# Obligation Capacity and Tests of Capital Structure Theories

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**Abstract**

Our primary outcomes are that if outer assets are required, without obligation limit concerns, obligation has all the earmarks of being liked to value. Worries over obligation limit to a great extent clarify the utilization of new outside value financing by traded on an open market firms. We look at the effect of expressly fusing a proportion of obligation limit in ongoing trial of contending hypotheses of capital structure. At last, we present proof that accommodates the continuous value issues by little, high-development firms with the pecking request. Subsequent to representing obligation limit, the pecking request seems, by all accounts, to be a decent portrayal of financing conduct for a vast example of firms inspected over an all-encompassing timeframe.

**Keywords:** Capital structure, pecking request hypothesis, and Obligation Capacity

JEL classification: G32

Background of the study

An intriguing discourse has been produced in late examinations intended to distinguish whether the tradeoff hypothesis or the pecking request hypothesis best depicts the financing selections of companies. Myers and Majluf (1984) said (the establishment for pecking request conduct dependent on awry data) While little firms are probably going to be related with bigger measures of hilter kilter data they are additionally liable to have development choices that are bigger in esteem in respect to resources set up contrasted with those of expansive firms. In addition, we demonstrate that it is accurately the little, high-development firms that additionally face the most prohibitive obligation limit limitations. These contentions propose that the regular value issues by littler firms don't really repudiate pecking request conduct. Observationally, we give proof on this inquiry first by looking at contrasts in the qualities of firms that issue value contrasted with non-guarantors crosswise over gatherings of firms fragmented on the probability of being obliged by obligation limit. For the gathering of firms well on the way to be compelled by obligation limit we find that the guarantors of huge measures of value are, by and large, developing quick (normal development in resources is 49.8% yearly when contrasted with 10.6% for non-backers) and losing cash (normal ROA is - 0.024 contrast with 0.107 for non-guarantors). Value guarantors in this gathering additionally have moderately low influence before the issue. In any case, the anticipated influence change (the adjustment in the company's book influence proportion that would happen if its financing deficiency was totally financed with obligation) is 29%, showing that if these organizations utilized just obligation financing their obligation proportions would by and large increment from about 13% to over 42%. Given their development rates and negative productivity, such an expansion in influence would probably abuse any sensible anticipated dimension of obligation limit. Interestingly, value issues by firms that are ex bet more averse to be worried about obligation limit face an alternate arrangement of requirements. While these organizations ought to be less inclined to be apportioned by moneylenders, they might be hesitant to seek after further obtaining in light of the fact that they are unfit to help extra obligation.

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Steady with this view, value guarantors in this gathering are developing substantially more quickly and have altogether higher influence preceding the issue than comparative non-backers. At last, proof from declaration impacts for new value issues likewise demonstrates that organizations well on the way to be obliged by worries over obligation limit face lower expenses of value issues than do unconstrained firms. By and large, firms confronting obligation limit limitations (by and large little, high development firms) see essentially more positive market responses to declarations of value issues when contrasted with unconstrained (by and large vast, develop) firms. By and large the proof recommends that the continuous value issues by youthful high development firms are steady with the presence of obligation limit requirements don't negate a rendition of the pecking request that perceives breaking points to the utilization of obligation financing.

## 1. Obligation Capacity

Obligation limit was initially characterized by Myers (1977) as the time when an expansion in the utilization of obligation decreases the all-out market estimation of the association's obligation. The blend of obligation limit characterized in these terms and the pecking request hypothesis recommends that expenses of unfavorable choice are prevailing for "low to direct" influence levels yet that tradeoff-hypothesis like powers become essential helpers of financing choices at "high" dimensions of influence. There is an enlightening weakening expense to issuing value within the sight of uneven data as in Myers and Majluf (1984). When issuing obligation, firms may pick between bank obligation and open bonds. Banks have favorable position in limiting expenses of money related trouble, however face their own intermediation costs that are passed on to the borrower, so bank obligation is ostensibly more costly than open obligation (See too, Cantillo and Wright (2000)). Securities convey a lower loan fee, however borrowers in the open obligation showcase face greater expenses on the off chance that they become troubled. The Bolton Freixas demonstrate results in a market division in which the most secure firms utilize the open obligation advertise for financing, these organizations have the best ability to get, an extremely low likelihood of misery thus it is financially savvy for them to maintain a strategic distance from the intermediation costs brought about with bank obligation. Increasingly unsafe firms with a lower ability to get utilize the more adaptable however ostensibly progressively costly bank obligation. Bank obligation gives the least expensive type of adaptable financing. The most hazardous firms are compelled to utilize value (or are unfit to get any outside financing). The transaction between the free market activities for assets causes the market division as firms sort themselves as indicated by their ability to utilize obligation financing and their interest for adaptability in trouble. In view of this division a company's capacity to issue open (evaluated) obligation shows a vast obligation limit. On the other hand, the utilization of bank (checked) obligation demonstrates a lower obligation limit. Moreover, Bolton and Freixas likewise propose proportions of firm hazard or firm age as elective intermediaries for obligation limit.

Holmstrom and Tirole (1997) additionally give a model in which the nearness or nonattendance of open or appraised obligation is identified with the company's dimension of obligation limit. In the Holmstrom and Tirole display, the financing decision is constrained to bank obligation or open obligation and the central erosion is an administrative good danger issue instead of unbalanced data. In their model, a company's obligation limit is dictated by its accessible security. These organizations are littler, have increasingly unpredictable money streams, less unmistakable resources and are progressively hazy, and along these lines are probably going to request lower dimensions of obligation financing contrasted with firms with appraised obligation. Besides, firms that obtain from "relationship loan specialists" are well on the way to be liable to a remotely forced obligation limit through apportioning (Faulkender and Peterson (2006)) and to confront high redesign costs (Cantillo and Wright (2002)). While the nearness (or nonattendance) of evaluated obligation gives a sign of the degree to which a firm approaches moderately ease getting thus recommends a generally huge (or little) obligation limit, the utilization of the real nearness or nonappearance of a security rating as a proportion of obligation limit is hazardous.

## 2. Information

The information comprise of all organizations on both the CRSP and Compustat databases for the period 1971-2001. The financing deficiency and net security issues are scaled by book resources (information 6) toward the finish of the earlier year. we dispose of firm-year perceptions for which the total estimations of the financing deficiency or net issues of obligation or value are more prominent than 200% of the association's all out book resources toward the finish of the past year.6 For each firm year, we likewise process influence as the proportion of long haul obligation (information 9 + information 44) to add up to resources.

We additionally utilize various factors that have been recognized as influencing influence in the past writing on capital structure (e.g., Rajan and Zingales (1995), Frank and Goyal (2003), and Fama and French (2002)). Resource substance is estimated as the proportion of 25)/information 6) is utilized as an intermediary for development openings.

Myers (1977) contends that organizations with more development open doors have a more prominent potential for underinvestment issues emerging from the utilization of obligation. Gainfulness is estimated as the proportion of working benefits (information 13) to add up to resources. Income unpredictability and stock value instability ought to be tied by estimating in the value advertise. Exactly, for a subset of firms with adequate information to precisely gauge income unpredictability, we find that the rank connection between's these two instability measures is 0.53.7 All else level with, a firm with increasingly unstable money streams can get less either in light of the fact that the obligation overhang issue (Myers (1977)) is progressively serious or in light of the fact that it is bound to be unfit to meet the installments on its obligation commitments.

**Tests of Capital Structure Theory**

The tradeoff hypothesis of capital structure predicts that organizations will pick their blend of obligation and value to adjust the expenses and advantages of obligation. In powerful forms of the model (for example Fisher, Heinkel, and Zechner (1989)) the ideal is portrayed as an interim, and infringement of the endpoints of the interim lead to corrections in the association's financing blend. The improvement of a pecking request dependent on expenses of unfavorable choice requires a specially appointed detail of the supervisor's motivating force contract (Dybvig and Zender (1991)) and some restriction on the sorts of financing systems that might be sought after (for example Brennan and Kraus (1987)). In spite of these hypothetical reactions, the pecking request remains an overwhelming hypothesis of financing decision. In an ongoing arrangement of papers, tests intended to recognize the pecking request and tradeoff hypotheses have been created. Shyam-Sunder and Myers (1999) present a trial of the pecking request hypothesis. Their test depends on the pecking request's forecast concerning the sort of outer financing picked to fill the "financing shortage." The financing shortfall is characterized, utilizing the income personality, as the development in resources less the development in current liabilities (aside from the present bit of long haul obligation) less the development in held profit. As per the personality, this shortage must be "filled" by the (net) closeout of new securities. Shyam-Sunder and Myers contend that, aside from firms at or close to their obligation limit, the pecking request predicts that the deficiency will be filled totally with new obligation issues. The exact detail of their test is

$$D_{it} = \alpha + \beta PO \ DEF_{it} + \varepsilon_{it} \qquad (1)$$

Where $D_{it}$ is the net debt issued by firm i in period t, and $DEF_{it}$ is the corresponding financing deficit. Fama and French (2002) look at huge numbers of the forecasts of the tradeoff and the pecking request hypotheses regarding capital structure and profit approach. Fama and French (2002) find that obligation is utilized to address varieties in venture and income for the time being. In any case, they likewise find, as in Frank and Goyal (2003), that little, high-development organizations issue the majority of the value (see additionally Fama and French (2005)). Fama and French join Frank and Goyal in contending that this finding negates the pecking request hypothesis. Leary and Roberts (2007) additionally question the capacity of the pecking request to clarify financing choices. Utilizing an alternate observational methodology, they discover little help for the pecking request, notwithstanding for subsamples of firms for which they contend the pecking request ought to be well on the way to hold. Shyam-Sunder and Myers contend that the pecking request predicts $\alpha = 0$ and $\beta PO = 1$. Instinctively, the incline coefficient in this relapse shows the degree to which obligation issues spread the financing shortage. They recognize that $\beta PO$ might be under 1 for firms close to their obligation limit, be that as it may, the extensive develop firms in their example are not liable to face such a limitation. They find $\beta PO = 0.75$ with a R2 of 0.68 (see segment 2 of their Table 2) when they gauge condition (1). They translate this as proof that "the pecking request is an astounding first-request descriptor of corporate financing conduct" (Shyam-Sunder and Myers (1999) pg.242) for their example. They likewise find that an objective change show dependent on the tradeoff hypothesis has little capacity to clarify the adjustments owing debtors financing for these organizations. Candid and Goyal (2003) question the ends drawn by Shyam-Sunder and Myers (1999) on a few fronts. The most intriguing difficulties are whether the Shyam-Sunder and Myers discoveries hold for a more extensive example of firms, regardless of whether the outcomes hold over a more extended time skyline (specifically including the 1990's) and whether their discoveries hold for subsamples of firms anticipated to have abnormal amounts of topsy-turvy data. For an extended example of firms, Frank and Goyal demonstrate that the gauge of $\beta PO$ in condition (1) is a lot littler than one and is significantly littler in the 1990's.

In addition, they find that the pecking request plays out the most exceedingly awful for little firms, which they contend ought to have the best level of unbalanced data and in this way the most grounded motivations to pursue the pecking request. Fama and French join Frank and Goyal in contending that this finding negates the pecking request hypothesis. Leary and Roberts (2007) additionally question the capacity of the pecking request to clarify financing choices. Utilizing an alternate observational methodology, they discover little help for the pecking request, notwithstanding for subsamples of firms for which they contend the pecking request ought to be well on the way to hold.

## Empirical Strategy

As talked about over, the Shyam-Sunder and Myers test, while extremely instinctive, has little capacity to recognize elective theories. As needs be, we adjust the Shyam-Sunder and Myers test in two different ways. First we independently analyze firms that are relied upon to be compelled by worries over obligation limit and those that are most certainly not. Along these lines we misuse the cross sectional heterogeneity in the red limit in the example. The differentiation in results over these two gatherings is an imperative part of our experimental structure. Second, we incorporate as an extra autonomous variable; the square of the financing deficiency:

$$D = \alpha + \beta \qquad PO \qquad DEF + \gamma DEF\,2 + \varepsilon \qquad it \qquad (2)$$

As Chirinko and Singha (2000) delineate, under the pecking request the connection between the adjustment paying off debtors and the financing shortfall when firms face obligation limit requirements is sunken. We incorporate the square of the financing shortage to catch the inward idea of the connection and to all the more completely distinguish the idea of the financing pecking order by thinking about the distinctions in financing decision among expansive and little deficiencies.  For firms that pursue the pecking request and are unconstrained by worries over obligation limit, the first Shyam-Sunder and Myers test (condition (1)) ought to perform great (a B PO coefficient gauge almost 1 and a high R-squared). Besides, there ought to be close to nothing change in results when condition (2) is rather evaluated. A slack obligation limit requirement will infer that both little and huge shortfalls will be financed with obligation. Conversely, for pecking request firms that are obliged by worries over obligation limit, the test in condition (1) ought to perform  "ineffectively" with a gauge of β PO that is a long way from 1 (see Chirinko and Singha (2000)) and a low R-squared. For such firms, be that as it may, evaluating condition (2) should result in a gauge of the Γ coefficient that is negative and noteworthy, an expansion in the gauge of the β PO coefficient, also, an expansion in the R-squared of the relapse with respect to condition (1). Pecking request firms that are compelled by obligation limit will utilize obligation to fill little financing shortages (those that don't damage the association's obligation limit imperative) however for bigger shortfalls these organizations will swing to value financing. Note that the sign the coefficient γ demonstrates the idea of the financing chain of command. To show the capacity of our tests to recognize pecking request conduct within the sight of worries over obligation limit and to recognize contending theories we give proof created utilizing reenacted information. We intently pursue Leary and Roberts (2007) in recreating the financing conduct of firms. We reenact information for two kinds of firms.

The principal set of firms is moderately unconstrained by worries over obligation limit, while the second arrangement of firms faces additionally restricting obligation limit limitations. To make the reproductions legitimately similar to our observational outcomes we utilize the real financing deficiencies in the information and reenact obligation limits and financing conduct. In particular, for each firm-year perception of the financing shortfall we reproduce an incentive for the company's unused obligation limit. To reenact financing conduct we think about the measure of the financing shortage to the reproduced estimation of the company's obligation limit. In the event that the measure of the financing shortfall is not exactly the rest of the obligation limit, the deficiency is thought to be filled altogether with obligation. In the event that the financing shortage surpasses the rest of the obligation limit of the firm, at that point the firm is expected to issue obligation up to the point where the company's obligation limit is depleted and is expected to fill the rest of the deficiency utilizing equity.1 As a reason for examination we additionally reproduce financing conduct under two elective financing suspicions. The principal elective is that financing approaches are essentially arbitrary as in a coin flip decides if the firm issues either obligation or value, where the likelihood of an obligation issue in a given year is set to coordinate the normal recurrence of obligation issues in the two subsamples. Chang and Dasgupta (2008) demonstrate that irregular financing can imitate various adapted realities identified with target alteration conduct and presume that various standard trial of target modification conduct have little capacity to dismiss elective clarifications for financing conduct. We consider the execution of our test on information produced by arbitrary financing to check whether a similar analysis can be connected.

Naturally, our test ought to have capacity to dismiss the pecking request under irregular financing since the coefficient on the square of the financing shortfall ought to be inconsequential as the span of the shortage in this setting is random to the decision of security the firm will issue. For the second elective we reenact information expecting that financing is created by a halfway change model of the structure:

DitDit −1+ ε , (3)  = λ k − Ait   Ait −1where λ is the speed of modification and k is the objective influence proportion.

The financing conduct produced by the incomplete change show is predictable with the tradeoff hypothesis, where firms issue securities so as to push toward some objective influence proportion. We, in this manner, pursue Shyam-Sunder and Myers (1999) and think about whether our test can dismiss the pecking request when a tradeoff display has produced the information. For every one of these elective financing courses of action (arbitrary or halfway change) firms are isolated into two gatherings, those with elevated amounts of obligation limit and those with low dimensions of obligation limit, in light of our experimental intermediary for obligation limit portrayed in Section 2.1. Inside each gathering, the recreations are aligned to yield financing conduct that coordinates the snapshots of real obligation issuance in the information for that gathering. The reenactment method is portrayed all the more totally in the reference section.

| | Dependent Variable is Simulated Net Debt Issued | | | |
|---|---|---|---|---|
| Variable | Low Debt Capacity | | High Debt Capacity | |
| Intercept | -0.009 | -0.013 | -0.010 | -0.010 |
| | (-16.71) | (-38.61) | (-40.43) | (-32.70) |
| Financing Deficit | 0.316 | 0.538 | 0.772 | 0.787 |
| | (31.03) | (37.57) | (73.66) | (84.95) |
| Squared Financing Deficit | --- | -0.226 | --- | -0.026 |
| | | (-12.61) | | (-1.20) |
| | | | | |
| N | 22,401 | 22,401 | 22,401 | 22,401 |
| R-Squared | 0.337 | 0.415 | 0.818 | 0.818 |
| | | | | |
| Panel B. Simulated Financing Behavior Under Random Financing | | | | |
| | Dependent Variable is Simulated Net Debt Issued | | | |
| Variable | Low Debt Capacity | | High Debt Capacity | |
| Intercept | 0.001 | 0.001 | 0.000 | 0.000 |
| | (2.33) | (1.96) | (-0.42) | (-0.95) |
| Financing Deficit | 0.298 | 0.342 | 0.760 | 0.732 |
| | (22.16) | (19.26) | (49.57) | (52.17) |
| Squared Financing Deficit | --- | -0.045 | --- | 0.050 |
| | | (-1.78) | | (1.46) |
| | | | | |
| N | 22,401 | 22,401 | 22,401 | 22,401 |
| R-Squared | 0.275 | 0.277 | 0.753 | 0.754 |
| | | | | |
| Panel C. Simulated Financing Behavior Under Partial Adjustment Model (λ = 0.3) | | | | |
| | Dependent Variable is Simulated Net Debt Issued | | | |
| Variable | Low Debt Capacity | | High Debt Capacity | |
| Intercept | 0.002 | 0.002 | -0.002 | -0.002 |
| | (2.71) | (2.51) | (-2.38) | (-2.10) |
| Financing Deficit | 0.057 | 0.070 | 0.071 | 0.090 |
| | (9.05) | (7.27) | (6.08) | (6.48) |
| Squared Financing Deficit | --- | -0.014 | --- | -0.035 |
| | | (-1.27) | | (-1.76) |
| | | | | |
| N | 22,401 | 22,401 | 22,401 | 22,401 |
| R-Squared | 0.011 | 0.012 | 0.006 | 0.006 |

Table 1 displays the aftereffects of our tests utilizing the reproduced information. We gauge conditions (1) and (2) to represent how our increased variant of the Shyam-Sunder and Myers test segregates among the elective theories for financing conduct. Board A presents the outcomes for the organizations thought to pursue the pecking request. We initially look at the execution of the first Shyam-Sunder and Myers test (condition (1)). The first and third segments in the table present the outcomes. Two highlights are significant.

To start with, regardless of the way that the information for the two arrangements of firms was produced by pecking request conduct, the model fits much better for those organizations with abnormal amounts of obligation limit. For this arrangement of firms, the R-squared of the relapse is 82% and the slant coefficient on the financing shortage is 0.77. The consequences of the reproduction intently coordinate the discoveries of Shyam-Sunder and Myers (1999). Second, additionally as anticipated, for the organizations with a tight obligation limit limitation the model in condition (1) fits much more awful. The R-squared is 34% and the slant coefficient is just 0.32. This outcome intently coordinates the discoveries for little firms exhibited in Frank and Goyal (2003).

Board B displays the aftereffects of evaluating condition (1) on the information created by arbitrary financing. Contrasting these outcomes with similar segments in Panel An outlines the evaluate of the Shyam-Sunder and Myers test raised by Chirinko and Singha (2000). Specifically, the coefficient assesses on the financing deficiency for the two gatherings of firms reflect those exhibited in Panel A. Notwithstanding when we independently analyze firms with high and low dimensions of obligation limit, assessing condition (1) alone has no capacity to recognize pecking request from irregular financing conduct. Board C exhibits the outcomes dependent on the reenacted information from the fractional change demonstrate. For the two gatherings of firms, the Shyam-Sunder and Myers test performs inadequately. The slant coefficients on the financing deficiency are near zero (in spite of the fact that they are factually noteworthy at the 1% level) and the R-squared of the relapses is little. The distinction in the aftereffects of assessing condition (1) on the mimicked information dependent on irregular financing and the fractional change demonstrate emerges from the way that under arbitrary financing, the financing shortfall is filled altogether with either obligation or value contingent upon the result of the coin flip, while under the halfway change show, the firm picks the blend of securities to issue that pushes the firm toward its objective obligation proportion. In view of these outcomes, it creates the impression that the essential Shyam-Sunder and Myers test can separate between the pecking request and financing produced under the tradeoff hypothesis, however can't segregate the pecking request from irregular financing behavior.2

The second and fourth sections in boards A, B, and C present the aftereffects of evaluating condition (2) utilizing the reproduced information. To begin with, the coefficient on the financing shortfall increments significantly ascending from 0.32 (segment 1) to 0.54(segment 2). This shows, as developed, littler shortages are bound to be filled utilizing obligation since financing a little shortfall with obligation is probably not going to disregard the company's obligation limit imperative. Second, the coefficient on the square of the shortfall is - 0.23 and is factually huge, demonstrating a sunken connection between net obligation issues and the financing deficiency. The concavity in this relationship emerges on the grounds that organizations confronting obligation limit requirements fill bigger deficiencies with issues of equity.3 When firms pursue arbitrary financing or a halfway change demonstrate, the expansion of the squared shortfall has little impact on the outcomes got utilizing the fundamental Shyam-Sunder and Myers particular in condition (1). Under neither one of the alternatives does the span of the financing shortage have an anticipated association with the decision of financing. For pecking request firms with elevated amounts of obligation limit (board A, segment 4) the expansion of the square of the financing shortfall has no effect.

The coefficient on the financing shortage does not change obviously and the coefficient on the square of the deficiency, while negative is monetarily little and isn't fundamentally not quite the same as zero. For firms with high obligation limits, both little and extensive shortages will in general be filled utilizing obligation issues. Similarly as with the low obligation limit firms, when firms pursue arbitrary financing or a halfway change demonstrate, the expansion of the squared financing deficiency has little impact on the outcomes. At last, note that the coefficient on the squared shortage can likewise segregate pecking request conduct from two other financing choices portrayed by Chirinko and Singha (2000). In the first place, if the financing progressive system is turned around, to such an extent that little financing deficiencies are filled utilizing value and substantial shortfalls are loaded up with obligation, at that point the connection between obligation issues and the financing shortage will be arched and the coefficient on the square of the financing shortage will be certain. Second, on the off chance that the firm dependably issues obligation and value in fixed extents, at that point the span of the deficiency does not influence financing and the coefficient on the square of the shortfall will be zero.

In synopsis, the recreations show the significance of controlling for the dimension of obligation limit in the Shyam-Sunder and Myers test and the value of including the square of the financing shortage as an extra informative variable in giving the test the ability to separate among contending speculations for steady financing choices.

## 2.1. Estimating Debt Capacity

As talked about over, our principle measure for obligation limit depends on the probability that a firm can get to open obligation markets. So as to quantify this probability we gauge a logit demonstrate in which the reliant variable is one if a firm has obligation rating in a specific year and zero generally. The estimation utilizes information from 1986-2001; the piece of our example period for which bond appraisals are accessible in Compustat. The firm attributes utilized in the logit relapse are firm size (log of all out resources), benefit (ROA), the part of all out resources that are unmistakable, the market to book proportion, influence, firm age (the regular log of the quantity of years since the firm originally showed up on Compustat), the standard deviation of stock returns, and, in one form, industry fakers for every 2-digit SIC code in the sample.8 All of the autonomous factors are slacked one period. Littler and more youthful firms are probably going to have a shorter reputation and be increasingly obscure from the point of view of moneylenders, proposing that they will be more averse to have security appraisals. Littler firms likewise face relatively higher fixed expenses of issuing securities in the open obligation markets (e.g., Altinkilic and Hansen (2000)). To the degree that relationship loan specialists are progressively proficient at ex post checking and rebuilding in case of misery (e.g., Cantillo and Wright (2000)), we expect that organizations that are probably going to confront greater expenses of budgetary trouble and mutilations to their speculation arrangement, for example, those with high instability, less substantial resources, and high market-to-book proportions, will be less inclined to have the capacity to acquire a security rating. At last, all else equivalent, progressively beneficial firms are better ready to make expected installments to debtholders thus can bolster more obligation, and firms with more obligation extraordinary have demonstrated their capacity to obtain.

| Variable | Dependent Variable is one if the firm has a bond rating in that year | |
|---|---|---|
| | Model (1) | Model (2) |
| Intercept | -10.048 | -10.234 |
| | (-30.91) | (-19.29) |
| Log (Assets) | 1.212 | 1.238 |
| | (25.49) | (24.75) |
| Return on Assets | 0.028 | 0.237 |
| | (0.07) | (0.57) |
| Property Plant & Equipment | -0.136 | -0.702 |
| | (-0.63)) | (-2.44) |
| Market-to-Book | -0.077 | -0.054 |
| | (-2.17) | (-1.57) |
| Leverage | 3.917 | 4.052 |
| | (13.66) | (14.96) |
| Log(Firm Age) | 0.363 | 0.391 |
| | (6.36) | (6.64) |
| Standard Deviation of | -4.944 | -5.619 |
| Stock Returns | (-2.43) | (-2.72) |
| Industry Indicators | No | Yes |
| | | |
| N | 37,342 | 37,342 |
| Pseudo R-Squared | 0.519 | 0.532 |

Table 2 shows the consequences of the logit relapses. Hearty t-measurements grouped by firm (Petersen (2008)) are accounted for in brackets underneath the relapse coefficients. Display (1) demonstrates that firm size, firm age, the standard deviation of stock returns, the market-to-book proportion, and influence have the normal signs and all are critical indicators of the probability that a firm has a security rating. In every year we structure terciles dependent on the anticipated likelihood of having a bond rating. The low tercile contains firm-years in the most reduced third of anticipated probabilities of having a bond rating dependent on their qualities, and the high tercile contains firms in the most noteworthy third of anticipated probabilities of having a bond rating. Table 3 presents outline measurements for subsamples of firms dependent on whether they have a low (base tercile) or a high (top tercile) likelihood of having the capacity to get to the open security advertise.

The most eminent contrasts between the subsamples are that, organizations with a high likelihood of having a bond rating have lower normal financing shortfalls, fund these deficiencies substantially more intensely with obligation financing, and by and large develop more gradually than firms with a low likelihood of having a security rating. The lower development rates and littler financing shortages for firms in the high anticipated security rating bunch implies that these organizations can back a bigger extent of their present financing shortfalls with obligation without fundamentally expanding their influence proportions (and in doing as such methodology their obligation limits considerably more gradually),

While firms in the low anticipated security rating gathering would encounter a critical change in their influence proportions by issuing obligation to subsidize their financing deficiencies. To delineate this solidly, we compute a variable marked anticipated influence change that estimates the adjustment in influence that would happen if firms financed their whole shortfall with obligation.

Table 3Synopsis measurements for subsamples of firms with and without bond appraisals detailed in Compustat. The underlying example comprises of 67,200 firm-year perceptions for 1971-2001. The example detailed in the table contains information for firms with the most minimal and most noteworthy anticipated probabilities of having a bond rating figured from model (1) from the log it relapses in Table 2. The financing shortfall and net obligation and value issues are characterized utilizing the stream of assets information on Compustat. Firm age is estimated in respect to the principal year the firm shows up on Compustat. The anticipated change in influence is the adjustment in the association's influence proportion throughout the year if the firm financed its whole financing shortfall with obligation.

| Variable | Low Predicted Bond Rating (N=22,401) | | | | High Predicted Bond Rating (N=22,401) | | | |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Dev. | 25th Pctile | 75th Pctile | Mean | Std. Dev. | 25th Pctile | 75th Pctile |
| Financing Deficit/Total Assets | 0.081 | 0.241 | -0.015 | 0.077 | 0.027 | 0.139 | -0.026 | 0.049 |
| Net Debt Issued/Total Assets | 0.026 | 0.134 | -0.015 | 0.019 | 0.021 | 0.122 | -0.021 | 0.042 |
| Net Equity Issued/Total Assets | 0.055 | 0.204 | 0.000 | 0.011 | 0.006 | 0.070 | -0.001 | 0.004 |
| Three Year Average Future Financing Deficit | 0.068 | 0.144 | -0.008 | 0.093 | 0.023 | 0.084 | -0.017 | 0.045 |
| Growth in Total Assets | 0.164 | 0.421 | -0.034 | 0.262 | 0.100 | 0.246 | -0.009 | 0.159 |
| Three Year Average Future Asset Growth | 0.159 | 0.246 | 0.019 | 0.249 | 0.100 | 0.153 | 0.017 | 0.156 |
| Firm Age (Years) | 8.740 | 6.423 | 4.000 | 12.000 | 21.655 | 12.171 | 11.000 | 30.000 |
| Total Assets | 20.566 | 21.040 | 8.350 | 26.058 | 2294.583 | 7194.108 | 257.450 | 1582.725 |
| Net Prop. Plant & Equip./Total Assets | 0.267 | 0.200 | 0.118 | 0.361 | 0.405 | 0.217 | 0.234 | 0.564 |
| Market-to-Book Ratio | 1.748 | 1.947 | 0.865 | 1.895 | 1.453 | 0.936 | 0.982 | 1.596 |
| Return on Assets | 0.073 | 0.237 | 0.016 | 0.192 | 0.137 | 0.126 | 0.097 | 0.183 |
| Annual Standard Deviation of Stock Returns | 0.733 | 0.468 | 0.449 | 0.880 | 0.434 | 0.245 | 0.281 | 0.511 |
| Long-Term Debt/Total Assets | 0.129 | 0.149 | 0.004 | 0.206 | 0.296 | 0.256 | 0.162 | 0.390 |
| Change in Leverage | 0.014 | 0.104 | -0.020 | 0.026 | -0.001 | 0.175 | -0.032 | 0.026 |
| Predicted Change in Leverage | 0.065 | 0.204 | -0.014 | 0.095 | 0.010 | 0.450 | -0.028 | 0.040 |

Table 3 demonstrates that, by and large, firms in the high anticipated rating gathering would see their influence proportions increment by 1.0% in the event that they pursued an exacting pecking request, while those in the while those in the low anticipated bond rating gathering would see a yearly increment in their influence proportions of 6.5% by and large. Conversely, the genuine normal influence changes for firms in these two gatherings are - 0.1% and 1.4%, separately.

## 3. Testing the Pecking Order with Debt Capacity

We currently present trial of the pecking request that unequivocally represent heterogeneity owing debtors limit utilizing our anticipated appraisals gatherings and the enlarged Shyam-Sunder and Myers relapse (condition 2). Under the pecking request, holding the span of the financing shortage steady, firms with less prohibitive obligation limit imperatives will, all things considered, utilize more obligation to fulfill their outer financing needs.

Holding obligation limit consistent, firms should utilize obligation to finance little shortfalls, yet will progressively swing to value when outside financing needs are huge.

Table 4 shows the consequences of these tests. The principal segment in the table introduces the aftereffects of the essential Shyam-Sunder and Myers trial of the pecking request on those organizations well on the way to be obliged by obligation limit contemplations (those in the low anticipated bond rating gathering). Obviously, the Shyam-Sunder and Myers test performs especially ineffectively for this arrangement of firms. The gauge of the incline coefficient on the financing shortfall is just 0.30 and the R-squared shows that the financing shortfall clarifies just 29% of the variety in net obligation issues.

The second segment in Table 4 thinks about similar firms however expands the Shyam-Sunder and Myers test by including the squared shortage as an extra free factor so as to consider contrasts in the conduct of firms confronting "little" and "substantial" financing deficiencies. The outcomes are steady with the expectations of the pecking request hypothesis within the sight of worries about obligation limit. The incline coefficient on the financing deficiency builds significantly to 0.53, showing that "little" shortfalls are financed by about half obligation and half value by and large. The coefficient gauge on the squared shortage is - 0.24, showing an a lot more noteworthy dependence on value financing when deficiencies are "vast". The R-squared of the relapse increments to 34%.

A fascinating differentiation to these outcomes is exhibited in the last two segments of Table 4, which analyzes the subsample of firms with the most astounding probability of having a bond rating. These segments demonstrate that for an expansive cross-segment (and quite a while arrangement) of firms that are anticipated not to confront obligation limit imperatives, the financing deficiency clarifies obligation issues great. In the fundamental Shyam-Sunder and Myers test, the incline coefficient is 0.76 and the R-squared is 75%.9 When the squared shortfall is incorporated, the slant coefficient on the deficiency increments to 0.79. The coefficient on the squared financing deficiency is fundamentally negative yet is little in extent (- 0.06), demonstrating that, for those organizations most drastically averse to be compelled by obligation limit, obligation is the essential security used to fill the financing shortfall, notwithstanding for "vast" shortages. The medium anticipated rating bunch displays conduct that lies between that of the low and high anticipated rating gatherings. Generally, the outcomes displayed in Table 4 show that the utilization of obligation and value crosswise over gatherings accommodates well with the expectations of the pecking request hypothesis 9In differentiation to Frank and Goyal (2003), we discover little proof that, for firms unconstrained by obligation limit, the pecking request performs more regrettable in the last 50% of the example time frame. For firms in the high anticipated rating gathering, the slant coefficient in the relapse is 0.79 in the pre-1986 period and 0.75 in the post-1986 period.in the wake of representing the impact of obligation limit. The more prohibitive is a company's obligation limit imperative the more noteworthy the company's watched reliance on outer value financing. Further, for a given dimension of obligation limit, the company's dependence on outer value financing increments with the extent of the financing deficiency. At long last, it is significant that the outcomes intently reflect those exhibited beforehand in Table 1 utilizing the reenacted financing information that accept firms pursue the pecking request in the nearness requirements forced by worries over obligation limit. To investigate the strength of these discoveries, Table 5 reports the outcomes from assessing condition (2) on subsamples that bar firm-years with negative financing deficiencies, firm-years with negative gainfulness, and firm-years with a high probability of budgetary pain. In the event that organizations with negative financing shortages will in general resign obligation, this could predisposition upward the coefficient on little financing deficiencies. The initial two segments in Table 5 demonstrate that barring firm-years with negative financing shortages has little impact on the outcomes contrasted with those detailed in Table 4.

**Table 4**

Pooled time-series cross-section regressions relapses of net obligation issued on the present financing deficiency and the squared estimation of the present financing shortfall. Net obligation issues and the financing shortfall are registered utilizing stream of assets information from Compustat. All factors are scaled by complete resources toward the finish of the earlier year. The example comprises of 67,203 firm-year perceptions from the period 1971-2001. Firms are arranged into subsamples dependent on the anticipated likelihood that the firm has a bond rating processed from model (1) from the logit relapses in Table 2. T-measurements dependent on hearty standard blunders balanced for non-independence inside firms are accounted for in brackets.

| | | Dependent Variable is Net Debt Issued | | | |
|---|---|---|---|---|---|---|
| Variable | | Low | | Medium | | High |
| Intercept | 0.002 | -0.002 | -0.002 | -0.002 | 0.000 | 0.001 |
| | (3.00) | (-3.85) | (-3.44) | (-3.17) | (0.92) | (1.48) |
| Financing Deficit | 0.297 | 0.527 | 0.620 | 0.674 | 0.755 | 0.787 |
| | (25.34) | (34.89) | (39.43) | (34.89) | (60.07) | (59.61) |
| Squared Financing Deficit | --- | -0.236 | | -0.076 | --- | -0.056 |
| | | (-12.61) | | (-2.24) | | (-2.15) |
| | | | | | | |
| N | 22,401 | 22,401 | 22,401 | 22,401 | 22,401 | 22,401 |
| R-Squared | 0.286 | 0.337 | 0.602 | 0.601 | 0.750 | 0.752 |

Unrewarding firms and firms presently confronting budgetary trouble will probably have bigger financing shortages since they have low dimensions of inward assets and these organizations will likewise be compelled to swing to value financing. To evaluate whether our outcomes are driven by unrewarding monetarily upset firms, we prohibit firm-years with negative profit for resources and firm a long time in the most elevated tercile of the probability of money related trouble as estimated by Altman's z-score. The outcomes are accounted for in the last four segments in Table 5

| | | | Dependent Variable is Net Debt Issued | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Excluding Negative Deficits | | Excluding Negative ROA | | | Excluding Financial Distress | | |
| Variable | Low | High | Low | High | | Low | High | |
| Intercept | 0.009 | 0.002 | 0.001 | 0.010 | | 0.001 | 0.006 | |
| | (6.47) | (1.25) | (2.72) | (2.10) | | (3.31) | (10.50) | |
| Financing Deficit | 0.469 | 0.776 | 0.588 | 0.783 | | 0.494 | 0.690 | |
| | (20.20) | (29.31) | (32.02) | (57.50) | | (29.09) | (30.77) | |
| Squared Financing Deficit | -0.197 | -0.044 | -0.255 | -0.022 | | -0.217 | 0.039 | |
| | (-8.18) | (-1.13) | (-9.76) | (0.90) | | (-10.62) | (0.85) | |
| | | | | | | | | |
| N | 11,918 | 22,343 | 17,675 | 21,731 | | 19,041 | 15,113 | |
| R-Squared | 0.215 | 0.714 | 0.388 | 0.761 | | 0.310 | 0.699 | |

Pooled time-series cross-section regressions relapses of net obligation issued on the present financing shortfall and the squared estimation of the present financing shortage. Net obligation issues and the financing deficiency are figured utilizing stream of assets information from Computation. All factors are scaled by absolute resources toward the finish of the earlier year. The example comprises of 67,203 firm-year perceptions from the period 1971-2001. Firms are arranged into sub samples dependent on the anticipated likelihood that the firm has a bond rating figured from model (1) from the legit relapses in Table 2. Results for the center tercile of revealed bond evaluations are not detailed. Firms in money related misery are characterized as those with estimations of Altman's Z-score beneath the 25th percentile.

In the two cases, the extra information prohibitions have little impact on the outcomes. At long last, we survey whether our outcomes are only a sign of contrasts in firm size. Almeida and Campello (2007) demonstrate that most huge firms have security appraisals while most little firms don't and it is conceivable that distinctions in firm size intermediary for financing imperatives that are random to obligation limit. To investigate this plausibility we first partition the example into little firms and vast firms dependent on the example middle estimation of all out resources in every year. At that point inside each firm size gathering, we rank firms into terciles dependent on the anticipated likelihood of having a bond rating. These sorts enable us to analyze the impacts of obligation limit on financing conduct while holding firm size consistent. The outcomes are accounted for in Table 6.

Table 6 Shyam Sunder-Myers relapses for firms characterized into sub-samples based firm size and likelihood of having a bond rating. Net obligation issues and the financing shortage is processed utilizing stream of assets information from Computation. All factors are scaled by absolute resources toward the finish of the earlier year. The example comprises of 67,203 firm-year perceptions from the period 1971-2001. Firms are arranged into two firm size gatherings dependent on the estimation of complete resources in every year. At that point inside each firm size gathering firms are arranged into three gatherings dependent on the anticipated likelihood of having a bond rating processed from model (1) from the log it relapses in Table 2. t-insights dependent on strong standard blunders balanced for non-independence inside firms are accounted for in brackets.

|  |  | Predicted Bond Ratings |  |
|---|---|---|---|
| Variable | Low | Medium | High |
| Intercept | -0.001 | -0.002 | -0.006 |
|  | (-1.78) | (-3.68) | (-6.69) |
| Financing Deficit | 0.477 | 0.580 | 0.687 |
|  | (23.45) | (25.38) | (33.11) |
| Squared Financing Deficit | -0.221 | -0.215 | -0.114 |
|  | (-9.91) | (-5.67) | (-2.76) |
|  |  |  |  |
| N | 11,203 | 11,203 | 11,204 |
| R-Squared | 0.288 | 0.410 | 0.586 |
|  |  |  |  |
| Panel B. Large firms |  |  |  |
|  |  | Predicted Bond Ratings |  |
| Variable | Low | Medium | High |
| Intercept | 0.002 | -0.001 | 0.002 |
|  | (2.99) | (-0.26) | (3.84) |
| Financing Deficit | 0.657 | 0.772 | 0.790 |
|  | (23.40) | (47.10) | (37.90) |
| Squared Financing Deficit | -0.040 | -0.068 | 0.014 |
|  | (-0.74) | (-1.82) | (0.52) |
|  |  |  |  |
| N | 11,197 | 11,198 | 11,198 |
| R-Squared | 0.627 | 0.732 | 0.796 |
|  |  |  |  |

Board a report the outcomes for little firms. As found in the table, the outcomes reflect those dependent on the full example. For little firms with a low probability of having a bond rating, the coefficient on the financing shortage is 0.48 and the coefficient on the squared financing shortfall is - 0.22. In correlation, for little firms with a high probability of having a bond rating, the coefficient on the financing shortage is 0.69 and the coefficient on the squared financing deficiency is - 0.047 and is simply measurably critical at the 10% dimension. The outcomes for huge firms are accounted for in Panel B. In huge firms with a low likelihood of having a bond rating, the coefficient on the financing shortfall is 0.66 and the coefficient on the squared financing deficiency is - 0.04, yet isn't factually critical. In substantial firms with a high probability of having a bond rating, the coefficient gauge on the financing shortage increments to 0.79 and the coefficient gauge on the squared financing shortage is 0.014, however isn't factually critical. By and large, the outcomes furnish extra proof that is steady with the anticipated impacts of obligation limit worries on financing conduct, even in the wake of controlling for the impacts of general financing limitations (as proxied by firm size). Besides, these discoveries additionally feature the significance of utilizing the anticipated likelihood of getting a bond rating as opposed to the genuine presence a rating to group firms confronting obligation limit requirements. Specifically, among little firms that have a high probability of having a bond rating dependent on the log it display in Table 2, just 2% really have bond evaluations. By and by, as appeared over these organizations depend substantially more vigorously on obligation financing contrasted with little firms that are more averse to have the capacity to issue open obligation, recommending that they approach generally ease obligation financing notwithstanding their little size and the way that they don't obtain in the open obligation markets.

Interestingly, to these outcomes, 71% of substantial firms with a high anticipated likelihood of approaching open obligation advertises really have a bond rating.10

Table 7 the anticipated rating bunches are framed dependent on the anticipated likelihood of the firm having a bond rating from model (1) in Table 3. The financing shortfall and net obligation and value issues registered utilizing stream of assets information from Computation. The financing factors are scaled by all out resources toward the finish of the earlier year. Backers are characterized as those firm-years where net value issues surpass 5% of the association's absolute resources toward the finish of the past period. Abundance influence is the contrast between the association's influence proportion and the anticipated estimation of influence from a cross-sectional relapse (in view of all organizations in the example in that year) of influence on log absolute resources, the proportion of property plant and gear to add up to resources, advertise to-book, return on resources, the anticipated likelihood that a firm has bond rating from model (1) in Table 2, and pointer factors for every two-digit SIC code in the sample. The beginning example comprises of 67,200 firm-year perceptions from the period 1971-2001.

| Predicted Rating Group | | | Medium | | High | |
|---|---|---|---|---|---|---|
| Variable | Non-issuers | Issuers | Non-issuers | Issuers | Non-issuers | Issuers |
| Financing Deficit/Total Assets | 0.022 | 0.429 | 0.020 | 0.295 | 0.014 | 0.204 |
| Net Debt Issued/Total Assets | 0.025 | 0.031 | 0.024 | 0.031 | 0.020 | 0.036 |
| Net Equity Issued/Total Assets | -0.003 | 0.397 | -0.004 | 0.265 | -0.006 | 0.168 |
| Lagged Leverage | 0.112 | 0.134 | 0.202 | 0.246 | 0.290 | 0.378 |
| Excess Leverage | -0.080 | -0.060 | 0.025 | 0.077 | 0.022 | 0.104 |
| Change in Leverage | 0.017 | -0.003 | 0.008 | -0.035 | 0.004 | -0.051 |
| Predicted Change in Leverage | 0.027 | 0.290 | 0.015 | 0.166 | 0.005 | 0.074 |
| Growth in Assets | 0.106 | 0.498 | 0.100 | 0.443 | 0.083 | 0.332 |
| Lagged Total Assets | 17.405 | 16.765 | 82.948 | 85.338 | 2190.405 | 1270.262 |
| Lagged Return on Assets | 0.107 | -0.024 | 0.138 | 0.101 | 0.143 | 0.114 |
| Lagged Market to Book | 1.580 | 3.372 | 1.404 | 2.285 | 1.448 | 1.729 |
| Lagged Property Plant & Equipment | 0.261 | 0.262 | 0.320 | 0.325 | 0.404 | 0.434 |
| Age | 9.168 | 6.260 | 13.864 | 9.809 | 22.042 | 16.570 |
| Annual Standard Deviation of Stock Returns | 0.712 | 0.840 | 0.544 | 0.631 | 0.427 | 0.497 |

## 4. Hilter kilter Information, Debt Capacity, and Financing Choice

The pecking request (Myers (1984)) is inferred dependent on the suspicion that expenses of topsy-turvy data drive firms' financing decisions. In light of this, Frank and Goyal (2003) and Fama and French (2002) contend that organizations with increasingly hilter kilter data ought to pursue the pecking request all the more perseveringly. These examinations refer to the finding that little, high-development firms are the overwhelming guarantors of value and the proof that the Shyam-Sunder and Myers test performs inadequately on an example of little, high-development firms and well on an example of extensive, develop firms as conflicting with the pecking request. Their decisions depend on the perception that the previous gathering of firms should confront bigger issues of hilter kilter data than the last mentioned.

Table 8 Relapse investigation of market response to value issue declarations. The reliant variable in the regression is either the three-day total anomalous returns around value issue declarations or the dollar misfortune to existing investors scaled by continues of the advertising. Free factors incorporate a pointer for firms in the low anticipated security rating bunch characterized dependent on the likelihood of having a security rating from model (1) in Table 3, the regular log of the issue continues, advertise to-book, influence, the portion of optional offers in the issue, and markers for every year.

Strange returns are assessed over the three-day time frame {-1,1} encompassing the issue declaration dependent on residuals from a market display evaluated over the period starting 220 days and consummation 21 days before the declaration. Value issue declarations originate from the Securities Data Corporation New Issues Database and spread the years 1980-2001. Extensive backers are named those where the returns from the issue are more prominent than 5% of complete book resources estimated toward the year's end before the issue. The underlying example comprises of 67,200 firm-year perceptions from the period 1971-2001.T-measurements dependent on strong standard mistakes are accounted for in brackets.

|  | All Issuers | Large Issuers Only | All Issuers | Large Issuers Only |
|---|---|---|---|---|
|  | CAR {-1, +1} | CAR {-1, +1} | Dollar Loss | Dollar Loss |
| Intercept | -0.044 | -0.032 | -0.177 | -0.074 |
|  | (3.81) | (-0.91) | (-2.68) | (-0.43) |
| Low Predicted Rating Group | 0.009 | 0.012 | 0.085 | 0.085 |
|  | (2.52) | (2.99) | (4.31) | (4.21) |
| Log(Proceeds) | 0.003 | 0.005 | 0.002 | 0.008 |
|  | (1.96) | (2.92) | (0.31) | (0.97) |
| Market-to-Book Ratio | -0.002 | -0.002 | -0.013 | -0.009 |
|  | (-2.66) | (-1.80) | (-2.84) | (-1.82) |
| Leverage | 0.005 | 0.002 | 0.053 | 0.051 |
|  | (0.68) | (0.29) | (1.37) | (1.28) |
| Fraction Secondary Shares | -0.005 | -0.015 | -0.043 | -0.046 |
|  | (-1.51) | (-2.80) | (-2.16) | (-1.67) |
| Year Dummies | Yes | Yes | Yes | Yes |
|  |  |  |  |  |
| N | 2,275 | 1,932 | 2,126 | 1,840 |
| R-Squared | 0.014 | 0.018 | 0.024 | 0.020 |

While this instinct is engaging, note that the hypothetical premise of the Myers and Majluf (1984) contention, the establishment of the pecking request, is the riches misfortune to existing investors from new value issues. This misfortune is gotten from an examination of the expense because of uneven data concerning the benefits set up versus the normal estimation of the association's development choices in respect to the estimation of the association's advantages set up. While little, high-development firms can sensibly be required to have more prominent measures of unbalanced data concerning their advantages set up than do extensive, develop firms, they can likewise sensibly be relied upon to have development alternatives that are progressively significant in respect to the estimation of benefits set up. In the event that the development alternatives of little firms are fundamentally progressively significant (in respect to resources set up) contrasted with those of extensive firms, at that point little firms, as per the Myers and Majluf (1984) display, may really confront lower unfriendly determination costs related with a value I

**Conclusions**

We demonstrate the importance of controlling for debt capacity when testing the pecking order theory. When we control for heterogeneity in debt capacity across firms we find that the pecking order theory is a good descriptor of the observed financing behavior of a broad cross-section of firms and provide a reconciliation of apparently conflicting findings in the literature that question the ability of the pecking order to describe the financing behavior of firms. Furthermore, we present evidence based on differences in firm characteristics and from market reactions to equity issues that reconcile the observed patterns of equity issuance across large, mature versus small, high-growth firms with the pecking order. The demonstrated preference ofsmall, high-growth firms for equity finance is explained by their growth levels and restrictive debt capacity constraints. An issue left to future research is the interaction between the growth in assets, profitability, and financing. We have implicitly assumed that asset growth and profitability are exogenous to the financing decision in this analysis. Theoretically, with perfect markets, this would be correct. Once one assumes a role for capital structure, however, we are necessarily removed from the Modigliani and Miller world, and it would be interesting and important to explore the link between a firm's financing and capital budgeting decisions.

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