The Cyclical Behavior of Debt and Equity Finance

Web Appendix

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Abstract

This appendix gives details regarding the construction of the data set and discusses the results of numerous robustness exercises.

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A Data Sources

Compustat. Our data are taken from Compustat and consists of annual data from 1971 to 2006. In the main text, we only report results based on data starting in 1980, but in Appendices B and C we show that the results are robust to including the earlier part of the data set. Compustat includes firms listed on the three US exchanges, NYSE, AMEX, and Nasdaq, with a non-foreign incorporation code. We exclude financial firms (SIC codes 6000-6999), utilities (SIC codes 4900-4949), and firms involved in major mergers (Compustat footnote code AB) from the whole sample.[1] We also exclude firms with a missing value for the book value of assets, and firm-years that violate the accounting identity by more than 10 per cent of the book value of assets. Finally, we eliminate the firms most affected by the accounting change in 1988, namely GM, GE, Ford, and Chrysler.[2] The firms included form an important part of the US economy, not only in firm assets, but also in terms of employment. We have employment numbers for 94 per cent of our firms; total employment for these firms is equal to 35 million, which is roughly one quarter of total US employment.

Assets, A, is the book value of assets (Compustat data item #6). Change in the book value of equity, ΔE, equals the change in stockholders' equity (item #216). This series excludes accumulated retained earnings. Sale of stock, ΔS, equals the sale of common and preferred stock (item #108), and net sale of stock is sale of stock minus purchase of common and preferred stock (item #115). ΔL is the net change in the book value of total liabilities (item #181) between period t and $t-1$. ΔD equals issuance of long-term debt (item #111) and net issuance of long-term debt equals issuance of long-term debt minus reduction of long-term debt (item #114). Total debt equals long-term debt (item #9) plus debt in current liabilities (item #34). Investment, I, equals capital expenditures in property, plant and equipment (item #30). Employment, N, equals employees (item

[1] Compustat assigns a footnote AB to total sales if sales increase by more than 50 percent in response to a merger or an asset acquisition. If the firm has been involved in a merger or acquired assets, but total sales did not increase by more than 50 percent, than this firm is still included in our sample.

[2] See Bernanke, Campbell, and Whited (1990) for details.

#29). Inventories, IVT, is Compustat data item #3. The profit variable is equal to income before extraordinary items (item #18), the cash flow variable, CF, is equal to the profit variable plus depreciation and amortization (item #14), the retained earnings variable, ΔRE, is the change in the balance-sheet item for accumulated retained earnings (item #36), and dividends are defined as dividends per share by ex-date (item #26) multiplied by the number of common shares outstanding (item #25). Tobin's Q equals the sum of common shares outstanding multiplied by the stock price at the close of the firm's fiscal year (199), liquidating value of preferred stock (item #10) plus dividends on preferred stock (item #19), and liabilities normalized by total assets.

For firms with a fiscal year ending in the beginning of the year, i.e., in the months January through May, we shift the observation to align it better with the observation for the macroeconomic variables. A year t observation for a firm with a fiscal year ending in May corresponds to the period from June of year $t-1$ to May of year t. This observation enters our sample in year $t-1$. The same change in date is used for firms with a fiscal year ending in the months January through April.

Output and deflator. The PPI is the producer price index for industrial commodities from the Bureau of Labor Statistics. Real GDP is real gross domestic product of the corporate sector, chained 2000 billions of dollars, from the Bureau of Economic Analysis.

B Additional results for correlation coefficients

In this Appendix, we document that the results reported in the main text are robust to numerous changes. First we graphically document the correlations when cumulative instead of non-overlapping firm groups are used. Next we look at the results when (i) an alternative scaling's variable is used, (ii) a longer sample is used, (iii) total instead of corporate GDP is used, (iv) the firm groups are constructed using actual percentiles instead of acyclical boundaries, and (v) firm group investment is used instead of GDP as the measure of real activity. We also report results for some additional debt measures and results for the comovement between debt and equity.

Figures for cumulative firm groups. Figures B1 and B2 plot the cyclical components of net debt and net equity issuance, respectively, when cumulative firm groups are used.[3] First consider Figure B1 that plots the results for net debt issuance. Comparing the cyclical component of debt issuance for the [0,25%] firm group with the one for the [0,90%] firm group, then we see few differences except that the cyclical component for the [0,90%] group lags the cyclical component of the [0.25%] group a bit. Going from the [0,90%] group to the full sample, there is a further gradual shift, but by now the shifts have changed the series so much that the cyclicality of debt issuance series of the full sample differs in some key aspects with the cyclicality of the other groups. This is especially true relative to the [0,25%] group, but even relative to the [0,90%] group. In particular, note that the cyclical component of net debt issuance for the full sample *increases* during the recession of the eighties, whereas the cyclical component decreases for the other four firm groups including the [0,90%] group. Another striking difference is that the cyclical component of aggregate net debt issuance displays only a minor reduction during the other two recessions in the sample; aggregate debt issuance only displays a sizeable decrease when the recession has ended. For the firm groups that exclude the largest firms, however, we find a sizeable reduction in debt issuance during all recessions.

How does the size dependence documented in the Figure show up in the actual correlation coefficients? The contemporaneous correlation between cyclical net debt issuance and cyclical GDP is still significantly positive for the full sample, namely 0.46.[4] Just excluding the top 5%, however, increases this correlation to 0.69. Moreover, the correlation between net debt issuance and *next period's* GDP is negative (but insignificant) for the full sample and significantly positive for the [0,95%] frim group. In particular, just excluding the top 1% increases this correlation from -0.07 to 0.18.

Now consider Figure B2 that plots the results for net equity issuance. Starting with the [0,25%] firm group we see that the cyclicality of equity issuance decreases as larger firms are added to the sample. As in Figure B1 for net debt issuance, there are some interesting changes when the top decile is added to the [0,90%] group. Whereas equity

[3] The sample includes newly listed firms.

[4] The numbers discussed in this paragraph are from Table 2 in the main text.

issuance is relatively flat throughout the first half of the eighties for the [0,90%] firm group, the cyclical component of equity issuance of the full sample actually *increases* during the recession of the early eighties and continues to rise after the recession even though the cyclical component of GDP remains low. Whereas the cyclical component of equity issuance of the [0,90%] firm group reaches a minimum during the recession of the early nineties and remains at that level after the recession when the cyclical component of GDP further declines, equity issuance of the full sample actually starts a recovery during the recession.

As documented in the main text, the actual correlation coefficients are also different. Whereas the contemporaneous correlation coefficient between net equity issuance and GDP is small and insignificant for the full sample, namely 0.17, this correlation coefficient increases to a significant 0.35 when just the top 1% is excluded from the sample.[5]

Alternative debt measures. In Table 1, we report the results for the cyclical behavior of debt when newly listed firms are excluded from the sample. The table documents that the results are virtually identical to the results reported in the main text which are based on the sample in which newly listed firms are included. In Table 2, we report results for net and gross long-term debt. Although this is an important debt measure, we report the results in the Appendix instead of the main text because of space constraints and because the results are so similar to those of the broader debt measures that are discussed in the main text. The table makes clear that these two debt measures are strongly procyclical for all firm groups except possibly the top 1%, which is identical to the set of results for total debt and total liabilities.

Alternative scaling. Tables 3 and 4 report the results when the variables are scaled by a trend value of assets instead of lagged capital. The trend value of assets is calculated by fitting a third-order polynomial to the logarithm of total assets.

Table 3 reports the results for equity and corresponds to Table 4 in the main text and Table 4 reports the results for debt and corresponds to Table 1 in this Appendix. The

[5] See Table 2 in the main text.

results are virtually identical.

Debt and equity issuance in the longer sample period. Next, we report the results when we also include the seventies.[6] Tables 5 through 8 report the results for equity and Tables 9 through 12 for debt. The tables report the results for both the level and the flow approach and when recently listed firms are and are not included in the analysis.

Equity issuance is perhaps slightly less procyclical when the seventies are included, but the overall pattern is very similar to the results reported in the main text, which are based on the sample that starts in 1980. The results for debt are even more similar than those for equity. The remainder of this section uses these results that include the seventies as the benchmark.

Other variables in the longer sample period. Although the results for debt and equity issuance are not affected when the seventies are included, this is not true for all variables. In particular, the cyclicality of profits and retained earnings has changed, especially for firms in the bottom two quartiles. Table 13 documents the cyclicality for retained earnings, profits, and dividends when the seventies are included.

First focus on profits. As shown in Table 6 in the main text, the contemporaneous correlation between profits and gdp is significantly positive for all firm groups except the two groups in the bottom 50%. For those there is even evidence of countercyclicality. When the seventies are included, then the two contemporaneous correlation coefficients for the bottom two quartiles turn positive, but are insignificant. In Figure B3, we plot the cyclical component of profits for firms in the bottom quartile together with the cyclical component of an aggregate profit measure from the BEA and the cyclical component of GDP.[7] The figure makes very clear that profits, including those of small firms, are very cyclical during the seventies. The figure also makes clear that the second half of the nineties is important in explaining the different correlation coefficient for firms in the bottom quartile. During

[6] Here and in the remainder of this section, we scale the variables with the trend value of assets.

[7] We use an aggregate profit measure from the BEA to make clear that the different behavior of profits during the second half the nineties is not only found in Compustat profit measures.

this period the cyclical component of GDP increased, but the cyclical component of profits in the bottom quartile did not. Interestingly, the cyclical component of aggregate profits also did not increase during this economic expansion. The cyclical component of aggregate profits did decrease together with GDP during the subsequent economic downturn. In contrast, profits for firms in the bottom quartile started to decline earlier, namely when GDP was still high, and in fact this cyclical downturn at the end of the nineties is the largest observed downturn for profits of firms in the bottom quartile.

For firms in the bottom quartile, the same type of pattern is observed for retained earnings and dividends. Moreover, the contemporaneous correlation between investment and GDP drops from a significantly positive value of 0.54 when the seventies are included to an insignificant value of 0.24 when they are not.

Results when total instead of corporate GDP is used. Tables 15 through 18 report the results when we replace corporate GDP by total GDP. Robustness of the results for equity using the level and the flow approach can be assessed by comparing Tables 6 and 8 with Tables 15 and 16. We see that the results are very similar for the sale of stock and the net change in equity measure, but slightly different for the net change in equity minus dividends measure and the (problematic) net sale of stock measure. Consider the net change in equity minus dividends measure and the level approach. Looking at the correlation with current and next period's GDP, we find that seven of the eight coefficients for firms in the bottom 90% are significant when corporate GDP is used. When total GDP is used instead, then we find that four of these eight coefficients and one of the four coefficients for current GDP is significant. All eight coefficients remain positive. So although the significance levels drop somewhat when a broader real activity measure is used, the overall picture does not change.

A comparison between Tables 10 and 12 with Tables 17 and 18 makes clear that the results are very robust for debt issuance.

Results when actual percentiles are used. The results in the main text are based on an *acyclical* definition of firm groups. That is, we determine in each period and for each

group the lower and upper bound for the value of firm assets that define the group. Next, we fit a deterministic trend through these lower and upper bounds. When these trend values are used to define firm groups, then the fraction of firms in say the second quartile is not exactly 25% anymore. But the variations are small. For the complete sample, i.e., including the seventies, we find that the group with the largest changes is the bottom "quartile" for which the fractions vary between 22% and 29%.

Comparing Tables 6, 8, 10, and 12, which use acyclical firm group boundaries, with Tables 19, 20, 21, and 22, which use the true percentiles to define firm groups, we see that the results for both equity and debt are very similar.

Results when firm group investment is used. Tables 23 and 24 document the cyclical behavior of equity issuance when the cyclical component of group investment is used instead of the cyclical component of corporate GDP. Tables 25 and 26 are the corresponding tables for debt issuance. By using group investment, we obtain a measure for real activity that is more closely related to the specific group. This turns out to be especially insightful for firms in the top 1% and for the aggregate. When we use HP-filtered corporate GDP as the business cycle indicator, then we find that equity issuance for the top 1% is countercyclical and for the aggregate that the results are very mixed. When we use group investments, however, then we find for the top 1% that equity issuance is *procyclical* for all four measures and for both the level and the flow approach and significantly so in six of the eight cases.[8]

Using the level approach, we find that all correlation coefficients for the aggregate equity issuance series are significantly positive, except the one based on the problematic net sale of stock measure.

Using group investment also strengthens the conclusion of procyclical debt issuance. In particular, the contemporaneous correlation coefficients are now significantly positive for all firm groups including the top 1%.

[8] There are some negative correlation coefficients for other firm groups of large firms.

Comovement between debt and equity. In Tables 27 and 28, we document the comovement between the cyclical components of debt and equity issuance using the level and the flow approach, respectively. The following observations can be made. The correlation for the top 1% is always positive and of the eight contemporaneous correlation coefficients, only 1 is insignificant. Although the top 1% resembles the smaller firms in this respect, there remain differences between the smaller and the larger firms. When we consider the 24 contemporaneous correlation coefficients for the three firm groups in the bottom 75%, then we find that 19 coefficients are significantly positive, three are positive and insignificant, and two are negative and insignificant. But for the firm groups with larger firms we do find some negative coefficients that are significant.

C Additional panel regressions

In this section, we document that the results for the panel regressions presented in the main text are robust to several modifications. We consider the results when (*i*) we use capital instead of assets to scale firm level variables, (*ii*) we use a longer sample, (*iii*) we do not winsorize the data, (*iv*) we allow for a firm specific trend, and (*v*) when recently listed firms are included in the sample. We also report the results when a fixed time effect is included instead of the business cycle indicator.

Scaling by capital. In the main text, we use firm assets to scale firm variables, which makes it easier to interpret the magnitudes of the estimated coefficients. Table 29 reports the results when the firm variables are scaled by capital instead of assets. It shows that the same pattern of results is found for this alternative choice of the scaling factor.

Longer sample period. Table 30 reports the results for the panel regressions when all available time periods are included, that is, when the sample starts in 1971. Adding these nine years of data changes the results very little, not only qualitatively but often also quantitatively. There is one interesting change. In the regression for retained earnings, the coefficient of cyclical output for firms in the first quartile becomes less negative when

the seventies are included. This corresponds with the results for the cyclical behavior of retained earnings characterized by the correlation of HP-filtered group aggregates discussed in the previous section.

Although the changes are not always substantial, it is interesting to note that the coefficients of cyclical output in the regression equation decrease for all firm groups when the seventies are included in the sample. For example, for firms in the bottom (second) quartile the effect of the highest observed change in Y^c on equity issuance decreases from 4.0 (3.9) percent of assets to 2.7 (2.6) when the seventies are added to the analysis. That is, equity issuance has become more cyclical over time, especially for firms in the bottom two quartiles. In contrast, for the bottom (second) quartile the effect on debt issuance *increases*, namely from 5.4 (7.1) to 8.7 (7.6).

No winsorizing. In our benchmark approach, we winsorize all variables at the bottom and top 1% of their distributions. A comparison of Tables 30 and 31 makes clear that the results are very similar when the data are and when they are not winsorized, except that the significance levels drop.[9] The magnitude of some coefficients changes. In particular, for smaller companies we find that the effects of the business cycle indicator on equity issuance, debt issuance, and asset growth are larger when we do not winsorize than when we do. Winsorizing has only a small effect on the coefficients for the larger firms so that the size dependence also increases when the data are not winsorized.

Firm specific trend. To check robustness of the results to the possible presence of firm specific trends, we estimate the panel regressions in first differences, but still include firm specific fixed effects. The results are reported in Table 32. The results are very similar to those reported in Table 30, which is based on regressions estimated in levels, only the significance levels are lower. One difference is that according to these alternative regressions the size dependence of the effect of the business cycle on investment increases. Another difference is that the coefficient of cash flows on retained earnings has changed

[9] All results in the remainder of this section are based on the sample that includes the seventies. That is, we take the results in Table 30 as the benchmark results.

sign and is now negative. This could happen if the first-difference specification picks up some mean reversion that occurs at higher frequencies. The lower effect of cash flows on asset growth is also lower for this regression specification. In fact, for firms in the first two quartiles the effect of cash flows on asset growth becomes negative. The benchmark results also indicate that the effect of cash flows on asset growth is smaller for smaller firms, but the effect is always positive. Note that the effect of cash flows on investments remains positive and significant.

Results when also recently listed firms are included. Table 33 displays the results when recently listed firms are included. Overall the results are quite similar, but there are some important exceptions. First, similar to the results for the correlation coefficients, evidence for procyclical equity issuance becomes stronger if recently listed firms are also included. When we look at the effect of Y^c on the change in equity, then we see that including recently listed firms not only leads to much higher significance levels, but also to higher coefficients. For example, when recently listed firms are not included then we find that an increase of Y^c from its lowest to its highest observed value increases equity issuance with 2.7 percentage points. When new firms are included this coefficient is equal to 10.7, substantially higher. Second, when recently listed firms are included then retained earnings are countercyclical for each of the two firm groups in the bottom 50%. Again this is similar to the results with correlation coefficients and is due to a large drop in profits in the second half of the nineties.

Fixed time effect. Finally, we show that the results for the coefficients of cash flows and Tobin's Q are robust to using fixed time effects instead of the cyclical indicator. Figure C1 displays the coefficients for the five regressions for both specifications.[10] Although there are some differences for firms in the top 10%, the results are remarkably robust.

[10] These coefficients are from the specification when lagged capital is used as the scaling variable, but the same results are obtained when assets are used as the scaling variable.

D Comparison of alternative aggregate data

Figure D1 documents the relevance of the statement of Baker and Wurgler (2002) that merger activity drive aggregate equity issuance. It plots two series over the sample for which we have merger data, that is, from 1984 to 2005. The net equity issuance series from the flow of funds is plotted using a solid line and the part of this series that is due to retirements of equity of the target firms in takeovers is plotted using a dotted line. The picture makes clear that in many periods the magnitude of retirements due to merger activity is the dominating factor in equity issuance.

Figure D2 compares the net change in equity and the net sale of stock series from Compustat with the flow of funds data. To make the series as comparable as possible, we construct the Compustat series for the aggregate change in equity exactly as described in Appendix A, but (*i*) do not exclude firms involved in a major merger and (*ii*) do not exclude the firms involved in the 1988 accounting change. We measure the net change of equity by firms that existed in period $t-1$ and still exist in period t, that is equity issuance by continuing firms. Therefore, to make our series comparable to the flow of funds series, we add retirements due to mergers to the flow of funds data. There remain some other differences that we cannot correct for. In particular, the flow of funds data include closely-held firms, that is, private companies that are part of the corporate sector. Although some of these firms are quite large, e.g. Cargill and Mars, we do not think this can explain the differences documented below. Another difference is that the flow of funds series do not include particular types of equity issuance, such as new equity shares that arise in the conversion of convertible debt into equity and equity share grants that are part of employee compensation packages. Those are included in the Compustat series.

The solid line plots the Compustat net change in equity (excluding retained earnings); the dotted line plots the Compustat net sale of stock measure; and the dashed line plots the flow of funds net equity issuance series with retirements added back in. The Compustat net sale of stock measure is clearly different from the other two measures and does not even capture the enormous increase in aggregate equity issuance (excluding retirements) and subsequent downturn that the other two series display in the last ten years of the

sample.

It is interesting to note that there are substantial differences between our Compustat and the flow of funds series as well. Although they follow a similar pattern, there are differences that are quantitatively quite large.

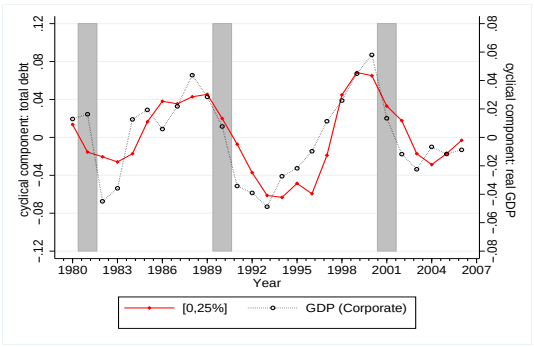
The Compustat net change in equity and the flow of funds series are remarkably similar up to 1999. After that there are substantial differences between these two series. It would be an interesting question to investigate this further and to determine which fraction of the difference between the two series is due to not including the conversion of convertible debt, equity issues to compensate employees and managers, and possibly the reissues of shares to finance takeovers.

References

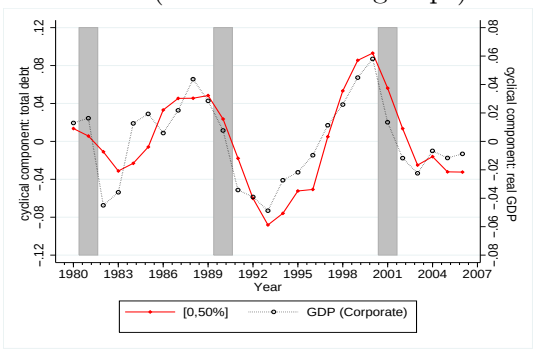
Baker, M., and J. Wurgler (2002): "Market Timing and Capital Structure," *Journal of Finance*, 57, 1–32.

Bernanke, B., J. Campbell, and T. Whited (1990): "U.S. Corporate Leverage: Developments in 1987 and 1988," *Brookings Papers on Economic Activity*, 1, 255–86.

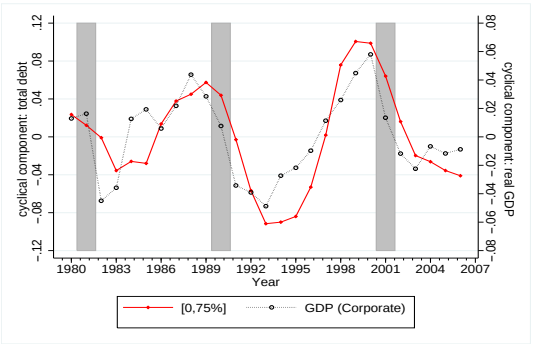
Figure B1: Cyclical behavior of net total debt issuance (cumulative firm groups)



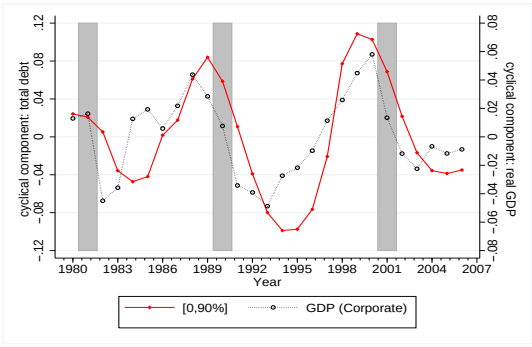
(a) 0 to 25-th percentile



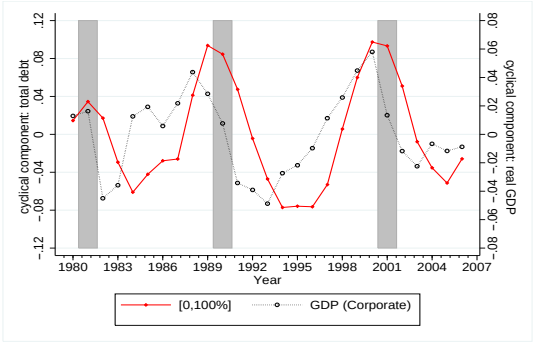
(b) 0 to 50-th percentile



(c) 0 to 75-th percentile



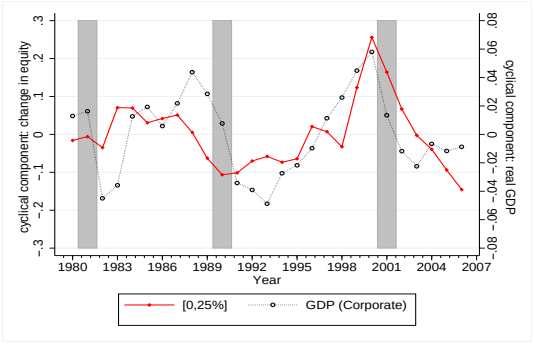
(d) 0 to 90-th percentile



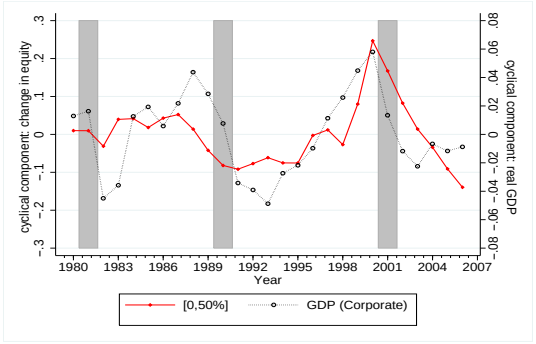
(e) full sample

Notes: All series are logged and HP filtered. The shaded areas are NBER recessions. Results are based on the level approach.

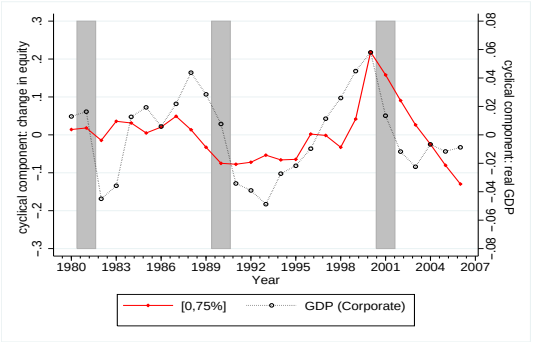
Figure B2: Cyclical behavior of net equity issuance (cumulative firm groups)



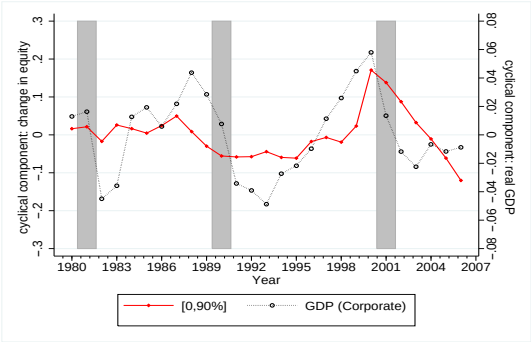
(f) 0 to 25-th percentile



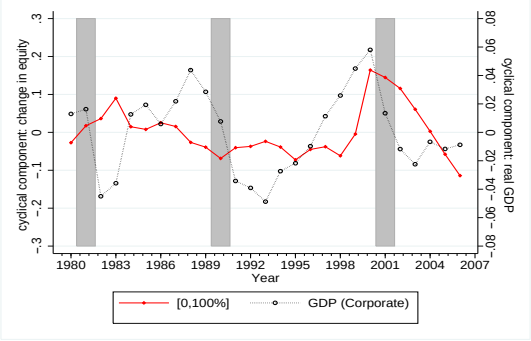
(g) 0 to 50-th percentile



(h) 0 to 75-th percentile



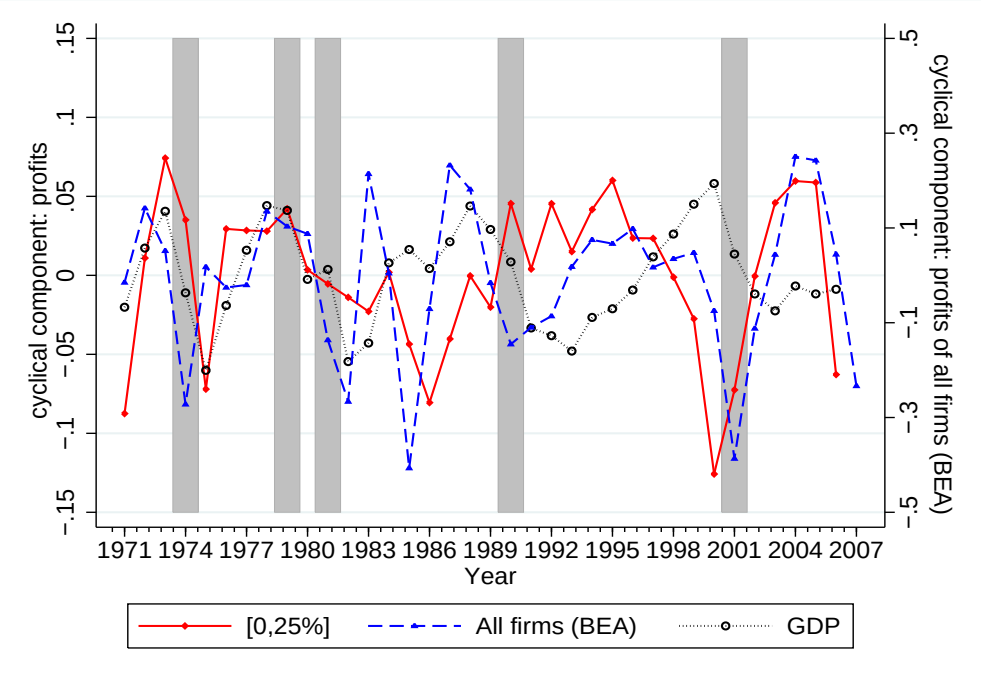
(i) 0 to 90-th percentile



(j) full sample

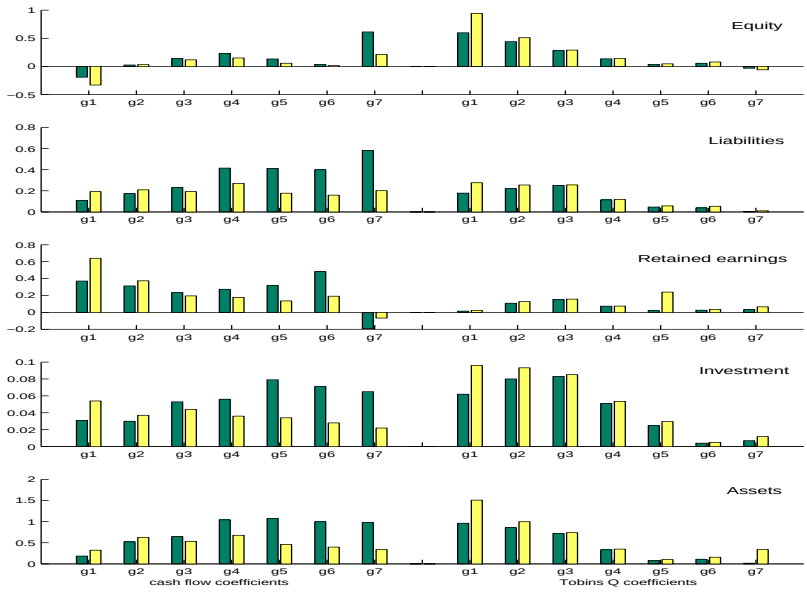
Notes: All series are logged and HP filtered. The shaded areas are NBER recessions. Results are based on the level approach.

Figure B3: Cyclical behavior of profits for different size classes



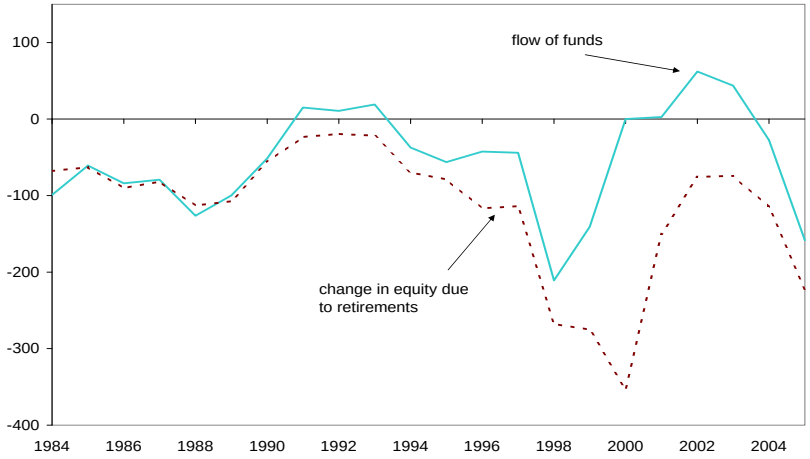
Notes: All series are logged and HP filtered. The shaded areas are NBER dates for recessions.

Figure C1: Time fixed effect versus cyclical indicator



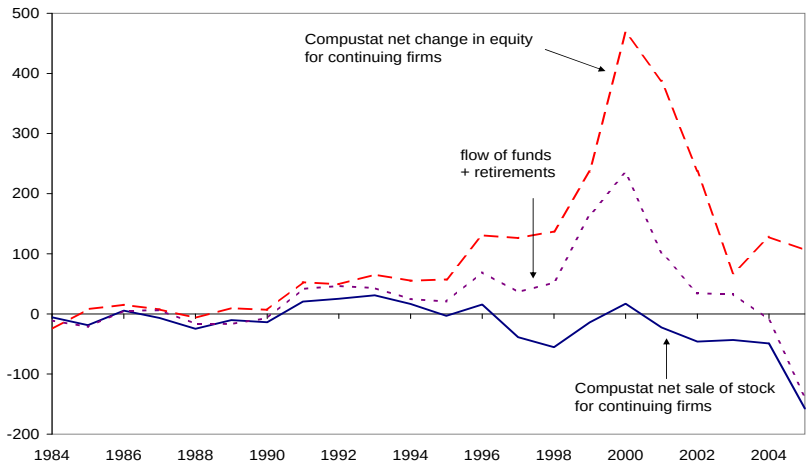
Notes: This graph plots the estimated coefficients when a business cycle indicator is used (dark bars) and when a time fixed effect is included instead (light bars). The labels of the x-axis correspond to the groups as follows: g1-[0,25%], g2-[25,50%], g3-[50,75%], g4-[75,90%], g5-[90,95%], g6-[95,99%], g7-[99,100%]

Figure D1: Flow of funds net equity issuance and retirements due to mergers



Notes: This graph plots the published net equity issuance series from the flow of funds together with that part of this series that is due to the retirements of equity of target firms in takeovers or mergers.

Figure D2: Comparison of alternative aggregate equity issuance series



Notes: This graph plots net equity issuance and net sale of stock for continuing firms constructed using Compustat together with net equity issuance plus retirements due to mergers from the flow of funds.

Table 1: Cyclical behavior of debt issuance - *new firms excluded*

Size classes	Level approach						Flow approach					
	Δ in total debt and			**Δ in liabilities and**			**Δ in total debt and**			**Δ in liabilities and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
[0, 25%]	**0.84**	**0.77**	**0.54**	**0.87**	**0.83**	**0.51**	0.07	**0.36**	**0.59**	-0.01	**0.47**	**0.64**
[25%, 50%]	**0.91**	**0.82**	**0.45**	**0.87**	**0.80**	**0.41**	0.15	**0.68**	**0.78**	0.11	**0.64**	**0.64**
[50%, 75%]	**0.89**	**0.75**	**0.43**	**0.86**	**0.83**	**0.53**	0.28	**0.58**	**0.71**	0.09	**0.57**	**0.75**
[75%, 90%]	**0.88**	**0.60**	0.21	**0.88**	**0.65**	0.23	**0.50**	**0.66**	**0.71**	**0.45**	**0.75**	**0.77**
[90%, 95%]	**0.87**	**0.63**	**0.22**	**0.84**	**0.60**	**0.15**	**0.44**	**0.68**	**0.77**	**0.45**	**0.75**	**0.78**
[95%, 99%]	**0.82**	**0.32**	**-0.18**	**0.63**	**0.22**	**-0.34**	**0.73**	**0.68**	**0.40**	**0.57**	**0.72**	**0.43**
[99%, 100%]	**0.46**	-0.04	**-0.59**	**0.23**	-0.20	**-0.63**	**0.63**	**0.64**	0.22	**0.56**	**0.52**	0.26
[0, 95%]	**0.91**	**0.67**	**0.27**	**0.90**	**0.70**	**0.27**	**0.44**	**0.69**	**0.78**	**0.40**	**0.77**	**0.83**
[0, 99%]	**0.91**	**0.57**	0.12	**0.86**	**0.56**	0.04	**0.58**	**0.74**	**0.68**	**0.51**	**0.82**	**0.73**
All firms	**0.83**	**0.40**	-0.14	**0.70**	**0.29**	**-0.27**	**0.67**	**0.80**	**0.61**	**0.60**	**0.79**	**0.63**

Table 2: Cyclical behavior of debt issuance - *alternative debt measures*

Size classes	recently listed firms excluded						All firms					
	LT debt issues and			**Net LT debt issues and**			**LT debt issues and**			**Net LT debt issues and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
[0, 25%]	-0.26	0.06	**0.34**	0.01	**0.41**	**0.68**	-0.16	**0.31**	**0.64**	0.08	**0.40**	**0.67**
[25%, 50%]	0.12	**0.50**	**0.64**	**0.22**	**0.65**	**0.76**	-0.07	**0.33**	**0.59**	**0.16**	**0.63**	**0.80**
[50%, 75%]	0.26	**0.55**	**0.73**	0.28	**0.49**	**0.61**	**0.24**	**0.56**	**0.75**	0.29	**0.56**	**0.70**
[75%, 90%]	**0.55**	**0.54**	**0.62**	**0.54**	**0.57**	**0.61**	**0.43**	**0.54**	**0.62**	**0.49**	**0.55**	**0.60**
[90%, 95%]	**0.54**	**0.61**	**0.54**	**0.54**	**0.64**	**0.67**	**0.46**	**0.62**	**0.70**	**0.60**	**0.70**	**0.68**
[95%, 99%]	**0.78**	**0.60**	**0.34**	**0.82**	**0.46**	0.07	**0.75**	**0.66**	**0.42**	**0.80**	**0.54**	0.21
[99%, 100%]	**0.36**	0.09	**-0.23**	**0.46**	**0.42**	0.03	**0.45**	0.09	**-0.27**	**0.55**	**0.50**	0.10
[0, 95%]	**0.54**	**0.64**	**0.68**	**0.53**	**0.65**	**0.72**	**0.41**	**0.61**	**0.74**	**0.49**	**0.64**	**0.71**
[0, 99%]	**0.71**	**0.70**	**0.60**	**0.72**	**0.64**	**0.51**	**0.62**	**0.71**	**0.68**	**0.67**	**0.66**	**0.57**
All firms	**0.69**	**0.67**	**0.52**	**0.72**	**0.67**	**0.45**	**0.67**	**0.68**	**0.54**	**0.71**	**0.71**	**0.50**

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold.

Table 3: Cyclical behavior of equity issuance - *firm variables scaled by trend value of assets*

Size classes	**Level approach**						**Flow approach**					
	Δ in equity and			**Δ in equity* and**			**Δ in equity and**			**Δ in equity* and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
[0, 25%]	0.35	**0.37**	0.21	0.34	**0.37**	0.22	0.06	0.25	0.07	0.08	0.25	0.07
[25%, 50%]	**0.65**	**0.65**	0.40	**0.62**	**0.70**	**0.45**	0.09	**0.39**	**0.39**	0.08	**0.43**	**0.41**
[50%, 75%]	0.41	**0.28**	0.05	0.25	**0.32**	0.33	0.24	0.35	**0.16**	0.24	0.34	**0.18**
[75%, 90%]	0.06	0.03	-0.01	-0.01	-0.22	-0.34	0.04	0.01	-0.04	0.08	0.03	-0.02
[90%, 95%]	**0.46**	**0.21**	-0.02	0.16	-0.08	-0.21	**0.40**	0.33	**0.16**	0.15	0.00	-0.24
[95%, 99%]	0.21	0.03	-0.08	0.17	-0.14	-0.36	0.33	0.13	**-0.17**	0.32	0.08	**-0.20**
[99%, 100%]	-0.19	**-0.40**	**-0.42**	0.08	-0.14	**-0.26**	**0.25**	-0.07	-0.20	**0.27**	-0.01	-0.12
[0, 95%]	**0.40**	**0.26**	0.06	**0.25**	-0.01	-0.25	0.27	0.32	**0.16**	0.21	0.17	-0.07
[0, 99%]	0.31	0.14	-0.01	**0.22**	-0.07	-0.31	0.32	0.24	-0.00	0.28	0.14	-0.14
All firms	0.21	-0.03	-0.17	0.20	-0.09	-0.32	**0.36**	0.14	-0.11	**0.34**	0.11	-0.17

Table 4: Cyclical behavior of debt issuance - *firm variables scaled by trend value of assets*

Size classes	**Level approach**						**Flow approach**					
	Δ in total debt and			**Δ in liabilities and**			**Δ in total debt and**			**Δ in liabilities and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
[0, 25%]	**0.84**	**0.77**	**0.54**	**0.87**	**0.83**	**0.51**	0.12	**0.37**	**0.59**	0.06	**0.49**	**0.66**
[25%, 50%]	**0.91**	**0.82**	**0.45**	**0.87**	**0.80**	**0.41**	0.13	**0.67**	**0.80**	0.09	**0.63**	**0.68**
[50%, 75%]	**0.89**	**0.75**	**0.43**	**0.86**	**0.83**	**0.53**	0.27	**0.58**	**0.70**	0.08	**0.58**	**0.76**
[75%, 90%]	**0.88**	**0.60**	0.21	**0.88**	**0.65**	0.23	**0.48**	**0.64**	**0.68**	**0.40**	**0.72**	**0.76**
[90%, 95%]	**0.87**	**0.63**	**0.22**	**0.84**	**0.60**	**0.15**	**0.40**	**0.70**	**0.82**	**0.40**	**0.75**	**0.83**
[95%, 99%]	**0.82**	**0.32**	**-0.18**	**0.63**	**0.22**	**-0.34**	**0.74**	**0.65**	**0.35**	**0.57**	**0.68**	**0.37**
[99%, 100%]	**0.46**	-0.04	**-0.59**	**0.23**	-0.20	**-0.63**	**0.64**	**0.65**	0.15	**0.57**	**0.52**	0.14
[0, 95%]	**0.91**	**0.67**	**0.27**	**0.90**	**0.70**	**0.27**	**0.42**	**0.70**	**0.80**	**0.35**	**0.77**	**0.86**
[0, 99%]	**0.91**	**0.57**	0.12	**0.86**	**0.56**	0.04	**0.59**	**0.74**	**0.68**	**0.50**	**0.82**	**0.73**
All firms	**0.83**	**0.40**	-0.14	**0.70**	**0.29**	**-0.27**	**0.69**	**0.80**	**0.52**	**0.62**	**0.79**	**0.51**

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; Δ equity* is the net change in equity, Δ equity, minus dividends; recently listed firms are excluded; firm variables scaled by trend value of assets instead of firm capital.

Table 5: Cyclical behavior of equity issuance - recently listed firms excluded - level approach - *'71-'06*

Size classes	**Sale of stock and**			**Δ in equity and**			**Net sale of stock and**			**Δ in equity* and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	0.24	**0.32**	0.13	0.21	**0.30**	0.12	-0.02	0.17	0.11	0.19	0.28	0.13
$[25\%, 50\%]$	**0.43**	**0.47**	0.21	**0.48**	**0.54**	0.28	0.21	**0.34**	0.19	**0.47**	**0.58**	**0.38**
$[50\%, 75\%]$	**0.36**	**0.45**	0.35	0.31	**0.24**	0.03	**-0.20**	0.06	0.30	0.14	0.22	0.26
$[75\%, 90\%]$	0.08	0.21	0.19	0.06	0.08	0.03	-0.47	**-0.26**	-0.00	-0.01	-0.16	-0.24
$[90\%, 95\%]$	**0.30**	**0.31**	0.11	0.33	0.15	-0.05	-0.38	-0.39	-0.30	0.08	-0.10	-0.22
$[95\%, 99\%]$	-0.03	0.12	**0.35**	0.09	-0.02	-0.09	-0.36	**-0.19**	0.08	0.10	-0.13	-0.30
$[99\%, 100\%]$	**-0.38**	**-0.53**	**-0.54**	-0.18	**-0.34**	**-0.37**	-0.12	-0.08	-0.05	0.02	-0.14	**-0.24**
$[0, 95\%]$	0.32	**0.40**	0.23	0.30	**0.23**	0.04	-0.30	**-0.20**	-0.08	0.16	-0.03	-0.22
$[0, 99\%]$	0.23	**0.34**	0.30	0.21	0.10	-0.04	-0.39	**-0.23**	0.00	0.14	-0.08	-0.27
All firms	0.06	0.10	0.04	0.11	-0.05	-0.17	-0.30	-0.18	-0.02	0.12	-0.10	-0.28

Table 6: Cyclical behavior of equity issuance - all firms - level approach - *'71-'06*

Size classes	**Sale of stock and**			**Δ in equity and**			**Net sale of stock and**			**Δ in equity* and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	0.22	**0.42**	**0.38**	0.24	**0.41**	**0.33**	0.11	**0.35**	**0.36**	0.21	**0.39**	**0.33**
$[25\%, 50\%]$	0.35	**0.50**	**0.37**	**0.41**	**0.48**	**0.28**	0.17	**0.41**	**0.39**	0.34	**0.45**	**0.33**
$[50\%, 75\%]$	**0.39**	**0.53**	**0.42**	0.36	**0.33**	0.12	0.11	**0.38**	**0.47**	0.20	**0.31**	0.28
$[75\%, 90\%]$	**0.41**	**0.48**	**0.35**	**0.37**	**0.34**	0.16	-0.21	-0.07	0.06	0.01	**0.26**	**0.47**
$[90\%, 95\%]$	**0.40**	**0.39**	0.19	**0.38**	0.21	-0.01	-0.41	**-0.36**	-0.20	0.19	0.01	-0.18
$[95\%, 99\%]$	0.12	0.18	0.23	0.12	0.07	-0.01	-0.32	**-0.17**	0.06	0.17	-0.03	-0.23
$[99\%, 100\%]$	-0.27	**-0.48**	**-0.46**	-0.05	**-0.31**	**-0.35**	-0.12	-0.11	-0.08	-0.02	**-0.27**	**-0.35**
$[0, 95\%]$	**0.46**	**0.54**	**0.38**	**0.41**	**0.39**	0.19	-0.07	0.12	0.21	-0.20	0.04	**0.30**
$[0, 99\%]$	0.39	**0.47**	**0.36**	0.31	**0.27**	0.12	-0.14	-0.02	0.09	0.30	0.11	-0.14
All firms	0.31	**0.32**	0.19	0.23	0.11	-0.03	-0.13	-0.05	0.02	0.24	0.02	-0.20

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; Δ equity* is the net change in equity, Δ equity, minus dividends; scaled by trend value of assets; '71-'06 instead of the '80-'06 sample.

Table 7: Cyclical behavior of equity issuance - recently listed firms excluded - flow approach - *'71-'06*

Size classes	**Sale of stock and**			**Δ in equity and**			**Net sale of stock and**			**Δ in equity* and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	-0.03	0.21	0.15	-0.01	0.22	0.17	-0.19	0.03	0.06	0.00	0.21	0.16
$[25\%, 50\%]$	-0.01	**0.30**	**0.44**	0.01	**0.35**	**0.41**	-0.14	0.12	**0.30**	-0.00	**0.35**	**0.42**
$[50\%, 75\%]$	-0.10	0.12	**0.37**	0.21	0.29	**0.20**	**-0.29**	**-0.27**	0.05	0.20	0.24	**0.17**
$[75\%, 90\%]$	-0.15	-0.00	**0.26**	-0.03	0.03	0.12	**-0.37**	**-0.43**	-0.21	-0.06	-0.08	0.05
$[90\%, 95\%]$	-0.07	**0.28**	**0.36**	**0.27**	0.27	**0.16**	-0.04	**-0.30**	**-0.36**	0.09	-0.01	-0.19
$[95\%, 99\%]$	**-0.22**	**-0.33**	0.12	0.20	0.01	-0.14	**-0.38**	**-0.64**	**-0.34**	0.15	-0.08	**-0.18**
$[99\%, 100\%]$	0.07	-0.10	-0.21	**0.18**	-0.09	-0.13	**-0.26**	**-0.40**	-0.35	0.18	-0.08	-0.12
$[0, 95\%]$	-0.11	0.19	**0.41**	0.13	0.26	**0.25**	**-0.28**	**-0.33**	-0.13	0.08	0.08	0.01
$[0, 99\%]$	-0.18	0.03	**0.37**	0.18	0.17	0.08	**-0.38**	**-0.53**	-0.24	0.13	0.03	-0.08
All firms	-0.11	-0.02	0.21	0.21	0.07	-0.01	**-0.37**	**-0.53**	-0.30	0.18	-0.02	-0.12

Table 8: Cyclical behavior of equity issuance - all firms - flow approach - *'71-'06*

Size classes	**Sale of stock and**			**Δ in equity and**			**Net sale of stock and**			**Δ in equity* and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	-0.05	0.25	**0.32**	0.03	0.31	**0.33**	-0.14	0.16	**0.26**	0.03	0.31	**0.33**
$[25\%, 50\%]$	-0.06	0.27	**0.34**	0.10	**0.36**	**0.30**	-0.24	0.10	**0.25**	0.10	**0.35**	**0.29**
$[50\%, 75\%]$	-0.14	0.19	**0.44**	0.12	**0.32**	**0.30**	**-0.32**	-0.11	0.25	0.10	0.28	**0.28**
$[75\%, 90\%]$	-0.07	0.15	**0.37**	0.11	0.26	**0.27**	**-0.28**	**-0.28**	-0.11	0.05	0.14	**0.19**
$[90\%, 95\%]$	-0.01	**0.28**	**0.42**	**0.28**	0.36	**0.30**	-0.08	**-0.35**	**-0.29**	0.12	0.04	-0.11
$[95\%, 99\%]$	-0.14	-0.12	0.26	0.13	0.08	-0.04	**-0.38**	**-0.60**	**-0.29**	0.07	-0.03	-0.14
$[99\%, 100\%]$	0.12	-0.13	-0.19	**0.29**	-0.11	-0.17	**-0.19**	**-0.41**	-0.37	**0.30**	-0.11	**-0.21**
$[0, 95\%]$	-0.08	0.28	**0.47**	0.15	**0.36**	**0.34**	**-0.28**	-0.17	0.05	0.11	0.25	**0.20**
$[0, 99\%]$	-0.10	0.19	**0.46**	0.14	0.27	**0.21**	**-0.37**	**-0.40**	-0.10	0.09	0.15	0.07
All firms	-0.04	0.12	0.33	0.23	0.18	0.10	**-0.34**	**-0.43**	-0.19	0.19	0.08	-0.02

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; Δ equity* is the net change in equity, Δ equity, minus dividends; scaled by trend value of assets; '71-'06 instead of the '80-'06 sample.

Table 9: Cyclical behavior of debt issuance - recently listed firms excluded - level approach - *'71-'06*

Size classes	**LT debt issues and**			**Δ in liabilities and**			**Net LT debt issues and**			**Δ in total debt and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
[0, 25%]	**0.20**	**0.23**	0.02	**0.50**	**0.40**	-0.02	**0.55**	**0.48**	0.10	**0.61**	**0.47**	0.05
[25%, 50%]	**0.29**	**0.30**	0.09	**0.74**	**0.55**	-0.01	**0.79**	**0.60**	0.15	**0.83**	**0.58**	0.02
[50%, 75%]	**0.48**	**0.42**	0.15	**0.81**	**0.60**	0.08	**0.76**	**0.55**	0.20	**0.86**	**0.56**	0.07
[75%, 90%]	**0.42**	0.25	0.04	**0.78**	**0.39**	-0.13	**0.71**	0.34	0.04	**0.80**	0.38	-0.05
[90%, 95%]	**0.46**	0.26	0.01	**0.80**	**0.46**	-0.04	**0.69**	**0.36**	0.07	**0.79**	**0.46**	0.05
[95%, 99%]	0.26	-0.03	-0.16	**0.58**	0.06	**-0.38**	**0.35**	-0.11	**-0.23**	**0.59**	0.08	**-0.19**
[99%, 100%]	-0.26	**-0.36**	**-0.42**	**0.25**	-0.18	**-0.60**	0.26	-0.11	**-0.41**	**0.39**	-0.04	**-0.51**
[0, 95%]	**0.46**	**0.32**	0.05	**0.84**	**0.50**	-0.05	**0.77**	**0.44**	0.09	**0.85**	**0.48**	0.01
[0, 99%]	**0.42**	0.21	-0.02	**0.81**	**0.37**	-0.19	**0.69**	0.28	-0.02	**0.82**	**0.37**	-0.06
All firms	**0.32**	0.10	-0.13	**0.66**	0.17	**-0.40**	**0.63**	0.20	-0.12	**0.74**	0.26	-0.23

Table 10: Cyclical behavior of debt issuance - all firms - level approach - *'71-'06*

Size classes	**LT debt issues and**			**Δ in liabilities and**			**Net LT debt issues and**			**Δ in total debt and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
[0, 25%]	**0.26**	**0.33**	0.16	**0.54**	**0.48**	0.13	**0.56**	**0.49**	0.16	**0.58**	**0.46**	0.13
[25%, 50%]	**0.29**	**0.32**	0.15	**0.65**	**0.53**	0.10	**0.71**	**0.59**	0.24	**0.75**	**0.56**	0.10
[50%, 75%]	**0.44**	**0.41**	0.16	**0.79**	**0.59**	0.10	**0.77**	**0.59**	0.25	**0.83**	**0.57**	0.11
[75%, 90%]	**0.47**	0.32	0.09	**0.80**	**0.44**	-0.06	**0.71**	0.35	0.05	**0.80**	**0.41**	-0.02
[90%, 95%]	**0.53**	0.36	0.15	**0.84**	**0.50**	-0.02	**0.71**	**0.40**	0.11	**0.83**	**0.47**	0.03
[95%, 99%]	0.29	-0.02	-0.20	**0.63**	0.12	**-0.34**	**0.42**	-0.02	**-0.18**	**0.65**	0.18	**-0.11**
[99%, 100%]	-0.20	**-0.32**	**-0.36**	**0.32**	-0.12	**-0.57**	0.33	-0.03	**-0.35**	**0.44**	0.01	**-0.47**
[0, 95%]	**0.48**	**0.37**	0.13	**0.82**	**0.52**	0.01	**0.76**	**0.46**	0.13	**0.83**	**0.49**	0.04
[0, 99%]	**0.45**	0.25	0.00	**0.83**	**0.42**	-0.13	**0.71**	0.32	0.03	**0.83**	**0.42**	-0.02
All firms	**0.37**	0.16	-0.07	**0.70**	**0.23**	**-0.34**	**0.65**	0.26	-0.07	**0.76**	**0.31**	-0.18

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; scaled by trend value of assets; '71-'06 instead of the '80-'06 sample.

Table 11: Cyclical behavior of debt issuance - recently listed firms excluded - flow approach - *'71-'06*

Size classes	**LT debt issues and**			**Δ in liabilities and**			**Net LT debt issues and**			**Δ in total debt and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	0.09	**0.48**	**0.35**	**0.26**	**0.66**	**0.35**	0.20	**0.61**	**0.47**	**0.32**	**0.59**	**0.32**
$[25\%, 50\%]$	0.13	**0.58**	**0.53**	**0.28**	**0.71**	**0.31**	**0.34**	**0.66**	**0.49**	**0.36**	**0.71**	**0.32**
$[50\%, 75\%]$	**0.24**	**0.57**	**0.55**	**0.31**	**0.67**	**0.31**	**0.39**	**0.57**	0.28	**0.41**	**0.65**	0.28
$[75\%, 90\%]$	**0.52**	**0.39**	0.33	**0.51**	**0.61**	0.14	**0.64**	**0.44**	0.15	**0.59**	**0.57**	0.16
$[90\%, 95\%]$	**0.41**	**0.41**	**0.42**	**0.49**	**0.70**	0.38	**0.55**	**0.43**	0.34	**0.52**	**0.61**	0.37
$[95\%, 99\%]$	**0.48**	0.09	0.08	**0.61**	**0.47**	-0.05	**0.39**	-0.12	-0.18	**0.60**	0.21	-0.12
$[99\%, 100\%]$	0.19	-0.09	**-0.26**	**0.61**	**0.51**	-0.03	**0.38**	0.18	-0.10	**0.60**	**0.55**	0.06
$[0, 95\%]$	**0.48**	**0.55**	**0.51**	**0.47**	**0.71**	0.29	**0.62**	**0.57**	0.32	**0.55**	**0.66**	0.30
$[0, 99\%]$	**0.62**	**0.45**	0.37	**0.57**	**0.68**	0.17	**0.70**	0.35	0.09	**0.66**	**0.59**	0.15
All firms	**0.61**	**0.37**	0.25	**0.64**	**0.68**	0.10	**0.71**	0.36	0.05	**0.72**	**0.66**	0.15

Table 12: Cyclical behavior of debt issuance - all firms - flow approach - *'71-'06*

Size classes	**LT debt issues and**			**Δ in liabilities and**			**Net LT debt issues and**			**Δ in total debt and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	-0.12	**0.42**	**0.46**	**0.19**	**0.61**	**0.35**	0.17	**0.52**	**0.38**	**0.28**	**0.53**	0.25
$[25\%, 50\%]$	-0.01	**0.41**	**0.38**	**0.21**	**0.60**	**0.23**	**0.26**	**0.61**	**0.46**	**0.31**	**0.63**	**0.24**
$[50\%, 75\%]$	0.15	**0.51**	**0.52**	**0.28**	**0.65**	**0.30**	**0.34**	**0.58**	0.39	**0.38**	**0.64**	0.29
$[75\%, 90\%]$	**0.45**	**0.44**	0.40	**0.51**	**0.65**	0.19	**0.62**	**0.43**	0.13	**0.57**	**0.60**	0.19
$[90\%, 95\%]$	**0.35**	**0.38**	0.48	**0.47**	**0.70**	0.36	**0.55**	**0.42**	0.28	**0.54**	**0.64**	0.37
$[95\%, 99\%]$	**0.53**	0.21	0.15	**0.62**	**0.51**	-0.01	**0.40**	-0.08	-0.10	**0.59**	0.25	-0.06
$[99\%, 100\%]$	0.21	-0.12	**-0.24**	**0.63**	**0.55**	-0.01	**0.42**	0.19	-0.09	**0.61**	**0.56**	0.08
$[0, 95\%]$	**0.36**	**0.49**	**0.52**	**0.43**	**0.70**	0.29	**0.56**	**0.54**	0.30	**0.52**	**0.66**	0.29
$[0, 99\%]$	**0.57**	**0.49**	0.43	**0.54**	**0.69**	0.19	**0.66**	0.37	0.13	**0.63**	**0.61**	0.18
All firms	**0.60**	**0.41**	0.32	**0.62**	**0.69**	0.12	**0.70**	0.38	0.08	**0.70**	**0.67**	0.17

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; scaled by trend value of assets; '71-'06 instead of the '80-'06 sample.

Table 13: Cyclical behavior of retained earnings, profits, and dividends - *'71-'06*

Size classes	**RE and**			**Profits and**			**Dividends and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	-0.10	0.13	-0.09	-0.17	0.14	-0.09	-0.22	0.28	0.26
$[25\%, 50\%]$	-0.20	0.12	0.13	**-0.20**	0.19	**0.23**	0.09	-0.03	-0.08
$[50\%, 75\%]$	-0.13	**0.44**	**0.30**	-0.12	**0.51**	**0.36**	0.06	0.37	0.21
$[75\%, 90\%]$	0.04	**0.32**	0.06	0.11	**0.45**	0.12	0.08	0.37	0.23
$[90\%, 95\%]$	-0.02	**0.37**	0.13	0.02	**0.52**	**0.32**	0.04	**0.16**	**0.31**
$[95\%, 99\%]$	0.04	**0.36**	0.16	0.12	**0.44**	0.12	0.25	**0.53**	**0.32**
$[99\%, 100\%]$	**0.37**	**0.41**	0.15	**0.35**	**0.41**	0.00	0.03	-0.07	-0.07
$[0, 95\%]$	-0.04	**0.37**	0.14	0.00	**0.51**	**0.27**	0.05	**0.24**	**0.36**
$[0, 99\%]$	-0.00	**0.38**	0.17	0.05	**0.50**	**0.22**	0.10	**0.33**	**0.41**
All firms	0.15	**0.42**	0.17	0.15	**0.51**	0.16	0.10	**0.27**	**0.35**

Table 14: Cyclical behavior of assets, investment, inventories, and employment - *'71-'06*

Size classes	**Assets and**			**Investment and**			**Inventories and**			**Employment and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	**0.41**	**0.37**	-0.00	0.13	**0.54**	**0.26**	**0.45**	**0.33**	-0.09	**0.27**	**0.28**	-0.01
$[25\%, 50\%]$	**0.66**	**0.58**	0.12	**0.20**	**0.57**	**0.23**	**0.49**	**0.35**	-0.12	**0.54**	**0.54**	0.02
$[50\%, 75\%]$	**0.77**	**0.62**	0.13	**0.31**	**0.63**	**0.24**	**0.57**	**0.36**	-0.14	**0.62**	**0.71**	0.27
$[75\%, 90\%]$	**0.76**	**0.46**	-0.01	**0.49**	**0.41**	-0.22	**0.61**	0.25	-0.22	**0.72**	**0.62**	0.05
$[90\%, 95\%]$	**0.81**	**0.52**	0.01	**0.48**	**0.46**	0.12	**0.60**	0.25	-0.25	**0.81**	**0.68**	0.08
$[95\%, 99\%]$	**0.61**	0.20	**-0.25**	**0.56**	0.12	**-0.46**	**0.36**	-0.09	**-0.53**	**0.73**	**0.41**	-0.16
$[99\%, 100\%]$	**0.28**	-0.10	**-0.49**	**0.35**	0.04	**-0.33**	**0.32**	0.06	**-0.27**	**0.43**	**0.36**	-0.13
$[0, 95\%]$	**0.81**	**0.56**	0.04	**0.51**	**0.58**	0.03	**0.60**	0.30	-0.21	**0.71**	**0.67**	0.11
$[0, 99\%]$	**0.80**	**0.46**	-0.08	**0.61**	**0.45**	-0.21	**0.56**	0.18	**-0.34**	**0.78**	**0.66**	0.04
All firms	**0.64**	0.25	-0.28	**0.66**	**0.37**	-0.33	**0.52**	0.15	**-0.35**	**0.80**	**0.68**	0.01

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; the correlation coefficients of assets, inventories and employment are calculated using the level approach and the correlation coefficients of retained earnings, profits, dividends, and investment are calculated using the flow approach; recently listed firms are excluded; scaled by trend value of assets; '71-'06 instead of the '80-'06 sample.

Table 15: Cyclical behavior of equity issuance - level approach - *total GDP*

Size classes	**Sale of stock and**			**Δ in equity and**			**Net sale of stock and**			**Δ in equity* and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	0.04	**0.30**	**0.34**	0.07	**0.30**	**0.31**	-0.06	0.24	**0.32**	0.03	0.27	**0.32**
$[25\%, 50\%]$	0.19	**0.39**	**0.34**	0.25	**0.37**	**0.26**	0.02	**0.30**	**0.33**	0.17	**0.34**	**0.30**
$[50\%, 75\%]$	0.22	**0.40**	**0.36**	0.21	**0.21**	0.08	-0.05	0.22	**0.36**	0.06	0.17	0.20
$[75\%, 90\%]$	**0.33**	**0.45**	**0.36**	0.24	**0.26**	0.14	**-0.21**	-0.10	0.01	-0.11	0.10	**0.32**
$[90\%, 95\%]$	**0.40**	**0.43**	**0.23**	0.26	0.15	-0.04	**-0.37**	**-0.35**	-0.22	0.09	-0.02	-0.15
$[95\%, 99\%]$	-0.05	0.09	**0.21**	-0.04	-0.06	-0.08	-0.44	**-0.30**	-0.07	0.09	-0.05	-0.18
$[99\%, 100\%]$	-0.32	**-0.48**	**-0.41**	-0.14	-0.37	**-0.36**	-0.19	-0.20	-0.15	-0.07	**-0.29**	**-0.32**
$[0, 95\%]$	0.32	**0.45**	**0.35**	0.25	**0.27**	0.14	-0.18	0.00	0.10	**-0.30**	-0.09	**0.16**
$[0, 99\%]$	0.23	**0.38**	**0.33**	0.14	0.15	0.06	-0.26	-0.13	-0.00	0.20	0.07	-0.10
All firms	0.13	0.21	0.17	0.06	-0.03	-0.09	-0.23	-0.16	-0.07	0.14	-0.01	-0.15

Table 16: Cyclical behavior of equity issuance - flow approach - *total GDP*

Size classes	**Sale of stock and**			**Δ in equity and**			**Net sale of stock and**			**Δ in equity* and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	-0.13	0.13	0.21	-0.06	0.18	**0.23**	-0.22	0.04	0.15	-0.06	0.18	**0.22**
$[25\%, 50\%]$	-0.16	0.15	**0.25**	0.01	0.24	**0.22**	-0.30	0.00	0.17	0.01	0.22	**0.20**
$[50\%, 75\%]$	-0.20	0.06	**0.32**	0.04	0.19	**0.20**	**-0.34**	**-0.20**	0.15	0.03	0.15	0.17
$[75\%, 90\%]$	-0.14	0.10	**0.26**	-0.00	0.17	0.19	**-0.24**	**-0.22**	-0.14	-0.05	0.05	0.09
$[90\%, 95\%]$	-0.06	**0.29**	**0.34**	0.18	0.30	0.23	-0.04	**-0.25**	**-0.28**	0.01	0.01	-0.11
$[95\%, 99\%]$	-0.22	-0.22	0.12	0.07	-0.01	-0.11	**-0.36**	**-0.60**	**-0.38**	-0.01	-0.11	-0.19
$[99\%, 100\%]$	0.07	-0.22	-0.28	**0.29**	-0.16	-0.23	-0.12	**-0.40**	**-0.42**	**0.33**	-0.15	**-0.27**
$[0, 95\%]$	-0.17	0.18	**0.35**	0.05	0.24	**0.24**	**-0.28**	-0.19	-0.02	-0.01	0.13	0.12
$[0, 99\%]$	-0.21	0.08	0.32	0.05	0.16	0.13	**-0.37**	**-0.42**	-0.19	-0.02	0.04	0.00
All firms	-0.15	-0.01	0.18	0.16	0.07	0.01	**-0.31**	**-0.44**	-0.28	0.11	-0.02	-0.10

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; Δ equity* is the net change in equity, Δ equity, minus dividends; recently listed firms are included; scaled by trend value of assets; '71-'06 sample; total GDP instead of corporate GDP.

Table 17: Cyclical behavior of debt issuance - level approach - *total GDP*

Size classes	**LT debt issues and**			**Δ in liabilities and**			**Net LT debt issues and**			**Δ in total debt and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	**0.26**	**0.37**	**0.20**	**0.49**	**0.49**	0.17	**0.54**	**0.53**	0.25	**0.55**	**0.51**	0.19
$[25\%, 50\%]$	**0.28**	**0.33**	0.15	**0.59**	**0.51**	0.09	**0.62**	**0.56**	0.25	**0.68**	**0.53**	0.08
$[50\%, 75\%]$	**0.43**	**0.42**	0.16	**0.70**	**0.55**	0.07	**0.66**	**0.51**	0.20	**0.74**	**0.52**	0.08
$[75\%, 90\%]$	**0.44**	**0.31**	0.09	**0.73**	**0.42**	-0.07	**0.60**	0.30	0.03	**0.72**	**0.39**	-0.02
$[90\%, 95\%]$	**0.55**	**0.42**	**0.22**	**0.82**	**0.55**	0.03	**0.66**	**0.42**	0.17	**0.79**	**0.50**	0.08
$[95\%, 99\%]$	**0.36**	0.07	-0.11	**0.68**	0.17	**-0.32**	**0.43**	-0.01	-0.14	**0.63**	0.15	-0.12
$[99\%, 100\%]$	-0.07	-0.17	**-0.28**	**0.38**	-0.03	**-0.47**	0.26	-0.02	**-0.28**	**0.42**	0.04	**-0.36**
$[0, 95\%]$	**0.47**	**0.39**	0.15	**0.77**	**0.52**	0.01	**0.67**	**0.43**	0.14	**0.77**	**0.48**	0.05
$[0, 99\%]$	**0.47**	**0.30**	0.05	**0.81**	**0.44**	-0.12	**0.64**	0.31	0.05	**0.78**	**0.41**	-0.01
All firms	**0.41**	**0.24**	-0.01	**0.71**	**0.27**	**-0.29**	**0.58**	0.24	-0.04	**0.71**	**0.31**	-0.14

Table 18: Cyclical behavior of debt issuance - flow approach - *total GDP*

Size classes	**LT debt issues and**			**Δ in liabilities and**			**Net LT debt issues and**			**Δ in total debt and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	-0.21	**0.40**	**0.49**	0.07	**0.57**	**0.37**	0.04	**0.46**	**0.39**	0.16	**0.51**	0.30
$[25\%, 50\%]$	-0.04	**0.42**	**0.37**	0.15	**0.61**	**0.24**	0.17	**0.56**	**0.42**	**0.25**	**0.63**	**0.25**
$[50\%, 75\%]$	0.09	**0.49**	**0.46**	**0.22**	**0.66**	**0.31**	**0.28**	**0.56**	**0.31**	**0.31**	**0.64**	0.29
$[75\%, 90\%]$	**0.38**	**0.40**	0.34	**0.46**	**0.67**	0.21	**0.56**	**0.43**	0.11	**0.51**	**0.59**	0.20
$[90\%, 95\%]$	**0.27**	**0.34**	0.40	**0.39**	**0.72**	0.39	**0.47**	**0.38**	0.19	**0.45**	**0.63**	0.35
$[95\%, 99\%]$	**0.50**	0.20	0.16	**0.64**	**0.59**	0.07	**0.44**	-0.07	-0.12	**0.63**	0.28	-0.05
$[99\%, 100\%]$	**0.20**	-0.04	**-0.16**	**0.61**	**0.56**	0.04	**0.35**	0.14	-0.10	**0.56**	**0.50**	0.09
$[0, 95\%]$	**0.27**	**0.45**	0.45	**0.37**	**0.71**	0.31	**0.48**	**0.51**	0.23	**0.44**	**0.65**	0.29
$[0, 99\%]$	**0.49**	**0.46**	0.40	**0.50**	**0.72**	0.24	**0.62**	**0.37**	0.08	**0.58**	**0.62**	0.19
All firms	**0.51**	**0.41**	0.32	**0.59**	**0.72**	0.17	**0.63**	0.35	0.04	**0.65**	**0.65**	0.18

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; recently listed firms are included; scaled by trend value of assets; '71-'06 sample; total GDP instead of corporate GDP.

Table 19: Cyclical behavior of equity issuance - level approach - *true percentiles*

Size classes	**Sale of stock and**			**Δ in equity and**			**Net sale of stock and**			**Δ in equity* and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	0.17	**0.37**	**0.34**	0.20	**0.36**	**0.29**	0.05	0.29	**0.32**	0.16	**0.34**	**0.30**
$[25\%, 50\%]$	0.34	**0.46**	**0.32**	**0.40**	**0.44**	0.22	0.18	**0.40**	**0.35**	0.36	**0.47**	**0.30**
$[50\%, 75\%]$	**0.39**	**0.48**	0.34	0.36	**0.33**	0.12	0.12	**0.35**	0.40	0.23	**0.35**	0.32
$[75\%, 90\%]$	0.32	**0.44**	**0.40**	0.29	**0.30**	0.18	-0.15	0.04	0.21	-0.06	**0.23**	**0.47**
$[90\%, 95\%]$	**0.42**	**0.41**	0.17	**0.39**	**0.24**	0.02	-0.33	**-0.30**	-0.21	0.19	0.02	-0.15
$[95\%, 99\%]$	0.20	0.23	0.27	0.15	0.03	-0.04	-0.31	-0.22	-0.05	0.18	-0.08	-0.27
$[99\%, 100\%]$	-0.19	**-0.38**	**-0.41**	0.02	-0.18	**-0.27**	-0.15	-0.10	-0.04	0.02	**-0.18**	**-0.32**
$[0, 95\%]$	**0.43**	**0.50**	**0.34**	**0.39**	**0.36**	0.16	-0.03	0.15	0.24	**0.35**	**0.17**	-0.08
$[0, 99\%]$	0.38	**0.45**	**0.34**	0.30	**0.23**	0.09	-0.12	-0.03	0.06	0.30	0.08	-0.16
All firms	0.31	**0.32**	0.19	0.23	0.11	-0.03	-0.13	-0.05	0.02	0.24	0.02	-0.20

Table 20: Cyclical behavior of equity issuance - flow approach - *true percentiles*

Size classes	**Sale of stock and**			**Δ in equity and**			**Net sale of stock and**			**Δ in equity* and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	-0.03	0.25	**0.33**	0.05	0.31	**0.32**	-0.15	0.14	**0.25**	0.04	0.31	**0.32**
$[25\%, 50\%]$	-0.00	0.29	**0.33**	0.15	**0.38**	**0.29**	-0.17	0.15	**0.28**	0.13	**0.38**	**0.30**
$[50\%, 75\%]$	-0.07	0.20	**0.40**	0.20	**0.33**	**0.25**	**-0.26**	-0.09	0.22	0.16	0.30	**0.25**
$[75\%, 90\%]$	-0.13	0.07	**0.39**	0.04	0.17	**0.27**	**-0.35**	**-0.34**	-0.05	-0.05	0.06	**0.22**
$[90\%, 95\%]$	-0.00	**0.31**	**0.41**	**0.23**	**0.32**	**0.22**	-0.08	-0.23	**-0.23**	0.08	0.06	-0.08
$[95\%, 99\%]$	-0.14	-0.15	0.22	0.22	0.02	-0.10	**-0.25**	**-0.51**	**-0.26**	0.24	-0.04	-0.24
$[99\%, 100\%]$	0.10	-0.07	-0.13	**0.23**	-0.03	-0.11	**-0.29**	**-0.44**	**-0.40**	**0.21**	-0.08	-0.16
$[0, 95\%]$	-0.06	0.26	**0.45**	0.15	**0.34**	**0.32**	**-0.27**	-0.16	0.07	0.08	0.24	**0.22**
$[0, 99\%]$	-0.09	0.17	**0.44**	0.19	0.26	**0.20**	**-0.32**	**-0.38**	-0.09	0.15	0.15	0.06
All firms	-0.04	0.12	0.33	0.23	0.18	0.10	**-0.34**	**-0.43**	-0.19	0.19	0.08	-0.02

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; Δ equity* is the net change in equity, Δ equity, minus dividends; recently listed firms are included; scaled by trend value of assets; '71-'06 sample; firm groups are constructed using the true percentiles, not the acyclical bounds.

Table 21: Cyclical behavior of debt issuance - level approach - *true percentiles*

Size classes	**LT debt issues and**			**Δ in liabilities and**			**Net LT debt issues and**			**Δ in total debt and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	**0.26**	**0.26**	0.07	**0.53**	**0.42**	0.06	**0.56**	**0.44**	0.11	**0.57**	**0.41**	0.07
$[25\%, 50\%]$	**0.29**	**0.26**	0.04	**0.72**	**0.53**	0.04	**0.77**	**0.59**	0.18	**0.81**	**0.54**	0.03
$[50\%, 75\%]$	**0.42**	**0.33**	0.06	**0.80**	**0.57**	0.02	**0.77**	**0.55**	0.17	**0.83**	**0.55**	0.04
$[75\%, 90\%]$	**0.46**	0.28	0.04	**0.83**	**0.43**	-0.11	**0.74**	0.37	0.05	**0.82**	**0.40**	-0.06
$[90\%, 95\%]$	**0.45**	0.23	-0.01	**0.80**	**0.44**	-0.08	**0.67**	**0.35**	0.06	**0.78**	**0.43**	0.00
$[95\%, 99\%]$	**0.44**	0.15	-0.04	**0.72**	0.22	**-0.24**	**0.49**	0.03	**-0.14**	**0.71**	0.25	-0.03
$[99\%, 100\%]$	-0.14	-0.22	**-0.28**	**0.34**	-0.09	**-0.55**	0.32	0.01	**-0.29**	**0.42**	0.01	**-0.46**
$[0, 95\%]$	**0.45**	**0.29**	0.02	**0.83**	**0.49**	-0.06	**0.76**	**0.43**	0.09	**0.84**	**0.47**	-0.00
$[0, 99\%]$	**0.48**	0.25	-0.00	**0.84**	**0.42**	-0.14	**0.72**	0.32	0.02	**0.84**	**0.42**	-0.01
All firms	**0.37**	0.16	-0.07	**0.70**	**0.23**	**-0.34**	**0.65**	0.26	-0.07	**0.76**	**0.31**	-0.18

Table 22: Cyclical behavior of debt issuance - flow approach - *true percentiles*

Size classes	**LT debt issues and**			**Δ in liabilities and**			**Net LT debt issues and**			**Δ in total debt and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	0.18	**0.46**	0.25	**0.31**	**0.59**	0.25	**0.28**	**0.53**	0.31	**0.37**	**0.50**	0.17
$[25\%, 50\%]$	0.23	**0.50**	**0.27**	**0.27**	**0.62**	**0.21**	**0.33**	**0.63**	**0.40**	**0.36**	**0.64**	0.22
$[50\%, 75\%]$	**0.33**	**0.59**	**0.49**	**0.32**	**0.70**	**0.31**	**0.40**	**0.61**	0.39	**0.40**	**0.69**	0.31
$[75\%, 90\%]$	**0.47**	**0.45**	0.42	**0.52**	**0.66**	0.21	**0.61**	**0.48**	0.15	**0.57**	**0.60**	0.20
$[90\%, 95\%]$	**0.52**	**0.42**	0.42	**0.54**	**0.72**	0.34	**0.58**	0.38	0.25	**0.59**	**0.65**	0.36
$[95\%, 99\%]$	**0.52**	0.24	0.22	**0.62**	**0.52**	0.00	**0.44**	-0.03	-0.13	**0.59**	0.26	-0.05
$[99\%, 100\%]$	0.15	-0.09	**-0.19**	**0.59**	**0.56**	-0.00	**0.31**	0.16	-0.02	**0.56**	**0.57**	0.09
$[0, 95\%]$	**0.52**	**0.55**	**0.49**	**0.48**	**0.72**	0.29	**0.60**	**0.54**	0.29	**0.55**	**0.67**	0.29
$[0, 99\%]$	**0.61**	**0.48**	0.41	**0.56**	**0.69**	0.19	**0.68**	**0.37**	0.10	**0.64**	**0.60**	0.18
All firms	**0.60**	**0.41**	0.32	**0.62**	**0.69**	0.12	**0.70**	0.38	0.08	**0.70**	**0.67**	0.17

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; recently listed firms are included; scaled by trend value of assets; '71-'06 sample; firm groups are constructed using the true percentiles, not the acyclical bounds.

Table 23: Cyclical behavior of equity issuance - level approach - *group investment*

Size classes	**Sale of stock and**			**Δ in equity and**			**Net sale of stock and**			**Δ in equity* and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	0.26	**0.61**	**0.70**	0.27	**0.62**	**0.69**	0.16	**0.56**	**0.70**	0.21	**0.56**	**0.65**
$[25\%, 50\%]$	0.26	**0.57**	**0.64**	**0.33**	**0.56**	**0.55**	0.11	**0.49**	**0.66**	0.22	**0.43**	**0.48**
$[50\%, 75\%]$	0.22	**0.56**	**0.66**	**0.35**	**0.48**	**0.44**	0.02	**0.40**	**0.61**	0.21	**0.38**	**0.44**
$[75\%, 90\%]$	0.13	**0.33**	**0.39**	**0.43**	**0.50**	**0.40**	-0.12	-0.03	-0.06	0.15	0.27	**0.36**
$[90\%, 95\%]$	**0.48**	**0.49**	**0.33**	**0.61**	**0.47**	**0.19**	-0.30	-0.38	**-0.46**	0.37	0.21	-0.03
$[95\%, 99\%]$	-0.01	-0.06	-0.13	**0.37**	0.31	0.03	**0.41**	0.13	**-0.28**	**0.40**	0.38	0.11
$[99\%, 100\%]$	0.20	**0.36**	0.31	**0.32**	**0.40**	**0.43**	0.09	0.12	0.07	**0.34**	**0.31**	0.24
$[0, 95\%]$	0.33	**0.54**	**0.56**	**0.48**	**0.54**	**0.45**	-0.03	0.13	0.20	-0.05	0.10	**0.26**
$[0, 99\%]$	0.09	0.27	0.33	**0.40**	**0.44**	**0.30**	0.18	0.12	-0.11	**0.47**	**0.37**	0.10
All firms	0.25	**0.39**	**0.38**	**0.52**	**0.54**	**0.40**	0.24	0.21	0.03	**0.55**	**0.43**	**0.18**

Table 24: Cyclical behavior of equity issuance - flow approach - *group investment*

Size classes	**Sale of stock and**			**Δ in equity and**			**Net sale of stock and**			**Δ in equity* and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	0.07	**0.38**	**0.23**	0.08	**0.35**	**0.18**	-0.00	**0.38**	**0.29**	0.08	**0.35**	**0.18**
$[25\%, 50\%]$	-0.22	**0.20**	**0.33**	-0.11	**0.16**	**0.17**	**-0.38**	**0.14**	**0.42**	-0.11	**0.14**	0.16
$[50\%, 75\%]$	**-0.29**	**0.18**	**0.52**	-0.18	0.06	**0.24**	**-0.47**	-0.06	**0.50**	-0.17	0.01	**0.21**
$[75\%, 90\%]$	-0.20	-0.10	**0.21**	-0.20	-0.17	0.09	**-0.25**	**-0.33**	-0.03	-0.11	-0.19	-0.03
$[90\%, 95\%]$	0.32	**0.27**	**0.34**	**0.29**	**0.15**	0.07	-0.11	**-0.27**	**-0.19**	-0.22	-0.01	-0.08
$[95\%, 99\%]$	0.14	-0.32	-0.27	**0.24**	0.09	-0.14	**0.41**	**-0.33**	**-0.51**	**0.30**	0.07	-0.26
$[99\%, 100\%]$	0.22	**0.52**	**0.41**	0.09	**0.19**	**0.22**	0.05	**0.27**	0.20	-0.00	0.02	0.06
$[0, 95\%]$	-0.07	0.12	**0.40**	-0.00	0.04	**0.16**	**-0.31**	**-0.25**	0.15	-0.05	-0.03	0.06
$[0, 99\%]$	-0.19	-0.13	0.21	-0.01	-0.01	0.04	-0.18	**-0.48**	**-0.28**	-0.00	-0.05	-0.10
All firms	-0.00	-0.05	0.26	0.20	0.08	0.06	-0.04	**-0.34**	-0.18	0.25	0.06	-0.10

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; Δ equity* is the net change in equity, Δ equity, minus dividends; recently listed firms are included; scaled by trend value of assets; '71-'06 sample; group investment is used as the cyclical indicator instead of corporate GDP.

Table 25: Cyclical behavior of debt issuance - level approach - *group investment*

Size classes	**LT debt issues and**			**Δ in liabilities and**			**Net LT debt issues and**			**Δ in total debt and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	**0.50**	**0.93**	**0.82**	**0.66**	**0.95**	**0.79**	**0.58**	**0.85**	**0.71**	**0.64**	**0.90**	**0.75**
$[25\%, 50\%]$	**0.53**	**0.92**	**0.92**	**0.68**	**0.90**	**0.75**	**0.61**	**0.80**	**0.69**	**0.64**	**0.81**	**0.65**
$[50\%, 75\%]$	**0.60**	**0.90**	**0.85**	**0.73**	**0.86**	**0.67**	**0.70**	**0.79**	**0.63**	**0.70**	**0.77**	**0.57**
$[75\%, 90\%]$	**0.54**	**0.84**	**0.81**	**0.63**	**0.83**	**0.68**	**0.66**	**0.74**	**0.56**	**0.58**	**0.72**	**0.56**
$[90\%, 95\%]$	**0.63**	**0.72**	**0.52**	**0.75**	**0.89**	**0.63**	**0.78**	**0.80**	**0.52**	**0.75**	**0.84**	**0.58**
$[95\%, 99\%]$	**0.31**	**0.64**	**0.73**	0.20	**0.62**	**0.69**	**0.40**	**0.61**	**0.52**	0.09	**0.46**	**0.53**
$[99\%, 100\%]$	0.09	**0.38**	0.08	0.21	**0.28**	**0.25**	**0.29**	**0.49**	**0.43**	0.12	**0.27**	**0.29**
$[0, 95\%]$	**0.59**	**0.86**	**0.78**	**0.74**	**0.89**	**0.70**	**0.73**	**0.80**	**0.60**	**0.69**	**0.80**	**0.60**
$[0, 99\%]$	**0.49**	**0.78**	**0.79**	**0.53**	**0.80**	**0.74**	**0.57**	**0.70**	**0.59**	**0.45**	**0.67**	**0.62**
All firms	**0.40**	**0.72**	**0.65**	**0.53**	**0.66**	**0.60**	**0.56**	**0.67**	**0.59**	**0.42**	**0.58**	**0.56**

Table 26: Cyclical behavior of debt issuance - flow approach - *group investment*

Size classes	**LT debt issues and**			**Δ in liabilities and**			**Net LT debt issues and**			**Δ in total debt and**		
	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}	GDP_{t-1}	GDP_t	GDP_{t+1}
$[0, 25\%]$	**0.44**	**0.86**	**0.35**	**0.51**	**0.82**	**0.21**	**0.48**	**0.80**	**0.29**	**0.63**	**0.72**	0.15
$[25\%, 50\%]$	**0.32**	**0.81**	**0.42**	**0.25**	**0.82**	**0.28**	**0.36**	**0.68**	**0.32**	**0.31**	**0.76**	**0.23**
$[50\%, 75\%]$	**0.36**	**0.75**	**0.31**	**0.41**	**0.86**	**0.19**	**0.52**	**0.76**	0.15	**0.50**	**0.84**	0.12
$[75\%, 90\%]$	**0.42**	**0.53**	**0.29**	0.17	**0.88**	**0.46**	**0.51**	**0.74**	**0.26**	**0.33**	**0.85**	**0.37**
$[90\%, 95\%]$	**0.60**	**0.56**	0.16	**0.28**	**0.80**	**0.47**	**0.57**	**0.70**	0.14	**0.41**	**0.79**	**0.39**
$[95\%, 99\%]$	**0.44**	**0.44**	0.16	0.05	**0.72**	**0.55**	**0.53**	**0.41**	-0.11	0.30	**0.64**	**0.29**
$[99\%, 100\%]$	**0.24**	**0.36**	0.01	-0.05	**0.20**	0.12	**0.24**	**0.50**	**0.25**	-0.01	**0.30**	**0.16**
$[0, 95\%]$	**0.54**	**0.66**	**0.33**	**0.32**	**0.91**	**0.47**	**0.63**	**0.79**	**0.25**	**0.44**	**0.89**	**0.39**
$[0, 99\%]$	**0.50**	**0.47**	**0.26**	**0.17**	**0.87**	**0.56**	**0.63**	**0.62**	0.14	**0.35**	**0.84**	**0.44**
All firms	**0.49**	**0.38**	0.13	0.16	**0.77**	**0.41**	**0.64**	**0.57**	0.08	**0.30**	**0.75**	**0.34**

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; recently listed firms are included; scaled by trend value of assets; '71-'06 sample; group investment is used as the cyclical indicator instead of corporate GDP.

Table 27: Co-movement of equity and debt - level approach

Size classes	**Sale of stock**			**Δ in equity and**			**Net sale of stock**			**Δ in equity* and**		
	LT debt			**Δ in liabilities**			**Net LT debt**			**Δ Total Debt**		
	−1	0	1	−1	0	1	−1	0	1	−1	0	1
[0, 25%]	0.17	**0.43**	**0.52**	**0.29**	**0.61**	**0.67**	0.12	**0.39**	**0.53**	0.20	**0.45**	**0.60**
[25%, 50%]	**0.28**	**0.53**	**0.57**	**0.43**	**0.63**	**0.60**	0.17	**0.49**	**0.66**	**0.38**	**0.54**	**0.57**
[50%, 75%]	0.16	**0.54**	**0.65**	**0.42**	**0.47**	**0.37**	0.00	**0.32**	**0.58**	0.27	**0.34**	**0.39**
[75%, 90%]	0.19	**0.51**	**0.58**	0.38	**0.40**	**0.37**	-0.22	-0.29	**-0.24**	-0.24	-0.03	**0.24**
[90%, 95%]	0.34	**0.44**	**0.47**	0.52	**0.45**	**0.22**	-0.27	-0.46	**-0.56**	0.37	0.18	-0.06
[95%, 99%]	-0.10	-0.04	-0.08	0.17	0.12	-0.08	0.10	-0.17	**-0.40**	0.40	0.27	0.03
[99%, 100%]	0.08	**0.33**	0.21	**0.66**	**0.56**	0.22	**0.48**	0.20	-0.07	**0.73**	**0.44**	0.03
[0, 95%]	0.24	**0.51**	**0.60**	**0.44**	**0.48**	**0.41**	-0.09	-0.05	0.08	-0.37	-0.24	-0.02
[0, 99%]	0.07	0.30	**0.39**	0.32	0.31	**0.22**	0.01	-0.11	-0.18	**0.52**	**0.32**	0.07
All firms	0.03	0.22	0.22	0.44	0.34	0.12	0.17	-0.01	-0.17	**0.62**	**0.39**	0.05

Table 28: Co-movement of equity and debt - flow approach

Size classes	**Sale of stock**			**Δ in equity and**			**Net sale of stock**			**Δ in equity* and**		
	LT debt			**Δ in liabilities**			**Net LT debt**			**Δ Total Debt**		
	−1	0	1	−1	0	1	−1	0	1	−1	0	1
[0, 25%]	0.22	**0.19**	0.06	0.23	**0.34**	**0.14**	0.22	**0.14**	0.15	0.21	0.07	0.11
[25%, 50%]	-0.05	**0.21**	0.25	0.05	**0.22**	0.10	-0.08	0.12	**0.35**	0.09	**0.13**	0.12
[50%, 75%]	-0.10	**0.24**	**0.32**	0.01	0.11	0.07	**-0.21**	-0.12	**0.27**	0.04	-0.04	0.09
[75%, 90%]	0.09	**0.29**	**0.27**	-0.11	-0.14	0.10	-0.10	**-0.40**	**-0.27**	-0.01	**-0.23**	0.00
[90%, 95%]	**0.33**	**0.36**	0.20	0.32	**0.22**	-0.01	-0.10	**-0.35**	**-0.53**	0.04	-0.06	**-0.27**
[95%, 99%]	**0.29**	0.23	-0.17	0.16	0.06	**-0.24**	**0.27**	-0.17	**-0.42**	0.18	-0.00	-0.16
[99%, 100%]	**0.13**	**0.57**	0.13	**0.30**	**0.33**	**-0.24**	0.14	**0.12**	-0.15	**0.38**	**0.25**	**-0.28**
[0, 95%]	0.22	**0.24**	**0.34**	0.11	0.07	0.09	-0.11	**-0.37**	-0.09	0.13	-0.08	-0.02
[0, 99%]	0.24	0.18	0.09	0.05	-0.00	-0.04	-0.02	**-0.52**	**-0.56**	0.08	-0.15	**-0.12**
All firms	0.24	0.17	-0.04	0.18	0.06	-0.19	0.02	**-0.47**	**-0.57**	0.28	0.00	**-0.29**

Notes: Tables report correlation coefficients; coefficients significant at the 5% level are in bold; Δ equity* is the net change in equity, Δ equity, minus dividends; scaled by trend value of assets; '71-'06 sample.

Table 29: Panel regression results - *scaled by capital*

Regressand	$\frac{\Delta E}{K}$	$\frac{\Delta L}{K}$	$\frac{RE}{K}$	$\frac{I}{K}$	$\frac{\Delta A}{K}$	$\frac{\Delta E}{K}$	$\frac{\Delta L}{K}$	$\frac{RE}{K}$	$\frac{I}{K}$	$\frac{\Delta A}{K}$	$\frac{\Delta E}{K}$	$\frac{\Delta L}{K}$	$\frac{RE}{K}$	$\frac{I}{K}$	$\frac{\Delta A}{K}$
						regression continued					regression continued				
Regressors	Y^c					$\frac{CF}{K}$					Q				
$[0, 25\%]$	24.822	24.869	-17.738	4.996	60.371	-0.193	0.113	0.368	0.032	0.187	0.597	0.179	0.015	0.061	0.959
	6.213	6.225	-4.440	1.251	15.112	-33.699	19.723	64.231	5.545	32.638	95.122	28.524	2.420	9.792	152.782
	2.88	*3.51*	*-2.96*	*3.75*	*4.02*	*-7.86*	*6.08*	*17.87*	*11.93*	*4.56*	*22.10*	*10.09*	*0.87*	*19.94*	*22.68*
$[25\%, 50\%]$	34.091	50.049	16.238	10.291	108.663	0.027	0.177	0.315	0.031	0.531	0.444	0.225	0.106	0.079	0.860
	8.534	12.528	4.065	2.576	27.201	3.190	20.970	37.368	3.678	63.082	51.826	26.230	12.379	9.284	100.525
	5.61	*8.76*	*3.76*	*10.03*	*10.06*	*0.90*	*7.43*	*13.93*	*9.04*	*10.34*	*15.20*	*10.73*	*5.75*	*24.18*	*18.60*
$[50\%, 75\%]$	12.700	35.555	4.029	8.759	57.980	0.144	0.227	0.233	0.052	0.635	0.277	0.253	0.145	0.084	0.706
	3.179	8.900	1.009	2.192	14.513	11.787	18.646	19.108	4.302	52.093	28.459	25.976	14.942	8.622	72.576
	3.07	*7.08*	*1.28*	*11.16*	*6.87*	*3.79*	*6.65*	*7.17*	*12.85*	*9.70*	*9.73*	*11.48*	*7.66*	*24.30*	*15.37*
$[75\%, 90\%]$	13.854	40.792	2.808	7.820	67.485	0.240	0.434	0.250	0.059	1.058	0.134	0.106	0.077	0.050	0.323
	3.468	10.211	0.703	1.958	16.893	15.499	27.971	16.110	3.834	68.231	14.106	11.174	8.091	5.245	34.074
	3.51	*7.00*	*0.84*	*9.17*	*7.22*	*4.15*	*7.83*	*5.06*	*7.82*	*10.85*	*4.82*	*4.98*	*3.67*	*13.25*	*7.63*
$[90\%, 95\%]$	5.647	42.744	-2.697	8.498	58.780	0.141	0.427	0.310	0.076	1.098	0.040	0.046	0.018	0.024	0.079
	1.413	10.700	-0.675	2.127	14.714	6.002	18.134	13.180	3.237	46.631	4.745	5.457	2.137	2.913	9.363
	0.94	*4.71*	*-0.51*	*6.78*	*3.86*	*1.12*	*3.58*	*2.61*	*5.84*	*4.49*	*1.44*	*1.91*	*0.86*	*5.12*	*1.72*
$[95\%, 99\%]$	3.927	20.937	7.156	4.638	33.375	0.046	0.444	0.506	0.072	1.086	0.053	0.037	0.023	0.004	0.103
	0.983	5.241	1.791	1.161	8.354	1.781	17.262	19.684	2.800	42.220	7.457	5.200	3.229	0.609	14.485
	0.53	*2.47*	*2.19*	*4.51*	*2.24*	*0.38*	*3.16*	*4.72*	*6.35*	*3.95*	*2.31*	*1.84*	*1.63*	*1.47*	*2.38*
$[99\%, 100\%]$	15.957	38.070	10.243	7.203	59.987	0.619	0.592	-0.193	0.064	0.994	-0.033	0.003	0.032	0.006	0.011
	3.994	9.530	2.564	1.803	15.016	21.298	20.360	-6.643	2.214	34.177	-6.138	0.573	5.917	1.185	1.998
	1.56	*2.70*	*1.34*	*5.14*	*2.72*	*2.61*	*3.49*	*-0.83*	*4.54*	*2.66*	*-1.07*	*0.09*	*1.30*	*1.66*	*0.18*
Observations											63684	64252	63684	63643	64252
$\mathbf{R}^2$											0.227	0.033	0.257	0.129	0.106

Notes: The top number in each cell gives in percentage points the response when Y increases from the lowest (i.e., 0) to the highest (i.e., 1) value or when $\frac{CF}{A}$ (or Q) increases with 1 ppt; the second number reports the effect in percentage points of a one-standard deviation change in the regressor; the number in the bottom row in italics is the t-statistic; '80 - '06 sample; scaled by firm capital instead of firm assets.

Table 30: Panel regression results - *'71-'06*

Regressand	$\frac{\Delta E}{A}$	$\frac{\Delta L}{A}$	$\frac{RE}{A}$	$\frac{I}{A}$	$\frac{\Delta A}{A}$	$\frac{\Delta E}{A}$	$\frac{\Delta L}{A}$	$\frac{RE}{A}$	$\frac{I}{A}$	$\frac{\Delta A}{A}$	$\frac{\Delta E}{A}$	$\frac{\Delta L}{A}$	$\frac{RE}{A}$	$\frac{I}{A}$	$\frac{\Delta A}{A}$
						regression continued					regression continued				
Regressors	Y^c					$\frac{CF}{A}$					Q				
	2.725	8.721	-0.662	2.312	11.522	-0.347	0.093	0.374	0.055	0.104	0.073	0.022	-0.000	0.012	0.105
$[0, 25\%]$	0.682	2.183	-0.166	0.579	2.884	-7.269	1.947	7.829	1.150	2.174	13.203	3.964	-0.086	2.121	18.879
	4.03	*14.06*	*-1.59*	*10.61*	*10.68*	*-18.37*	*6.67*	*28.75*	*14.71*	*4.03*	*30.45*	*13.12*	*-0.35*	*21.05*	*31.67*
	2.552	7.594	1.074	2.291	11.762	-0.079	0.219	0.217	0.090	0.356	0.041	0.022	0.017	0.012	0.083
$[25\%, 50\%]$	0.639	1.901	0.269	0.573	2.944	-0.958	2.648	2.624	1.083	4.311	4.944	2.661	2.085	1.406	9.914
	5.89	*14.80*	*3.87*	*11.93*	*15.44*	*-3.96*	*12.67*	*14.17*	*18.22*	*12.39*	*16.14*	*11.43*	*12.69*	*21.83*	*23.56*
	0.459	6.224	0.593	1.865	7.744	0.076	0.316	0.160	0.120	0.584	0.028	0.026	0.023	0.013	0.076
$[50\%, 75\%]$	0.115	1.558	0.149	0.467	1.938	0.679	2.830	1.433	1.076	5.234	2.906	2.692	2.423	1.409	7.930
	1.51	*13.42*	*2.55*	*10.97*	*12.16*	*3.31*	*14.74*	*8.34*	*18.45*	*17.17*	*10.34*	*12.01*	*14.55*	*21.14*	*20.09*
	0.246	5.863	0.346	1.509	7.026	0.130	0.423	0.189	0.166	0.748	0.010	0.015	0.016	0.009	0.042
$[75\%, 90\%]$	0.061	1.468	0.087	0.378	1.759	0.992	3.230	1.442	1.266	5.713	1.037	1.606	1.689	0.997	4.456
	0.81	*10.82*	*1.29*	*7.06*	*9.70*	*4.71*	*13.30*	*6.60*	*13.86*	*15.30*	*3.91*	*6.34*	*8.18*	*11.26*	*10.35*
	0.801	5.732	0.978	1.373	7.764	0.021	0.551	0.220	0.240	0.846	0.002	0.005	0.008	0.003	0.014
$[90\%, 95\%]$	0.201	1.435	0.245	0.344	1.943	0.128	3.329	1.331	1.450	5.111	0.214	0.585	0.979	0.409	1.690
	1.34	*6.19*	*2.02*	*4.68*	*6.07*	*0.46*	*8.78*	*5.19*	*11.86*	*9.68*	*0.65*	*1.55*	*4.39*	*3.88*	*2.80*
	-0.500	2.103	0.670	0.745	2.466	0.080	0.581	0.342	0.271	0.958	0.002	0.004	0.003	0.001	0.009
$[95\%, 99\%]$	-0.125	0.526	0.168	0.187	0.617	0.458	3.343	1.969	1.561	5.513	0.288	0.621	0.475	0.110	1.307
	-0.82	*2.28*	*1.74*	*2.55*	*1.81*	*1.42*	*9.26*	*4.37*	*9.09*	*6.78*	*1.19*	*1.98*	*2.57*	*1.07*	*2.67*
	-0.619	5.127	0.955	0.643	5.579	0.186	0.660	0.327	0.283	1.167	-0.001	0.002	0.001	0.001	0.001
$[99\%, 100\%]$	-0.155	1.283	0.239	0.161	1.397	1.013	3.589	1.776	1.539	6.348	-0.217	0.443	0.148	0.270	0.102
	-0.88	*3.49*	*1.65*	*1.50*	*2.91*	*1.76*	*5.27*	*4.02*	*7.38*	*5.92*	*-0.68*	*0.80*	*0.63*	*1.91*	*0.12*
Observations											82504	83114	82504	82362	83114
$\mathbf{R}^2$											0.303	0.016	0.264	0.051	0.080

Notes: The top number in each cell gives in percentage points the response when Y increases from the lowest (i.e., 0) to the highest (i.e., 1) value or when $\frac{CF}{A}$ (or Q) increases with 1 ppt; the second number reports the effect in percentage points of a one-standard deviation change in the regressor; the number in the bottom row in italics is the t-statistic; scaled by assets; '71-'06 instead of the '80-'06 sample.

Table 31: Panel regression results - *no winsorizing of data*

Regressand	$\frac{\Delta E}{A}$	$\frac{\Delta L}{A}$	$\frac{RE}{A}$	$\frac{I}{A}$	$\frac{\Delta A}{A}$	$\frac{\Delta E}{A}$	$\frac{\Delta L}{A}$	$\frac{RE}{A}$	$\frac{I}{A}$	$\frac{\Delta A}{A}$	$\frac{\Delta E}{A}$	$\frac{\Delta L}{A}$	$\frac{RE}{A}$	$\frac{I}{A}$	$\frac{\Delta A}{A}$
						regression continued					regression continued				
Regressors	Y^c					$\frac{CF}{A}$					Q				
	11.537	12.133	-0.335	2.278	23.370	-0.970	0.183	0.858	0.010	0.071	0.050	0.076	0.023	0.006	0.150
$[0, 25\%]$	2.888	3.037	-0.084	0.570	5.850	-39.530	7.449	34.949	0.388	2.879	16.168	24.580	7.531	1.994	48.244
	3.02	*6.07*	*-0.13*	*4.43*	*6.63*	*-1.62*	*1.19*	*1.50*	*1.42*	*0.35*	*1.18*	*1.14*	*0.60*	*3.75*	*1.84*
	4.161	10.322	-0.175	2.656	14.295	0.024	0.150	0.056	0.037	0.228	0.041	0.020	0.014	0.008	0.075
$[25\%, 50\%]$	1.042	2.584	-0.044	0.665	3.578	0.357	2.258	0.850	0.558	3.431	5.908	2.917	2.079	1.122	10.886
	4.17	*6.16*	*-0.11*	*9.98*	*11.69*	*0.28*	*2.45*	*0.89*	*4.24*	*3.05*	*4.43*	*1.93*	*2.68*	*8.14*	*5.06*
	3.180	6.139	0.456	1.774	9.778	0.064	0.790	-0.672	0.028	0.200	0.112	0.016	0.007	0.007	0.135
$[50\%, 75\%]$	0.796	1.537	0.114	0.444	2.447	0.836	10.376	-8.826	0.366	2.629	14.772	2.143	0.901	0.923	17.732
	2.12	*3.77*	*0.91*	*7.47*	*4.26*	*1.98*	*4.05*	*-2.63*	*2.06*	*3.81*	*1.93*	*1.97*	*0.60*	*3.75*	*2.61*
	1.221	6.690	-0.299	1.326	7.610	0.604	0.447	-0.003	0.128	1.050	0.000	0.000	0.005	0.000	0.004
$[75\%, 90\%]$	0.306	1.675	-0.075	0.332	1.905	5.350	3.965	-0.025	1.137	9.308	-0.047	-0.031	1.147	0.026	1.070
	1.33	*7.95*	*-0.61*	*4.52*	*5.97*	*1.98*	*5.38*	*-0.04*	*4.69*	*3.66*	*-0.04*	*-0.06*	*1.37*	*0.15*	*0.98*
	2.018	6.760	-0.931	0.905	7.797	0.034	0.594	0.253	0.242	0.890	0.001	0.001	0.001	0.000	0.002
$[90\%, 95\%]$	0.505	1.692	-0.233	0.227	1.952	0.208	3.629	1.545	1.479	5.438	0.119	0.117	0.162	0.050	0.410
	1.60	*4.20*	*-0.64*	*2.38*	*4.58*	*0.35*	*4.93*	*2.49*	*8.43*	*6.79*	*0.25*	*0.21*	*0.43*	*0.46*	*0.53*
	-0.458	1.071	-0.001	-0.335	0.663	0.425	0.367	0.081	0.118	0.871	0.003	0.003	0.002	0.001	0.008
$[95\%, 99\%]$	-0.115	0.268	0.000	-0.084	0.166	2.903	2.507	0.553	0.805	5.946	0.543	0.665	0.325	0.195	1.532
	-0.43	*0.83*	*0.00*	*-0.53*	*0.33*	*1.86*	*2.23*	*0.99*	*1.88*	*3.40*	*1.11*	*1.76*	*1.66*	*1.12*	*2.19*
	-0.525	4.766	0.321	-0.009	4.529	0.290	0.683	0.234	0.253	1.200	-0.001	-0.001	0.000	0.000	-0.001
$[99\%, 100\%]$	-0.131	1.193	0.080	-0.002	1.134	1.580	3.723	1.277	1.378	6.544	-0.324	-0.451	-0.019	0.037	-0.798
	-0.57	*3.00*	*0.48*	*-0.02*	*2.15*	*2.41*	*5.11*	*2.82*	*6.60*	*5.75*	*-0.93*	*-0.82*	*-0.29*	*0.66*	*-0.99*
Observations											82504	83114	82504	82362	83114
$\mathbf{R}^2$											0.107	0.026	0.163	0.007	0.042

Notes: The top number in each cell gives in percentage points the response when Y increases from the lowest (i.e., 0) to the highest (i.e., 1) value or when $\frac{CF}{A}$ (or Q) increases with 1 ppt; the second number reports the effect in percentage points of a one-standard deviation change in the regressor; the number in the bottom row in italics is the t-statistic; scaled by firm assets; '71 - '06 sample.

Table 32: Panel regression results - *estimated in first differences*

Regressand	$\frac{\Delta E}{A}$	$\frac{\Delta L}{A}$	$\frac{RE}{A}$	$\frac{I}{A}$	$\frac{\Delta A}{A}$	$\frac{\Delta E}{A}$	$\frac{\Delta L}{A}$	$\frac{RE}{A}$	$\frac{I}{A}$	$\frac{\Delta A}{A}$	$\frac{\Delta E}{A}$	$\frac{\Delta L}{A}$	$\frac{RE}{A}$	$\frac{I}{A}$	$\frac{\Delta A}{A}$
						regression continued					regression continued				
Regressors	Y^c					$\frac{CF}{A}$					Q				
	2.744	13.461	1.569	3.802	19.635	-0.252	0.149	-0.164	0.018	-0.364	0.073	0.022	-0.002	0.010	0.113
$[0, 25\%]$	0.687	3.369	0.393	0.952	4.915	-5.283	3.116	-3.432	0.378	-7.634	13.183	4.009	-0.401	1.874	20.347
	2.90	*14.19*	*2.93*	*12.13*	*13.28*	*-10.27*	*8.32*	*-11.17*	*4.49*	*-11.24*	*20.10*	*9.40*	*-1.25*	*15.52*	*24.45*
	2.222	9.237	1.534	2.800	13.432	0.016	0.272	-0.309	0.043	-0.025	0.034	0.025	0.017	0.009	0.079
$[25\%, 50\%]$	0.556	2.312	0.384	0.701	3.362	0.190	3.287	-3.742	0.515	-0.299	4.020	3.041	1.998	1.086	9.422
	3.53	*12.05*	*4.49*	*10.91*	*12.36*	*0.63*	*12.55*	*-18.99*	*8.76*	*-0.69*	*9.18*	*9.44*	*9.29*	*15.23*	*17.05*
	0.694	6.270	1.722	2.032	9.125	0.156	0.415	-0.390	0.066	0.231	0.019	0.031	0.024	0.012	0.071
$[50\%, 75\%]$	0.174	1.569	0.431	0.509	2.284	1.400	3.722	-3.498	0.593	2.075	1.970	3.262	2.533	1.311	7.469
	1.48	*-8.94*	*5.89*	*8.87*	*9.63*	*5.47*	*15.21*	*-18.37*	*12.15*	*6.03*	*4.63*	*10.11*	*11.60*	*17.15*	*13.25*
	0.304	4.300	1.495	1.485	6.733	0.206	0.581	-0.340	0.087	0.474	0.006	0.025	0.019	0.011	0.054
$[75\%, 90\%]$	0.076	1.076	0.374	0.372	1.685	1.575	4.436	-2.597	0.667	3.619	0.625	2.669	1.992	1.176	5.800
	0.59	*4.82*	*4.23*	*4.93*	*5.46*	*5.73*	*12.57*	*-9.49*	*9.53*	*7.74*	*1.14*	*6.11*	*6.65*	*10.50*	*7.77*
	0.123	5.555	3.240	1.827	9.009	0.240	0.823	-0.431	0.122	0.752	-0.005	0.014	0.018	0.005	0.030
$[90\%, 95\%]$	0.031	1.391	0.811	0.457	2.255	1.448	4.972	-2.605	0.740	4.544	-0.566	1.757	2.267	0.680	3.681
	0.13	*3.89*	*4.89*	*4.71*	*4.55*	*2.81*	*7.79*	*-5.85*	*7.37*	*5.87*	*-0.87*	*2.86*	*5.54*	*4.83*	*3.55*
	0.810	0.885	2.075	-0.041	3.730	0.319	0.852	-0.333	0.124	0.761	0.003	0.020	0.008	0.003	0.031
$[95\%, 99\%]$	0.203	0.222	0.519	-0.010	0.934	1.836	4.901	-1.917	0.713	4.377	0.455	2.930	1.091	0.371	4.502
	0.88	*0.59*	*3.73*	*-0.10*	*1.78*	*2.46*	*6.10*	*-3.30*	*6.31*	*4.08*	*0.93*	*3.75*	*2.75*	*2.25*	*3.98*
	0.760	4.196	2.424	1.423	5.787	0.733	1.524	-0.161	0.184	2.097	-0.003	0.000	0.004	0.001	-0.001
$[99\%, 100\%]$	0.190	1.050	0.607	0.356	1.449	3.989	8.290	-0.877	1.000	11.403	-0.545	-0.042	0.812	0.288	-0.285
	0.52	*1.48*	*2.56*	*2.22*	*1.49*	*3.48*	*4.36*	*-1.69*	*4.35*	*4.52*	*-0.48*	*-0.02*	*1.12*	*0.70*	*-0.12*
Observations											75203	75776	75203	74934	75776
$\mathbf{R}^2$											0.105	0.076	0.053	0.039	0.149

Notes: The top number in each cell gives in percentage points the response when Y increases from the lowest (i.e., 0) to the highest (i.e., 1) value or when $\frac{CF}{A}$ (or Q) increases with 1 ppt; the second number reports the effect in percentage points of a one-standard deviation change in the regressor; the number in the bottom row in italics is the t-statistic; scaled by firm assets; '71 - '06 sample.

Table 33: Panel regression results - *recently listed firms included*

Regressand	$\frac{\Delta E}{A}$	$\frac{\Delta L}{A}$	$\frac{RE}{A}$	$\frac{I}{A}$	$\frac{\Delta A}{A}$	$\frac{\Delta E}{A}$	$\frac{\Delta L}{A}$	$\frac{RE}{A}$	$\frac{I}{A}$	$\frac{\Delta A}{A}$	$\frac{\Delta E}{A}$	$\frac{\Delta L}{A}$	$\frac{RE}{A}$	$\frac{I}{A}$	$\frac{\Delta A}{A}$
						regression continued					regression continued				
Regressors	Y^c					$\frac{CF}{A}$					Q				
	10.662	10.103	-4.156	2.707	16.486	-0.651	0.022	0.491	0.038	-0.093	0.122	0.025	-0.014	0.014	0.133
$[0, 25\%]$	2.680	2.539	-1.045	0.680	4.143	-18.437	0.615	13.920	1.069	-2.638	26.927	5.572	-3.114	2.983	29.280
	7.12	*13.02*	*-6.95*	*9.57*	*9.36*	*-19.22*	*1.49*	*31.89*	*9.31*	*-2.66*	*26.89*	*14.57*	*-8.71*	*22.18*	*27.73*
	7.174	8.298	-1.182	2.034	14.793	-0.166	0.166	0.256	0.070	0.252	0.077	0.027	0.008	0.013	0.114
$[25\%, 50\%]$	1.803	2.086	-0.297	0.511	3.718	-2.334	2.330	3.598	0.984	3.537	11.206	3.915	1.198	1.920	16.492
	9.14	*14.65*	*-3.56*	*9.12*	*14.12*	*-5.75*	*9.65*	*15.36*	*13.94*	*7.70*	*18.69*	*15.34*	*5.78*	*24.18*	*25.19*
	3.003	6.834	-0.105	1.771	10.268	0.096	0.285	0.137	0.112	0.562	0.046	0.028	0.018	0.014	0.094
$[50\%, 75\%]$	0.755	1.717	-0.026	0.445	2.581	0.961	2.844	1.371	1.119	5.620	5.441	3.328	2.117	1.593	10.990
	5.93	*13.28*	*-0.40*	*9.59*	*12.69*	*3.02*	*13.58*	*6.98*	*17.38*	*13.85*	*10.33*	*12.95*	*10.28*	*23.63*	*18.36*
	1.089	6.317	-0.211	1.471	7.743	0.244	0.422	0.126	0.146	0.801	0.018	0.020	0.013	0.010	0.052
$[75\%, 90\%]$	0.274	1.587	-0.053	0.370	1.946	2.007	3.473	1.040	1.205	6.591	2.073	2.214	1.478	1.126	5.933
	2.52	*10.97*	*-0.72*	*6.52*	*9.09*	*5.53*	*13.10*	*4.45*	*12.34*	*13.27*	*3.76*	*7.29*	*5.77*	*10.84*	*8.80*
	1.748	5.428	-0.260	1.345	7.539	0.195	0.494	0.230	0.212	0.961	0.003	0.005	0.008	0.003	0.014
$[90\%, 95\%]$	0.439	1.364	-0.065	0.338	1.895	1.259	3.185	1.485	1.366	6.198	0.324	0.642	1.028	0.399	1.804
	2.14	*5.77*	*-0.55*	*4.46*	*5.15*	*2.17*	*8.60*	*5.01*	*9.55*	*9.18*	*0.84*	*1.45*	*4.59*	*3.34*	*2.25*
	0.019	2.864	0.906	0.831	3.549	0.237	0.631	0.250	0.246	1.095	0.002	0.003	0.003	0.000	0.008
$[95\%, 99\%]$	0.005	0.720	0.228	0.209	0.892	1.438	3.826	1.513	1.492	6.640	0.341	0.403	0.486	0.061	1.202
	0.03	*3.02*	*2.29*	*2.80*	*2.49*	*2.10*	*8.91*	*3.08*	*8.09*	*6.21*	*0.79*	*1.15*	*2.62*	*0.56*	*1.68*
	0.188	5.642	0.249	0.311	6.178	0.197	0.671	0.274	0.248	1.169	0.001	0.003	-0.001	0.001	0.002
$[99\%, 100\%]$	0.047	1.418	0.063	0.078	1.553	1.081	3.672	1.500	1.358	6.398	0.247	0.650	-0.233	0.193	0.304
	0.27	*3.30*	*0.38*	*0.74*	*2.80*	*1.98*	*5.46*	*2.62*	*6.06*	*5.19*	*0.72*	*1.02*	*-0.82*	*1.45*	*0.30*
Observations											92681	93457	92681	92607	93457
$\mathbf{R}^2$											0.304	0.019	0.362	0.040	0.094

Notes: The top number in each cell gives in percentage points the response when Y increases from the lowest (i.e., 0) to the highest (i.e., 1) value or when $\frac{CF}{A}$ (or Q) increases with 1 ppt; the second number reports the effect in percentage points of a one-standard deviation change in the regressor; the number in the bottom row in italics is the t-statistic; scaled by firm assets; '71 - '06 sample.