1.31***			-0.74***
			(-5.71)			(-2.91)
Tobin's Q_t	-0.29***	-0.29***	-0.28***	-0.28***	-0.29***	-0.28***
	(-5.77)	(-5.67)	(-5.55)	(-5.32)	(-5.42)	(-5.34)
$Ln(Sales)_t$	-0.10**	-0.10**	-0.10**	-0.04*	-0.04*	-0.04*
	(-2.58)	(-2.42)	(-2.54)	(-1.84)	(-1.80)	(-1.89)
$OIBD_t$	1.08***	0.91**	0.85**	1.74***	1.75***	1.70***
	(2.96)	(2.50)	(2.33)	(5.50)	(5.48)	(5.30)
$Investment_t$	-1.50***	-1.26***	-1.23***	-0.85***	-0.78***	-0.77***
	(-7.89)	(-6.50)	(-6.53)	(-5.13)	(-4.80)	(-4.76)
$R\&D_t$	3.79***	3.61***	3.71***	3.03***	2.90***	3.03***
	(4.23)	(3.98)	(4.13)	(3.64)	(3.46)	(3.57)
$Return_t$	-0.20**	-0.20**	-0.20**	0.23*	0.23*	0.23*
	(-2.03)	(-2.08)	(-2.07)	(1.79)	(1.81)	(1.82)
Average Adjusted R^2	2.06%	2.04%	2.14%	2.90%	2.95%	3.03%

Table IA-15: More lagged control variables and Fama-MacBeth regressions of stock returns (Number of months = 492, from 1975-2015)

Cross-sectional regressions are estimated each month. The dependent variable is the monthly return (in percent) on a firm's stock. This table reports the time-series averages of the monthly coefficients and the corresponding Newey-West *t*-statistics that correct for first, second, and third order autocorrelations in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels. See Appendix A and Table I for variable definitions.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Intercept	2.01***	2.20***	2.18***	2.20***	2.18***	2.13***	2.17***
	(4.55)	(5.21)	(5.15)	(5.24)	(5.27)	(5.15)	(5.27)
=1 if no. of debt issues $\geqslant$ 1,		-0.15***			-0.14***		
=0 otherwise		(-3.72)			(-3.69)		
=1 if no. of equity issues $\geqslant$ 1,		-0.36***			-0.36***		
=0 otherwise		(-5.00)			(-5.48)		
=1 if no. of issues = 1,			-0.10***			-0.11***	
=0 otherwise			(-2.74)			(-3.06)	
=1 if no. of issues = 2,			-0.35***			-0.36***	
=0 otherwise			(-5.77)			(-6.44)	
=1 if no. of issues = 3,			-0.55***			-0.56***	
=0 otherwise			(-5.26)			(-5.83)	
=1 if no. of issues $\geqslant$ 4,			-1.10***			-1.14***	
=0 otherwise			(-8.08)			(-8.76)	
=1 if no. of debt issues = 1,				-0.09**			-0.09**
=0 otherwise				(-2.31)			(-2.43)
=1 if no. of debt issues = 2,				-0.28***			-0.28***
=0 otherwise				(-4.40)			(-4.71)
=1 if no. of debt issues = 3,				-0.59***			-0.59***
=0 otherwise				(-5.21)			(-5.33)
=1 if no. of equity issues = 1,				-0.28***			-0.29***
=0 otherwise				(-3.93)			(-4.44)
=1 if no. of equity issues = 2,				-0.62***			-0.65***
=0 otherwise				(-5.68)			(-6.09)
=1 if no. of equity issues = 3,				-1.16***			-1.17***
=0 otherwise				(-5.92)			(-5.74)
Tobin's Q_t	-0.13**	-0.12**	-0.12**	-0.12**	-0.10*	-0.11*	-0.10*
	(-2.16)	(-2.06)	(-2.20)	(-2.03)	(-1.75)	(-1.85)	(-1.70)
$Ln(Sales)_t$	-0.37***	-0.34***	-0.32***	-0.32***	-0.34***	-0.33***	-0.33***
	(-4.10)	(-3.68)	(-3.56)	(-3.50)	(-3.73)	(-3.61)	(-3.52)
$OIBD_t$	2.32***	2.09***	2.04***	1.95***	2.14***	2.09***	2.01***
	(6.98)	(6.53)	(6.39)	(6.07)	(6.77)	(6.63)	(6.34)
$Investment_t$	-1.17***	-0.95***	-0.81***	-0.80***	-0.96***	-0.82***	-0.82***
	(-7.34)	(-6.30)	(-5.25)	(-5.33)	(-6.53)	(-5.45)	(-5.55)
$R\&D_t$	3.31***	3.23***	3.10***	3.02***	2.77***	2.65***	2.56***
	(3.93)	(3.87)	(3.67)	(3.58)	(3.26)	(3.09)	(3.02)
$Return_t$	-0.29**	-0.29**	-0.29**	-0.29**	-0.30**	-0.30**	-0.30**
	(-2.14)	(-2.18)	(-2.18)	(-2.15)	(-2.28)	(-2.28)	(-2.25)
Tobin's Q_{t-1}	-0.15***	-0.15***	-0.15***	-0.15***	-0.17***	-0.16***	-0.16***
	(-3.29)	(-3.34)	(-3.29)	(-3.21)	(-3.27)	(-3.20)	(-3.08)
$Ln(Sales)_{t-1}$	0.29***	0.24***	0.24***	0.23***	0.22*	0.24**	0.23*
	(3.32)	(2.84)	(2.77)	(2.65)	(1.85)	(1.99)	(1.90)

$OIBD_{t-1}$	-0.64**	-0.69***	-0.78***	-0.79***	-0.75**	-0.83***	-0.83***
	(-2.35)	(-2.59)	(-2.91)	(-2.97)	(-2.54)	(-2.81)	(-2.82)
$Investment_{t-1}$	-0.47***	-0.25*	-0.07	-0.08	-0.24*	-0.09	-0.10
	(-3.32)	(-1.91)	(-0.58)	(-0.65)	(-1.93)	(-0.71)	(-0.80)
$R\&D_{t-1}$	0.82	0.90	0.90	1.10	0.04	0.08	0.18
	(0.98)	(1.11)	(1.10)	(1.32)	(0.04)	(0.08)	(0.20)
Tobin's Q_{t-2}					-0.00	-0.01	-0.01
					(-0.00)	(-0.22)	(-0.20)
$Ln(Sales)_{t-2}$					0.04	0.01	0.01
					(0.42)	(0.09)	(0.12)
$OIBD_{t-2}$					0.04	0.01	-0.01
					(0.18)	(0.05)	(-0.04)
$Investment_{t-2}$					0.01	0.12	0.12
					(0.08)	(0.86)	(0.82)
$R\&D_{t-2}$					1.49**	1.44**	1.55**
					(2.12)	(2.05)	(2.21)
Average Adjusted R^2	2.81%	2.95%	2.95%	3.04%	3.24%	3.23%	3.32%

Table IA-16: Nonlinear control variables and Fama-MacBeth regressions of stock returns (Number of months = 492, from 1975-2015)

Cross-sectional regressions are estimated each month. The dependent variable is the monthly return (in percent) on a firm's stock. This table reports the time-series averages of the monthly coefficients and the corresponding Newey-West *t*-statistics that correct for first, second, and third order autocorrelations in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels. See Appendix A and Table I for variable definitions.

	(1)	(2)	(3)	(4)
Intercept	2.43***	2.56***	2.52***	2.55***
	(5.69)	(6.19)	(6.01)	(6.15)
=1 if no. of debt issues ≥ 1, =0 otherwise		-0.15***		
		-0.15***		
=1 if no. of equity issues ≥ 1, =0 otherwise		(-3.51)		
		-0.37***		
=1 if no. of issues = 1, =0 otherwise		(-4.96)		
			-0.09**	
=1 if no. of issues = 2, =0 otherwise			(-2.40)	
			-0.33***	
=1 if no. of issues = 3, =0 otherwise			(-5.25)	
			-0.52***	
=1 if no. of issues ≥ 4, =0 otherwise			(-4.86)	
			-1.07***	
=1 if no. of debt issues = 1, =0 otherwise			(-7.29)	
				-0.07*
=1 if no. of debt issues = 2, =0 otherwise				(-1.89)
				-0.27***
=1 if no. of debt issues = 3, =0 otherwise				(-4.17)
				-0.59***
=1 if no. of equity issues = 1, =0 otherwise				(-5.04)
				-0.28***
=1 if no. of equity issues = 2, =0 otherwise				(-3.92)
				-0.57***
=1 if no. of equity issues = 3, =0 otherwise				(-5.13)
				-1.13***
Tobin's Q_t	-0.64***	-0.59***	-0.60***	-0.57***
	(-5.63)	(-5.46)	(-5.43)	(-5.33)
$Ln(Sales)_t$	-0.10	-0.10	-0.08	-0.09
	(-1.27)	(-1.26)	(-1.09)	(-1.24)
$OIBD_t$	1.71***	1.43***	1.36***	1.26***
	(3.38)	(2.96)	(2.80)	(2.62)
$Investment_t$	-1.70***	-1.32***	-1.12***	-1.11***
	(-6.05)	(-4.87)	(-4.08)	(-4.05)
$R\&D_t$	5.07***	4.95***	4.63***	4.73***
	(3.42)	(3.37)	(3.09)	(3.21)
$Return_t$	-0.15	-0.15	-0.15	-0.15
	(-1.32)	(-1.39)	(-1.41)	(-1.41)
Tobin's Q_t^2	0.05***	0.05***	0.05***	0.05***
	(4.04)	(4.01)	(3.96)	(3.91)
$Ln(Sales)_t^2$	0.00	0.00	0.00	0.00

	(0.43)	(0.27)	(0.15)	(0.22)
$OIBD_t^2$	-0.13	-0.23	-0.16	-0.12
	(-0.21)	(-0.37)	(-0.24)	(-0.19)
$Investment_t^2$	0.30	0.19	0.15	0.14
	(1.16)	(0.73)	(0.55)	(0.52)
$R\&D_t^2$	-0.59	-0.43	0.06	0.02
	(-0.13)	(-0.09)	(0.01)	(0.01)
Average Adjusted R^2	2.97%	3.14%	3.14%	3.23%

Table IA-17: Fama-MacBeth regressions of earnings announcement returns (Panel A is included in the paper as Table IX and is reproduced here for convenience)

The dependent variable is the average three-day buy-and-hold return (in percent) from one day before to one day after the quarterly earnings announcement date (Compustat item RDQ) for all earnings announcements made from 92 to 457 calendar days after the end of fiscal year t. We estimate cross-sectional regressions annually for each of the calendar years from 1974-2014, using observations with the fiscal year end date that falls into the calendar year. This table reports the average of the annual coefficients and the corresponding Newey-West *t*-statistics that correct for first-order autocorrelation in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels. Panel D reports the results for the regressions separately for the subperiods of 1974-1995 and 1996-2014. Panel E reports the results for the subsamples of microcaps and other stocks. Panel F reports the results for the subsamples split by the median idiosyncratic stock return volatility. See Appendix A, Table I, and Tables IA-13 and IA-14 for the definitions of microcaps, idiosyncratic stock return volatility, and other variables.

Panel A: All Issues (1974-2014, Number of years = 41)

	(1)	(2)	(3)		(4)	(5)	(6)
Intercept	0.78***	0.90***	0.91***	Intercept	0.94***	0.96***	0.96***
	(4.05)	(5.03)	(5.12)		(5.24)	(5.55)	(5.55)
=1 if no. of issues = 1,		-0.06		No. of issues	-0.19***		
=0 otherwise		(-1.38)			(-5.01)		
=1 if no. of issues = 2,		-0.33***		No. of types	0.02		
=0 otherwise		(-5.53)			(0.44)		
=1 if no. of issues = 3,		-0.54***		=1 if no. of debt issues		-0.07**	
=0 otherwise		(-5.50)		≥1, =0 otherwise		(-2.06)	
=1 if no. of issues ≥ 4,		-0.92***		=1 if no. of equity issues		-0.47***	
=0 otherwise		(-5.63)		≥1, =0 otherwise		(-6.28)	
=1 if no. of types=1 and no.			-0.06	=1 if no. of debt issues			-0.03
of issues =1, =0 otherwise			(-1.38)	= 1, =0 otherwise			(-0.92)
=1 if no. of types=1 and no.			-0.22***	=1 if no. of debt issues			-0.10**
of issues =2, =0 otherwise			(-3.88)	= 2, =0 otherwise			(-2.06)
=1 if no. of types=1 and no.			-0.61***	=1 if no. of debt issues			-0.35**
of issues =3, =0 otherwise			(-4.30)	= 3, =0 otherwise			(-2.49)
=1 if no. of types=2 and no.			-0.51***	=1 if no. of equity issues			-0.39***
of issues =2, =0 otherwise			(-5.90)	= 1, =0 otherwise			(-6.53)
=1 if no. of types=2 and no.			-0.49***	=1 if no. of equity issues			-0.62***
of issues =3, =0 otherwise			(-4.24)	= 2, =0 otherwise			(-4.28)
=1 if no. of types=2 and no.			-0.92***	=1 if no. of equity issues			-1.04***
of issues ≥4, =0 otherwise			(-5.64)	= 3,=0 otherwise			(-4.64)
Tobin's Q_t	-0.17***	-0.16***	-0.16***	Tobin's Q_t	-0.16***	-0.15***	-0.14***
	(-6.09)	(-5.57)	(-5.63)		(-5.69)	(-5.48)	(-5.05)
$Ln(Sales)_t$	-0.03	-0.04*	-0.04*	$Ln(Sales)_t$	-0.03*	-0.04**	-0.05**
	(-1.64)	(-1.89)	(-1.95)		(-1.84)	(-2.54)	(-2.57)
$OIBD_t$	0.68**	0.33	0.34	$OIBD_t$	0.35	0.40	0.22
	(2.15)	(1.15)	(1.14)		(1.20)	(1.40)	(0.75)
$Investment_t$	-0.75***	-0.29**	-0.28**	$Investment_t$	-0.30**	-0.44***	-0.29**
	(-6.03)	(-2.25)	(-2.15)		(-2.34)	(-3.34)	(-2.23)
$R\&D_t$	-0.54	-0.67	-0.69*	$R\&D_t$	-0.69	-0.50	-0.47
	(-1.30)	(-1.66)	(-1.71)		(-1.68)	(-1.18)	(-1.12)
$Return_t$	-0.14**	-0.14**	-0.14**	$Return_t$	-0.14**	-0.14**	-0.14**
	(-2.10)	(-2.19)	(-2.19)		(-2.16)	(-2.16)	(-2.13)
Average Adjusted R^2	0.83%	1.03%	1.06%	Average Adjusted R^2	0.98%	0.97%	1.08%

Panel B: Large issues (1974-2014, Number of years = 41)

	(6)	(7)	(8)
Intercept	0.94***	0.90***	0.94***
	(5.35)	(4.91)	(5.34)
=1 if no. of large debt issues ≥ 1, =0 otherwise	-0.09**		
	(-2.21)		
=1 if no. of large equity issues ≥ 1, =0 otherwise	-0.50***		
	(-5.79)		
=1 if no. of large issues = 1, =0 otherwise		-0.14***	
		(-2.96)	
=1 if no. of large issues = 2, =0 otherwise		-0.45***	
		(-6.00)	
=1 if no. of large issues = 3, =0 otherwise		-0.62***	
		(-4.80)	
=1 if no. of large issues ≥ 4, =0 otherwise		-1.16***	
		(-5.17)	
=1 if no. of large debt issues = 1, =0 otherwise			-0.06
			(-1.22)
=1 if no. of large debt issues = 2, =0 otherwise			-0.17**
			(-2.37)
=1 if no. of large debt issues = 3, =0 otherwise			-0.78***
			(-3.40)
=1 if no. of large equity issues = 1, =0 otherwise			-0.43***
			(-5.58)
=1 if no. of large equity issues = 2, =0 otherwise			-0.60***
			(-3.83)
=1 if no. of large equity issues = 3, =0 otherwise			-1.18***
			(-4.48)
Tobin's Q_t	-0.15***	-0.15***	-0.14***
	(-5.19)	(-5.15)	(-4.85)
$Ln(Sales)_t$	-0.05**	-0.04**	-0.05**
	(-2.67)	(-2.10)	(-2.69)
$OIBD_t$	0.39	0.33	0.22
	(1.36)	(1.16)	(0.77)
$Investment_t$	-0.40***	-0.26*	-0.27*
	(-3.03)	(-1.96)	(-2.01)
$R\&D_t$	-0.44	-0.61	-0.45
	(-1.07)	(-1.49)	(-1.05)
$Return_t$	-0.15***	-0.15***	-0.14***
	(-5.19)	(-5.15)	(-4.85)
Average Adjusted R^2	0.98%	1.02%	1.11%

Panel C: Issue recency (1974-2014, Number of years = 41)

	(9)		(10)
Intercept	0.95***	Intercept	0.94***
	(5.50)		(5.31)
Debt issue (0,0,1)	0.07	Large debt issue (0,0,1)	0.02
	(1.39)		(0.33)
Debt issue (0,1,0)	-0.08*	Large debt issue (0,1,0)	-0.08
	(-1.73)		(-1.22)
Debt issue (1,0,0)	-0.10	Large debt issue (1,0,0)	-0.11
	(-1.66)		(-1.57)
Debt issue (0,1,1)	-0.10	Large debt issue (0,1,1)	-0.07
	(-1.28)		(-0.36)
Debt issue (1,0,1)	-0.05	Large debt issue (1,0,1)	-0.19
	(-0.56)		(-1.52)
Debt issue (1,1,0)	-0.13	Large debt issue (1,1,0)	-0.25
	(-1.37)		(-1.63)
Debt issue (1,1,1)	-0.36**	Large debt issue (1,1,1)	-0.78***
	(-2.55)		(-3.51)
Equity issue (0,0,1)	-0.30***	Large equity issue (0,0,1)	-0.28***
	(-3.96)		(-2.85)
Equity issue (0,1,0)	-0.35***	Large equity issue (0,1,0)	-0.41***
	(-4.17)		(-3.85)
Equity issue (1,0,0)	-0.59***	Large equity issue (1,0,0)	-0.65***
	(-5.08)		(-4.84)
Equity issue (0,1,1)	-0.62***	Large equity issue (0,1,1)	-0.53**
	(-2.99)		(-2.12)
Equity issue (1,0,1)	-0.34*	Large equity issue (1,0,1)	-0.56**
	(-1.84)		(-2.36)
Equity issue (1,1,0)	-0.92***	Large equity issue (1,1,0)	-0.71***
	(-4.46)		(-2.84)
Equity issue (1,1,1)	-1.08***	Large equity issue (1,1,1)	-1.23***
	(-4.79)		(-4.65)
Tobin's Q_t	-0.14***	Tobin's Q_t	-0.14***
	(-4.97)		(-4.77)
$Ln(Sales)_t$	-0.05**	$Ln(Sales)_t$	-0.05**
	(-2.57)		(-2.68)
$OIBD_t$	0.19	$OIBD_t$	0.18
	(0.66)		(0.65)
$Investment_t$	-0.18	$Investment_t$	-0.18
	(-1.38)		(-1.23)
$R\&D_t$	-0.45	$R\&D_t$	-0.40
	(-1.05)		(-0.93)
$Return_t$	-0.14**	$Return_t$	-0.14**
	(-2.09)		(-2.17)
Average Adjusted R^2	1.16%	Average Adjusted R^2	1.25%

Panel D: Two subperiods

	1974-1995 (Number of years = 22)			1996-2014 (Number of years = 19)		
	(11)	(12)	(13)	(14)	(15)	(16)
Intercept	1.29***	1.28***	1.29***	0.57*	0.47	0.58*
	(11.47)	(11.33)	(11.61)	(1.85)	(1.48)	(1.85)
=1 if no. of debt issues ≥1, =0 otherwise	-0.04			-0.10*		
	(-1.03)			(-1.85)		
=1 if no. of equity issues ≥1, =0 otherwise	-0.21***			-0.77***		
	(-4.33)			(-11.03)		
=1 if no. of issues = 1, =0 otherwise		0.02			-0.15**	
		(0.38)			(-2.47)	
=1 if no. of issues = 2, =0 otherwise		-0.22***			-0.45***	
		(-3.23)			(-5.15)	
=1 if no. of issues = 3, =0 otherwise		-0.30***			-0.81***	
		(-4.27)			(-5.38)	
=1 if no. of issues ≥ 4, =0 otherwise		-0.49***			-1.42***	
		(-4.35)			(-6.19)	
=1 if no. of debt issues = 1, =0 otherwise			0.01			-0.08
			(0.19)			(-1.54)
=1 if no. of debt issues = 2, =0 otherwise			-0.13**			-0.07
			(-2.21)			(-0.82)
=1 if no. of debt issues = 3, =0 otherwise			-0.38**			-0.31
			(-2.61)			(-1.21)
=1 if no. of equity issues = 1, =0 otherwise			-0.19***			-0.63***
			(-4.06)			(-11.33)
=1 if no. of equity issues = 2, =0 otherwise			-0.22			-1.09***
			(-1.42)			(-7.07)
=1 if no. of equity issues = 3, =0 otherwise			-0.56**			-1.60***
			(-2.21)			(-5.32)
Tobin's Q_t	-0.17***	-0.18***	-0.17***	-0.13***	-0.14***	-0.11***
	(-3.75)	(-3.67)	(-3.65)	(-4.89)	(-5.11)	(-4.14)
$Ln(Sales)_t$	-0.09***	-0.09***	-0.09***	0.00	0.02	0.00
	(-6.84)	(-6.76)	(-6.75)	(0.18)	(0.86)	(0.14)
$OIBD_t$	-0.19	-0.24	-0.26	1.09***	1.00***	0.77***
	(-0.45)	(-0.55)	(-0.60)	(4.77)	(4.33)	(2.98)
$Investment_t$	-0.60***	-0.48***	-0.46***	-0.26	-0.08	-0.09
	(-3.70)	(-3.12)	(-2.94)	(-1.25)	(-0.38)	(-0.44)
$R\&D_t$	-1.20*	-1.26*	-1.20*	0.31	0.02	0.37
	(-1.86)	(-2.00)	(-1.85)	(0.80)	(0.05)	(0.99)
$Return_t$	-0.14**	-0.14**	-0.14**	-0.14	-0.14	-0.14
	(-2.36)	(-2.33)	(-2.34)	(-1.14)	(-1.15)	(-1.10)
Average Adjusted R^2	0.77%	0.83%	0.82%	1.21%	1.25%	1.37%

Panel E: Subsamples of microcaps and other stocks

	(1) Microcaps			(2) Other stocks		
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	1.37***	1.28***	1.37***	0.23**	0.22*	0.27**
	(5.44)	(4.93)	(5.48)	(2.07)	(1.88)	(2.31)
=1 if no. of debt issues ≥1, =0 otherwise	-0.07			-0.04		
	(-1.38)			(-1.14)		
=1 if no. of equity issues ≥1, =0 otherwise	-0.61***			-0.23***		
	(-5.64)			(-3.72)		
=1 if no. of issues = 1, =0 otherwise		-0.07			-0.02	
		(-1.32)			(-0.39)	
=1 if no. of issues = 2, =0 otherwise		-0.44***			-0.16***	
		(-4.82)			(-2.81)	
=1 if no. of issues = 3, =0 otherwise		-0.68***			-0.28***	
		(-4.21)			(-3.30)	
=1 if no. of issues ≥ 4, =0 otherwise		-1.00***			-0.71***	
		(-3.93)			(-4.38)	
=1 if no. of debt issues = 1, =0 otherwise			-0.04			-0.02
			(-0.68)			(-0.52)
=1 if no. of debt issues = 2, =0 otherwise			-0.11			-0.06
			(-1.37)			(-1.05)
=1 if no. of debt issues = 3, =0 otherwise			-0.38			-0.31**
			(-1.18)			(-2.31)
=1 if no. of equity issues = 1, =0 otherwise			-0.57***			-0.15***
			(-6.09)			(-2.83)
=1 if no. of equity issues = 2, =0 otherwise			-0.53**			-0.44***
			(-2.30)			(-3.28)
=1 if no. of equity issues = 3, =0 otherwise			-1.31***			-0.87***
			(-3.33)			(-4.69)
Tobin's Q_t	-0.23***	-0.24***	-0.22***	-0.10***	-0.10***	-0.10***
	(-3.63)	(-3.68)	(-3.42)	(-3.95)	(-3.94)	(-3.64)
$Ln(Sales)_t$	-0.08**	-0.06*	-0.08**	0.02*	0.02*	0.02
	(-2.50)	(-1.80)	(-2.51)	(1.72)	(1.76)	(1.23)
$OIBD_t$	0.06	-0.03	-0.12	0.64***	0.57**	0.45*
	(0.16)	(-0.08)	(-0.35)	(2.82)	(2.46)	(1.99)
$Investment_t$	-0.56***	-0.43**	-0.52**	-0.26*	-0.11	-0.09
	(-2.88)	(-2.14)	(-2.50)	(-1.83)	(-0.71)	(-0.55)
$R\&D_t$	-1.66**	-1.90***	-1.54**	0.61	0.50	0.56
	(-2.54)	(-2.98)	(-2.41)	(1.10)	(0.91)	(1.01)
$Return_t$	-0.25***	-0.25***	-0.25***	0.04	0.04	0.04
	(-2.97)	(-2.97)	(-2.92)	(0.63)	(0.56)	(0.66)
Average Adjusted R^2	0.98%	0.95%	1.09%	0.85%	0.99%	1.03%

Panel F: Subsamples split by idiosyncratic stock return volatility: Limits to arbitrage

	High idiosyncratic volatility			Low idiosyncratic volatility		
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	1.25***	1.18***	1.26***	0.62***	0.60***	0.62***
	(5.60)	(5.13)	(5.69)	(4.67)	(4.55)	(4.70)
=1 if no. of debt issues ⩾1, =0 otherwise	-0.09			-0.05		
	(-1.35)			(-1.19)		
=1 if no. of equity issues ⩾1, =0 otherwise	-0.60***			-0.20***		
	(-5.34)			(-3.81)		
=1 if no. of issues = 1, =0 otherwise		-0.08			-0.03	
		(-1.17)			(-0.61)	
=1 if no. of issues = 2, =0 otherwise		-0.49***			-0.11*	
		(-4.79)			(-1.99)	
=1 if no. of issues = 3, =0 otherwise		-0.69***			-0.25**	
		(-4.88)			(-2.39)	
=1 if no. of issues ⩾ 4, =0 otherwise		-1.08***			-0.61***	
		(-4.73)			(-3.09)	
=1 if no. of debt issues = 1, =0 otherwise			-0.03			-0.03
			(-0.38)			(-0.91)
=1 if no. of debt issues = 2, =0 otherwise			-0.18**			-0.02
			(-2.14)			(-0.31)
=1 if no. of debt issues = 3, =0 otherwise			-0.48			-0.28**
			(-1.53)			(-2.52)
=1 if no. of equity issues = 1, =0 otherwise			-0.53***			-0.14***
			(-5.36)			(-2.90)
=1 if no. of equity issues = 2, =0 otherwise			-0.70***			-0.40***
			(-3.86)			(-3.16)
=1 if no. of equity issues = 3, =0 otherwise			-1.02***			-0.64***
			(-3.71)			(-2.77)
Tobin's Q_t	-0.19***	-0.20***	-0.18***	-0.12***	-0.13***	-0.12***
	(-4.58)	(-4.94)	(-4.37)	(-3.95)	(-3.93)	(-3.76)
$Ln(Sales)_t$	-0.06**	-0.05*	-0.07**	-0.03**	-0.02*	-0.03**
	(-2.24)	(-1.72)	(-2.31)	(-2.09)	(-2.02)	(-2.19)
$OIBD_t$	0.14	0.03	-0.04	0.24	0.21	0.17
	(0.40)	(0.09)	(-0.12)	(0.90)	(0.76)	(0.65)
$Investment_t$	-0.55***	-0.37**	-0.39**	-0.22	-0.14	-0.16
	(-3.07)	(-2.10)	(-2.21)	(-1.32)	(-0.81)	(-0.94)
$R\&D_t$	-1.33**	-1.51***	-1.28**	1.71***	1.57***	1.66***
	(-2.47)	(-2.90)	(-2.41)	(3.00)	(2.74)	(2.89)
$Return_t$	-0.19***	-0.19**	-0.19**	0.23***	0.22***	0.23***
	(-2.73)	(-2.70)	(-2.69)	(2.76)	(2.77)	(2.84)
Average Adjusted R^2	1.06%	1.08%	1.19%	0.69%	0.78%	0.78%

Table IA-18: More lagged control variables and Fama-MacBeth regressions of earnings announcement returns (Number of months = 492, from 1975-2015)

The dependent variable is the average three-day buy-and-hold return (in percent) from one day before to one day after the quarterly earnings announcement date (Compustat item RDQ) for all earnings announcements made from 92 to 457 calendar days after the end of fiscal year t. We estimate cross-sectional regressions annually for each of the calendar years from 1974-2014, using observations with the fiscal year end date that falls into the calendar year. This table reports the average of the annual coefficients and the corresponding Newey-West *t*-statistics that correct for first-order autocorrelation in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Intercept	0.83***	1.01***	0.95***	1.01***	1.03***	0.98***	1.03***
	(4.20)	(5.48)	(4.99)	(5.51)	(5.11)	(4.72)	(5.16)
=1 if no. of debt issues $\geqslant$ 1,		-0.07**			-0.06**		
=0 otherwise		(-2.26)			(-2.04)		
=1 if no. of equity issues $\geqslant$ 1,		-0.43***			-0.41***		
=0 otherwise		(-6.10)			(-6.17)		
=1 if no. of issues = 1,			-0.06			-0.06	
=0 otherwise			(-1.37)			(-1.37)	
=1 if no. of issues = 2,			-0.32***			-0.31***	
=0 otherwise			(-5.71)			(-5.50)	
=1 if no. of issues = 3,			-0.50***			-0.48***	
=0 otherwise			(-5.26)			(-5.21)	
=1 if no. of issues $\geqslant$ 4,			-0.85***			-0.84***	
=0 otherwise			(-5.41)			(-5.29)	
=1 if no. of debt issues = 1,				-0.04			-0.04
=0 otherwise				(-1.23)			(-1.15)
=1 if no. of debt issues = 2,				-0.11**			-0.12**
=0 otherwise				(-2.44)			(-2.58)
=1 if no. of debt issues = 3,				-0.33**			-0.33**
=0 otherwise				(-2.22)			(-2.20)
=1 if no. of equity issues = 1,				-0.37***			-0.37***
=0 otherwise				(-6.37)			(-6.40)
=1 if no. of equity issues = 2,				-0.56***			-0.55***
=0 otherwise				(-4.01)			(-4.10)
=1 if no. of equity issues = 3,				-0.90***			-0.86***
=0 otherwise				(-4.07)			(-3.95)
Tobin's Q_t	0.04	0.05	0.06	0.06	0.05	0.05	0.06
	(0.87)	(1.06)	(1.11)	(1.18)	(0.96)	(1.04)	(1.08)
$Ln(Sales)_t$	-0.10	-0.06	-0.06	-0.05	-0.03	-0.03	-0.02
	(-1.63)	(-1.02)	(-0.95)	(-0.83)	(-0.53)	(-0.43)	(-0.29)
$OIBD_t$	0.60*	0.38	0.35	0.26	0.30	0.26	0.18
	(1.98)	(1.27)	(1.15)	(0.86)	(0.94)	(0.82)	(0.56)
$Investment_t$	-0.39***	-0.19	-0.08	-0.09	-0.17	-0.07	-0.08
	(-3.05)	(-1.39)	(-0.59)	(-0.65)	(-1.24)	(-0.51)	(-0.55)
$R\&D_t$	-1.58*	-1.68*	-1.73*	-1.70*	-1.43	-1.47*	-1.46
	(-1.74)	(-1.83)	(-1.94)	(-1.88)	(-1.63)	(-1.72)	(-1.68)
$Return_t$	-0.28***	-0.28***	-0.29***	-0.28***	-0.28***	-0.29***	-0.27***
	(-3.44)	(-3.42)	(-3.45)	(-3.38)	(-3.35)	(-3.38)	(-3.29)
Tobin's Q_{t-1}	-0.22***	-0.22***	-0.23***	-0.22***	-0.24***	-0.24***	-0.23***

	(-5.56)	(-5.40)	(-5.50)	(-5.39)	(-5.60)	(-5.61)	(-5.50)
$Ln(Sales)_{t-1}$	0.07	0.02	0.02	0.00	-0.03	-0.02	-0.03
	(1.08)	(0.27)	(0.31)	(0.05)	(-0.30)	(-0.21)	(-0.28)
$OIBD_{t-1}$	0.32	0.24	0.19	0.16	-0.16	-0.20	-0.22
	(1.33)	(1.09)	(0.89)	(0.75)	(-0.56)	(-0.73)	(-0.79)
$Investment_{t-1}$	-0.57***	-0.35***	-0.22*	-0.24**	-0.37***	-0.27**	-0.29**
	(-4.60)	(-3.07)	(-2.01)	(-2.21)	(-3.21)	(-2.27)	(-2.52)
$R\&D_{t-1}$	1.41*	1.53**	1.46*	1.57**	-0.23	-0.25	-0.21
	(1.94)	(2.10)	(2.00)	(2.17)	(-0.19)	(-0.21)	(-0.18)
Tobin's Q_{t-2}					0.03	0.02	0.03
					(1.33)	(1.04)	(1.24)
$Ln(Sales)_{t-2}$					0.01	0.00	-0.01
					(0.12)	(0.03)	(-0.07)
$OIBD_{t-2}$					0.66**	0.64**	0.62**
					(2.15)	(2.13)	(2.08)
$Investment_{t-2}$					-0.13	-0.05	-0.05
					(-1.15)	(-0.39)	(-0.43)
$R\&D_{t-2}$					1.58	1.52	1.61
					(1.51)	(1.44)	(1.54)
Average Adjusted R^2	1.045	1.145	1.19%	1.22%	1.32%	1.37%	1.40%

Table IA-19: Nonlinear control variables and Fama-MacBeth regressions of earnings announcement returns (Number of months = 492, from 1975-2015)

The dependent variable is the average three-day buy-and-hold return (in percent) from one day before to one day after the quarterly earnings announcement date (Compustat item RDQ) for all earnings announcements made from 92 to 457 calendar days after the end of fiscal year t. We estimate cross-sectional regressions annually for each of the calendar years from 1974-2014, using observations with the fiscal year end date that falls into the calendar year. This table reports the average of the annual coefficients and the corresponding Newey-West *t*-statistics that correct for first-order autocorrelation in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

	(1)	(2)	(3)	(4)
Intercept	0.98***	1.11***	1.05***	1.10***
	(3.36)	(4.13)	(3.74)	(4.10)
=1 if no. of debt issues ≥ 1, =0 otherwise		-0.06*		
		(-1.96)		
=1 if no. of equity issues ≥ 1, =0 otherwise		-0.46***		
		(-6.02)		
=1 if no. of issues = 1, =0 otherwise			-0.06	
			(-1.31)	
=1 if no. of issues = 2, =0 otherwise			-0.32***	
			(-5.29)	
=1 if no. of issues = 3, =0 otherwise			-0.50***	
			(-5.06)	
=1 if no. of issues ≥ 4, =0 otherwise			-0.88***	
			(-5.32)	
=1 if no. of debt issues = 1, =0 otherwise				-0.03
				(-0.86)
=1 if no. of debt issues = 2, =0 otherwise				-0.10**
				(-2.10)
=1 if no. of debt issues = 3, =0 otherwise				-0.34**
				(-2.41)
=1 if no. of equity issues = 1, =0 otherwise				-0.39***
				(-6.21)
=1 if no. of equity issues = 2, =0 otherwise				-0.59***
				(-4.08)
=1 if no. of equity issues = 3, =0 otherwise				-0.94***
				(-4.27)
Tobin's Q_t	-0.32***	-0.26***	-0.27***	-0.24***
	(-4.37)	(-3.59)	(-3.81)	(-3.20)
$Ln(Sales)_t$	-0.05	-0.06	-0.04	-0.06
	(-0.92)	(-1.08)	(-0.73)	(-1.12)
$OIBD_t$	0.72**	0.43	0.39	0.29
	(2.12)	(1.31)	(1.17)	(0.86)
$Investment_t$	-0.86***	-0.51*	-0.33	-0.36
	(-3.06)	(-1.70)	(-1.10)	(-1.17)
$R\&D_t$	-0.29	-0.37	-0.71	-0.57
	(-0.39)	(-0.48)	(-0.96)	(-0.75)
$Return_t$	-0.14**	-0.14**	-0.14**	-0.14**
	(-2.04)	(-2.10)	(-2.12)	(-2.08)

Tobin's Q_t^2	0.03***	0.02**	0.02**	0.02*
	(2.78)	(2.13)	(2.24)	(1.85)
$Ln(Sales)_t^2$	0.00	0.00	0.00	0.00
	(0.68)	(0.53)	(0.31)	(0.54)
$OIBD_t^2$	-1.28***	-1.32***	-1.24**	-1.25***
	(-2.73)	(-2.77)	(-2.62)	(-2.71)
$Investment_t^2$	0.32	0.24	0.16	0.19
	(0.85)	(0.62)	(0.41)	(0.49)
$R\&D_t^2$	1.01	1.28	1.72	2.18
	(0.34)	(0.42)	(0.58)	(0.72)
Average Adjusted R^2	0.98%	1.12%	1.17%	1.21%

Table IA-20: Calendar-time regressions of *value-weighted* returns for different periods
This table reports the value-weighted results of calendar-time regressions for different periods to compare with those of Fu and Huang (*Management Science* 2016). See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

Panel A: 2003-2012 and 2003-2015

	(1) 2003-2012					(2) 2003-2015				
	No. of equity issues≥2	No. of debt issues≥2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of debt issues≥1, No. of equity issues≥2	No. of equity issues≥2	No. of debt issues≥2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of debt issues≥1, No. of equity issues≥2
Market model										
α	-0.03	-0.08	-0.25	0.07	-0.13	-0.34	-0.18	-0.59*	-0.05	-0.53
t(α)	(-0.09)	(-0.36)	(-0.78)	(0.29)	(-0.33)	(-0.98)	(-0.99)	(-1.96)	(-0.25)	(-1.42)
b	1.25***	1.22***	1.33***	1.23***	1.23***	1.21***	1.20***	1.31***	1.20***	1.18***
t(b)	(11.98)	(21.87)	(14.88)	(17.92)	(10.82)	(12.89)	(23.37)	(15.92)	(19.20)	(11.38)
3-factor										
α	-0.15	-0.12	-0.36	0.03	-0.25	-0.44	-0.20	-0.66**	-0.06	-0.60*
t(α)	(-0.48)	(-0.55)	(-1.23)	(0.12)	(-0.73)	(-1.46)	(-1.12)	(-2.39)	(-0.29)	(-1.76)
b	1.25***	1.20***	1.29***	1.18***	1.20***	1.19***	1.18***	1.25***	1.15***	1.14***
t(b)	(13.67)	(17.26)	(11.77)	(15.42)	(9.98)	(14.55)	(20.04)	(14.07)	(18.11)	(10.75)
s	0.56***	0.20**	0.53**	0.21	0.58***	0.57***	0.17**	0.55***	0.20**	0.52***
t(s)	(3.21)	(2.05)	(2.45)	(1.59)	(3.21)	(3.85)	(2.33)	(3.22)	(2.09)	(3.25)
h	-0.60***	-0.13	-0.39***	0.01	-0.48**	-0.51***	-0.12*	-0.33***	0.03	-0.36*
t(h)	(-4.15)	(-1.63)	(-3.23)	(0.12)	(-2.54)	(-3.75)	(-1.77)	(-2.98)	(0.36)	(-1.96)
5-factor										
α	0.19	0.03	-0.15	0.14	0.01	-0.21	-0.13	-0.53*	-0.03	-0.47
t(α)	(0.70)	(0.14)	(-0.51)	(0.49)	(0.02)	(-0.74)	(-0.78)	(-1.88)	(-0.15)	(-1.39)
b	1.09***	1.13***	1.18***	1.12***	1.07***	1.06***	1.14***	1.18***	1.13***	1.06***
t(b)	(13.49)	(16.87)	(12.44)	(13.24)	(9.28)	(15.76)	(21.89)	(15.93)	(17.73)	(10.95)
s	0.55***	0.23**	0.59***	0.32**	0.61***	0.49***	0.17**	0.54***	0.27***	0.49***
t(s)	(3.42)	(2.50)	(2.77)	(2.56)	(3.57)	(3.32)	(2.30)	(3.10)	(2.68)	(3.05)
h	-0.52***	-0.04	-0.29*	0.14	-0.40*	-0.41**	-0.03	-0.23	0.16*	-0.27
t(h)	(-3.29)	(-0.42)	(-1.86)	(1.61)	(-1.74)	(-2.48)	(-0.35)	(-1.48)	(1.89)	(-1.15)
r	-0.61***	-0.19*	-0.27	-0.03	-0.39*	-0.55***	-0.11	-0.25	0.05	-0.28
t(r)	(-3.24)	(-1.73)	(-1.43)	(-0.18)	(-1.83)	(-3.07)	(-1.27)	(-1.42)	(0.36)	(-1.36)
c	-0.79***	-0.56***	-0.81***	-0.75***	-0.80***	-0.69***	-0.45***	-0.70***	-0.61***	-0.65**
t(c)	(-4.50)	(-4.09)	(-3.70)	(-3.76)	(-3.29)	(-3.63)	(-3.71)	(-3.25)	(-3.60)	(-2.58)
q-factor										
α	0.03	-0.08	-0.19	0.06	-0.01	-0.15	-0.13	-0.39	0.01	-0.29
t(α)	(0.10)	(-0.50)	(-0.70)	(0.25)	(-0.02)	(-0.52)	(-0.91)	(-1.61)	(0.08)	(-0.96)
b	1.09***	1.16***	1.15***	1.15***	1.03***	1.04***	1.16***	1.12***	1.14***	1.00***
t(b)	(10.97)	(24.50)	(12.81)	(17.36)	(8.98)	(12.22)	(28.99)	(15.02)	(20.33)	(9.89)
s	0.45***	0.19**	0.44**	0.24**	0.44***	0.41***	0.14**	0.39***	0.18**	0.32**
t(s)	(3.39)	(2.50)	(2.43)	(2.13)	(2.71)	(3.39)	(2.38)	(2.73)	(2.06)	(2.15)
b^{ROE}	-0.20	-0.02	-0.25*	-0.04	-0.37*	-0.39*	-0.04	-0.42***	-0.11	-0.52***
$t(b^{ROE})$	(-0.85)	(-0.24)	(-1.74)	(-0.22)	(-1.81)	(-1.83)	(-0.67)	(-2.92)	(-0.66)	(-2.75)
$b^{I/A}$	-1.06***	-0.47***	-0.88***	-0.44**	-1.13***	-1.08***	-0.42***	-0.88***	-0.35**	-1.04***
$t(b^{I/A})$	(-5.14)	(-3.77)	(-3.74)	(-2.22)	(-4.44)	(-5.75)	(-4.14)	(-4.23)	(-2.17)	(-4.62)

Panel B: 2000-2012 and 2000-2015

	(1) 2000-2012					(2) 2000-2015				
	No. of equity issues≥2	No. of debt issues≥2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of debt issues≥1, No. of equity issues≥2	No. of equity issues≥2	No. of debt issues≥2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of debt issues≥1, No. of equity issues≥2
Market model										
α	-0.27	-0.02	-0.76**	0.12	-0.35	-0.51*	-0.11	-0.98***	0.01	-0.65**
t(α)	(-0.89)	(-0.11)	(-2.44)	(0.56)	(-1.11)	(-1.77)	(-0.70)	(-3.44)	(0.08)	(-2.16)
b	1.36***	1.16***	1.51***	1.15***	1.27***	1.32***	1.14***	1.48***	1.14***	1.23***
t(b)	(16.82)	(23.57)	(15.61)	(18.36)	(16.32)	(17.47)	(25.07)	(16.41)	(19.67)	(16.54)
3-factor										
α	-0.23	-0.08	-0.65***	0.00	-0.35	-0.49*	-0.15	-0.91***	-0.07	-0.67**
t(α)	(-0.80)	(-0.43)	(-2.61)	(0.01)	(-1.13)	(-1.77)	(-0.95)	(-3.77)	(-0.37)	(-2.19)
b	1.27***	1.16***	1.41***	1.15***	1.22***	1.23***	1.15***	1.38***	1.14***	1.18***
t(b)	(20.19)	(24.92)	(19.60)	(22.49)	(15.74)	(20.50)	(26.55)	(20.65)	(24.14)	(15.91)
s	0.36***	0.01	0.38***	0.03	0.21*	0.39***	0.02	0.42***	0.04	0.24**
t(s)	(4.42)	(0.20)	(3.57)	(0.47)	(1.87)	(5.05)	(0.26)	(4.10)	(0.69)	(2.24)
h	-0.38***	0.11	-0.52***	0.22***	-0.16	-0.35***	0.09	-0.48***	0.21***	-0.12
t(h)	(-3.47)	(1.57)	(-6.78)	(3.07)	(-1.14)	(-3.53)	(1.49)	(-6.28)	(3.22)	(-0.99)
5-factor										
α	-0.02	-0.07	-0.32	0.02	-0.30	-0.26	-0.13	-0.61**	-0.06	-0.58*
t(α)	(-0.08)	(-0.32)	(-1.22)	(0.06)	(-0.92)	(-0.97)	(-0.77)	(-2.42)	(-0.27)	(-1.87)
b	1.16***	1.15***	1.25***	1.14***	1.19***	1.11***	1.13***	1.23***	1.13***	1.13***
t(b)	(16.97)	(19.00)	(18.34)	(18.61)	(13.54)	(17.50)	(21.73)	(20.09)	(21.14)	(13.92)
s	0.32***	0.06	0.39***	0.12	0.30**	0.33***	0.06	0.40***	0.12*	0.29***
t(s)	(3.33)	(0.90)	(3.43)	(1.43)	(2.57)	(3.63)	(0.98)	(3.69)	(1.67)	(2.68)
h	-0.25*	0.15	-0.24*	0.28***	-0.09	-0.19	0.14*	-0.20	0.27***	-0.02
t(h)	(-1.71)	(1.60)	(-1.94)	(3.36)	(-0.46)	(-1.33)	(1.69)	(-1.63)	(3.64)	(-0.12)
r	-0.23*	0.03	-0.24*	0.08	0.03	-0.28**	0.03	-0.27**	0.08	-0.03
t(r)	(-1.78)	(0.34)	(-1.74)	(0.68)	(0.20)	(-2.23)	(0.32)	(-2.05)	(0.77)	(-0.17)
c	-0.26	-0.14	-0.67***	-0.26*	-0.30	-0.31*	-0.14	-0.66***	-0.25*	-0.35*
t(c)	(-1.55)	(-1.23)	(-4.37)	(-1.82)	(-1.55)	(-1.96)	(-1.36)	(-4.56)	(-1.94)	(-1.86)
q-factor										
α	-0.13	-0.13	-0.42*	-0.03	-0.26	-0.27	-0.15	-0.57**	-0.06	-0.47*
t(α)	(-0.46)	(-0.77)	(-1.70)	(-0.14)	(-0.88)	(-1.04)	(-1.09)	(-2.59)	(-0.32)	(-1.69)
b	1.15***	1.19***	1.21***	1.20***	1.16***	1.10***	1.18***	1.18***	1.17***	1.09***
t(b)	(14.95)	(25.52)	(18.92)	(20.50)	(12.50)	(15.11)	(27.03)	(18.85)	(21.45)	(12.31)
s	0.32***	0.02	0.28***	0.04	0.17	0.32***	0.03	0.27***	0.04	0.15
t(s)	(5.31)	(0.36)	(2.72)	(0.45)	(1.42)	(4.93)	(0.39)	(2.83)	(0.48)	(1.28)
b^{ROE}	-0.19	0.11	-0.35***	0.11	-0.12	-0.27*	0.08	-0.43***	0.06	-0.22
$t(b^{ROE})$	(-1.25)	(1.62)	(-3.28)	(1.04)	(-0.83)	(-1.93)	(1.32)	(-4.14)	(0.61)	(-1.60)
$b^{I/A}$	-0.65***	0.01	-0.88***	0.09	-0.38**	-0.65***	-0.00	-0.84***	0.10	-0.37**
$t(b^{I/A})$	(-3.75)	(0.12)	(-5.99)	(0.58)	(-2.07)	(-3.86)	(-0.02)	(-6.02)	(0.68)	(-2.05)

Panel C: 1995-2015 and 1975-2015, excluding 2000-2002 when the Internet Bubble burst

	(1) 1996-1999 and 2003-2015					(2) 1975-1999 and 2003-2015				
	No. of equity issues≥2	No. of debt issues≥2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of debt issues≥1, No. of equity issues≥2	No. of equity issues≥2	No. of debt issues≥2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of debt issues≥1, No. of equity issues≥2
Market model										
α	-0.58*	-0.32*	-0.91***	-0.33	-0.82**	-0.54***	-0.19*	-0.86***	-0.28**	-0.73***
t(α)	(-1.85)	(-1.88)	(-3.06)	(-1.65)	(-2.40)	(-3.21)	(-1.96)	(-4.26)	(-2.46)	(-3.89)
b	1.26***	1.13***	1.33***	1.14***	1.22***	1.28***	1.16***	1.28***	1.17***	1.26***
t(b)	(15.87)	(23.85)	(18.52)	(20.52)	(14.32)	(28.59)	(46.27)	(24.08)	(41.67)	(26.85)
3-factor										
α	-0.57**	-0.29*	-0.89***	-0.29	-0.80***	-0.47***	-0.20**	-0.72***	-0.30***	-0.64***
t(α)	(-2.23)	(-1.73)	(-3.51)	(-1.52)	(-2.71)	(-3.06)	(-2.06)	(-3.85)	(-2.65)	(-3.80)
b	1.15***	1.09***	1.21***	1.09***	1.11***	1.13***	1.11***	1.11***	1.12***	1.12***
t(b)	(18.33)	(22.84)	(16.74)	(22.96)	(14.12)	(28.64)	(47.17)	(20.14)	(39.13)	(25.04)
s	0.68***	0.23***	0.74***	0.25***	0.67***	0.61***	0.24***	0.71***	0.27***	0.57***
t(s)	(7.15)	(3.79)	(6.39)	(3.32)	(6.38)	(8.63)	(6.13)	(7.72)	(5.57)	(8.22)
h	-0.42***	0.08	-0.32***	0.18**	-0.31**	-0.40***	-0.02	-0.41***	0.01	-0.41***
t(h)	(-3.82)	(0.99)	(-3.18)	(2.14)	(-2.23)	(-5.44)	(-0.57)	(-5.43)	(0.17)	(-5.32)
5-factor										
α	-0.40	-0.26	-0.75***	-0.28	-0.68**	-0.31*	-0.20*	-0.57***	-0.31**	-0.52***
t(α)	(-1.58)	(-1.48)	(-2.93)	(-1.38)	(-2.29)	(-1.95)	(-1.95)	(-2.90)	(-2.47)	(-3.09)
b	1.03***	1.06***	1.11***	1.07***	1.02***	1.08***	1.11***	1.06***	1.11***	1.07***
t(b)	(17.04)	(20.86)	(15.09)	(20.23)	(12.72)	(29.98)	(47.05)	(20.41)	(37.79)	(25.14)
s	0.61***	0.24***	0.71***	0.30***	0.64***	0.55***	0.26***	0.67***	0.31***	0.54***
t(s)	(5.78)	(4.33)	(6.03)	(4.36)	(5.83)	(7.41)	(7.26)	(7.20)	(7.06)	(7.37)
h	-0.31**	0.12	-0.21	0.27***	-0.19	-0.36***	0.01	-0.40***	0.09	-0.36***
t(h)	(-2.11)	(1.34)	(-1.46)	(3.14)	(-0.92)	(-3.71)	(0.16)	(-4.07)	(1.33)	(-3.22)
r	-0.36**	0.01	-0.21	0.14	-0.16	-0.29**	0.08	-0.25*	0.14	-0.17
t(r)	(-2.04)	(0.05)	(-1.16)	(1.12)	(-0.89)	(-2.34)	(1.01)	(-1.74)	(1.55)	(-1.32)
c	-0.47**	-0.19*	-0.54***	-0.36**	-0.54**	-0.32**	-0.11	-0.23	-0.20**	-0.31**
t(c)	(-2.56)	(-1.86)	(-3.10)	(-2.57)	(-2.56)	(-2.34)	(-1.41)	(-1.43)	(-2.12)	(-2.07)
q-factor										
α	-0.21	-0.25	-0.53**	-0.25	-0.44*	-0.24	-0.10	-0.52**	-0.19	-0.44**
t(α)	(-0.86)	(-1.55)	(-2.30)	(-1.21)	(-1.65)	(-1.51)	(-0.97)	(-2.52)	(-1.42)	(-2.52)
b	1.00***	1.07***	1.06***	1.08***	0.96***	1.12***	1.10***	1.10***	1.11***	1.11***
t(b)	(15.32)	(25.48)	(15.91)	(22.08)	(12.07)	(25.61)	(53.68)	(20.43)	(40.68)	(23.04)
s	0.50***	0.20***	0.54***	0.22***	0.46***	0.46***	0.20***	0.62***	0.23***	0.45***
t(s)	(5.64)	(3.87)	(4.94)	(3.23)	(4.17)	(6.77)	(6.15)	(6.44)	(5.46)	(5.90)
b^{ROE}	-0.40**	-0.04	-0.46***	-0.08	-0.47***	-0.11	-0.04	-0.12	-0.05	-0.08
$t(b^{ROE})$	(-2.47)	(-0.50)	(-3.46)	(-0.57)	(-3.14)	(-1.05)	(-0.77)	(-0.90)	(-0.62)	(-0.70)
$b^{I/A}$	-0.96***	-0.11	-0.84***	-0.06	-0.91***	-0.72***	-0.18**	-0.62***	-0.19*	-0.71***
$t(b^{I/A})$	(-6.07)	(-0.99)	(-4.83)	(-0.39)	(-5.23)	(-6.47)	(-2.46)	(-4.49)	(-1.87)	(-5.99)

Table IA-21: Calendar-time regressions of *equal-weighted* returns for different periods
This table reports the equal-weighted results of calendar-time regressions for different periods to compare with those of Fu and Huang (*Management Science* 2016). See Appendices A and B and Table I for variable definitions. *T*-statistics are in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels.

	(1) 2003-2012					(2) 2003-2015				
	No. of equity issues≥2	No. of debt issues≥2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of debt issues≥1, No. of equity issues≥2	No. of equity issues≥2	No. of debt issues≥2	Equity issues (1,1,0) or (1,1,1)	Debt issues (1,1,0) or (1,1,1)	No. of debt issues≥1, No. of equity issues≥2
Market model										
α	-0.24	-0.01	-0.57	-0.35	-0.48	-0.65	-0.33	-0.86**	-0.63**	-0.93**
t(α)	(-0.49)	(-0.04)	(-1.19)	(-1.05)	(-1.04)	(-1.48)	(-1.14)	(-2.03)	(-2.06)	(-2.17)
b	1.53***	1.49***	1.55***	1.48***	1.53***	1.49***	1.45***	1.52***	1.44***	1.50***
t(b)	(12.96)	(19.29)	(12.50)	(18.00)	(13.42)	(13.71)	(20.22)	(13.43)	(19.23)	(14.30)
3-factor										
α	-0.43	-0.15	-0.76**	-0.48*	-0.66*	-0.76**	-0.36	-0.98***	-0.66**	-1.02***
t(α)	(-1.20)	(-0.56)	(-2.14)	(-1.69)	(-1.72)	(-2.33)	(-1.47)	(-3.10)	(-2.49)	(-2.84)
b	1.39***	1.32***	1.41***	1.32***	1.39***	1.33***	1.28***	1.36***	1.30***	1.35***
t(b)	(11.45)	(16.12)	(9.95)	(17.12)	(11.18)	(12.75)	(17.33)	(11.47)	(18.06)	(12.66)
s	1.02***	0.72***	1.03***	0.68***	0.92***	1.06***	0.70***	1.09***	0.64***	0.90***
t(s)	(6.04)	(7.15)	(5.10)	(5.98)	(5.08)	(6.95)	(7.01)	(6.49)	(5.76)	(5.56)
h	-0.42*	0.02	-0.41**	-0.01	-0.33	-0.35*	0.13	-0.36**	0.09	-0.22
t(h)	(-1.85)	(0.11)	(-2.30)	(-0.06)	(-1.49)	(-1.68)	(0.86)	(-2.14)	(0.57)	(-1.02)
5-factor										
α	0.07	0.07	-0.38	-0.20	-0.31	-0.38	-0.26	-0.65*	-0.52**	-0.78**
t(α)	(0.17)	(0.26)	(-0.99)	(-0.81)	(-0.76)	(-1.07)	(-1.05)	(-1.86)	(-2.00)	(-2.04)
b	1.13***	1.21***	1.20***	1.18***	1.21***	1.13***	1.22***	1.18***	1.22***	1.22***
t(b)	(11.12)	(16.39)	(10.31)	(14.29)	(10.83)	(12.67)	(18.29)	(11.54)	(17.18)	(12.78)
s	0.86***	0.73***	0.94***	0.68***	0.78***	0.82***	0.67***	0.91***	0.59***	0.73***
t(s)	(6.25)	(7.25)	(5.06)	(5.71)	(4.58)	(5.82)	(6.21)	(5.38)	(4.86)	(4.40)
h	-0.51**	0.02	-0.51**	0.02	-0.45*	-0.42*	0.13	-0.42*	0.13	-0.33
t(h)	(-2.16)	(0.10)	(-2.21)	(0.12)	(-1.82)	(-1.74)	(0.68)	(-1.84)	(0.64)	(-1.30)
r	-1.18***	-0.39**	-0.90***	-0.51***	-0.86***	-1.11***	-0.24*	-0.94***	-0.33*	-0.73***
t(r)	(-4.83)	(-2.61)	(-3.33)	(-2.63)	(-4.03)	(-5.06)	(-1.77)	(-3.61)	(-1.93)	(-3.64)
c	-0.38	-0.53***	-0.35	-0.66***	-0.17	-0.30	-0.36*	-0.36	-0.48**	-0.07
t(c)	(-1.28)	(-2.98)	(-0.90)	(-3.40)	(-0.55)	(-1.05)	(-1.92)	(-0.98)	(-2.46)	(-0.22)
q-factor										
α	-0.06	0.03	-0.38	-0.26	-0.31	-0.22	-0.10	-0.44	-0.36	-0.54
t(α)	(-0.14)	(0.11)	(-0.96)	(-1.08)	(-0.81)	(-0.64)	(-0.52)	(-1.29)	(-1.61)	(-1.63)
b	1.00***	1.11***	1.03***	1.10***	1.06***	0.98***	1.12***	1.01***	1.12***	1.06***
t(b)	(8.33)	(15.98)	(9.06)	(14.43)	(9.62)	(8.99)	(16.98)	(9.75)	(15.66)	(10.35)
s	0.79***	0.69***	0.80***	0.62***	0.67***	0.77***	0.60***	0.81***	0.51***	0.62***
t(s)	(4.89)	(8.71)	(3.98)	(6.96)	(3.69)	(5.78)	(7.24)	(5.21)	(5.91)	(4.12)
b^{ROE}	-0.97***	-0.53***	-0.97***	-0.63***	-0.92***	-1.09***	-0.60***	-1.08***	-0.69***	-1.02***
$t(b^{ROE})$	(-4.24)	(-3.31)	(-4.34)	(-3.76)	(-5.20)	(-5.42)	(-4.12)	(-5.49)	(-4.68)	(-6.25)
$b^{I/A}$	-0.65***	-0.40***	-0.69**	-0.52***	-0.55**	-0.71***	-0.28**	-0.75***	-0.39***	-0.54**
$t(b^{I/A})$	(-2.86)	(-2.82)	(-2.53)	(-3.70)	(-2.23)	(-3.61)	(-2.12)	(-3.26)	(-3.05)	(-2.57)

Table IA-22: Fama-MacBeth regressions of stock returns for different periods

This table reports the Fama-MacBeth regression results for different periods to compare with those of Fu and Huang (*Management Science* 2016). Cross-sectional regressions are estimated each month. The dependent variable is the monthly return (in percent) on a firm's stock. This table reports the time-series averages of the monthly coefficients and the corresponding Newey-West *t*-statistics that correct for first, second, and third order autocorrelations in parentheses, with *, **, and *** signifying statistical significance at the 10%, 5%, and 1% significance levels. See Appendix A and Table I for variable definitions.

	2003-2012 (Number of months = 120)			2003-2015 (Number of months = 156)		
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	1.75*	1.71*	1.75*	1.57**	1.48*	1.57**
	(1.88)	(1.84)	(1.87)	(2.05)	(1.93)	(2.05)
=1 if no. of debt issues ≥1, =0 otherwise	-0.06			-0.04		
	(-0.67)			(-0.60)		
=1 if no. of equity issues ≥1, =0 otherwise	-0.34**			-0.52***		
	(-2.56)			(-3.60)		
=1 if no. of issues = 1, =0 otherwise		-0.05			-0.05	
		(-0.61)			(-0.77)	
=1 if no. of issues = 2, =0 otherwise		-0.20			-0.28**	
		(-1.47)			(-2.35)	
=1 if no. of issues = 3, =0 otherwise		-0.56***			-0.57***	
		(-2.68)			(-2.88)	
=1 if no. of issues ≥ 4, =0 otherwise		-0.94***			-1.18***	
		(-3.88)			(-4.50)	
=1 if no. of debt issues = 1, =0 otherwise			0.01			0.03
			(0.16)			(0.36)
=1 if no. of debt issues = 2, =0 otherwise			-0.14			-0.16
			(-1.15)			(-1.45)
=1 if no. of debt issues = 3, =0 otherwise			-1.01***			-0.72***
			(-3.72)			(-2.81)
=1 if no. of equity issues = 1, =0 otherwise			-0.26*			-0.41***
			(-1.97)			(-3.11)
=1 if no. of equity issues = 2, =0 otherwise			-0.46**			-0.73***
			(-2.14)			(-3.13)
=1 if no. of equity issues = 3, =0 otherwise			-0.97***			-1.22***
			(-3.19)			(-4.27)
Tobin's Q_t	-0.16**	-0.16**	-0.14**	-0.12**	-0.13**	-0.11**
	(-2.60)	(-2.57)	(-2.49)	(-2.27)	(-2.32)	(-2.11)
$Ln(Sales)_t$	-0.06	-0.05	-0.06	-0.05	-0.04	-0.05
	(-1.26)	(-1.12)	(-1.26)	(-1.35)	(-1.02)	(-1.35)
$OIBD_t$	0.68	0.56	0.49	0.96*	0.86	0.71
	(0.99)	(0.80)	(0.68)	(1.72)	(1.54)	(1.23)
$Investment_t$	-0.70**	-0.52*	-0.52*	-0.80***	-0.60**	-0.61***
	(-2.38)	(-1.79)	(-1.83)	(-3.23)	(-2.51)	(-2.61)
$R\&D_t$	1.32	1.19	1.30	2.33***	2.15***	2.34***
	(1.55)	(1.36)	(1.53)	(3.02)	(2.76)	(3.03)
$Return_t$	-0.55	-0.55	-0.54	-0.39	-0.39	-0.39
	(-1.49)	(-1.50)	(-1.49)	(-1.35)	(-1.34)	(-1.33)
Average Adjusted R^2	1.97%	2.02%	2.10%	2.16%	2.21%	2.31%