Financing and Investment Flexibility Intrinsic in Revolving Credit Loans

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Abstract

Revolving credit loans allow flexibility in the renegotiation of the magnitude, the maturity, and the pricing of the loan over time. Thus, revolving credit loans allow the borrower to more precisely match the funds required for the firm's investment opportunities and to market-time by borrowing at times when financing costs are attractive. Consistent with the renegotiation flexibility provided by revolving credit loans, our empirical results show that these loans are positively valued by the market both initially and over the longer term. We conclude that revolving credit loans provide firms the financial flexibility to better match their financing and investment decisions.

JEL classification: G14; G21

Keywords: Bank loans; Revolving credit; Long-run performance

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I. INTRODUCTION

Securities issuance impacts the capital structure of the firm. However, equity and debt issues are characterized by adverse market reaction in both the short- and long-run. In contrast, while financing provided by banks also change capital structure, bank loans are generally viewed favorably by the market. In particular, revolving credit loans appear to create the greatest value for the borrowing firm. Revolving credit loans allow managers to opportunistically renegotiate the magnitude, the maturity, and the pricing of the loans. The option to renegotiate provides flexibility in financing and investment decisions as well as in corporate liquidity management.

Billett, Flannery and Garfinkel (1995) report bank loans are unique because borrowers' experience positive abnormal short-term returns associated with the announcement of a loan. This market reaction is consistent with investors' believing the loan creates value for the borrower. However, in their subsequent research, Billett, Flannery and Garfinkel (2006) report that the market's initial response is systematically wrong as the returns over the three years following the announcement are significantly negative. This suggests that the market is disappointed with the performance of the company following the loan, even though they report that the borrowers' operating performance improved after the loan.

Because Lummer and McConnell (1989) and Gasbarro et al (2004) show that the structure of the loan impacts the market's reaction to the loan announcement, revolving credit loans, term loans, and hybrid loans are used to examine short- and long-term abnormal returns. Revolving credit loans have embedded options that allow managers to behave opportunistically. In contrast, term loans' size, interest rate and maturity are negotiated at its origination. Hybrid loans contain elements of both

revolving credit and term loans. More specifically, revolving credit loans allow more flexibility in the renegotiation of magnitude, maturity, and pricing than do term loans, and, hence, facilitate market timing by firms.[1] Hence, loan structures that provide the most flexibility should be recognized favorably by generating positive long-run returns. Since revolving credit has an embedded option to renegotiate, the increased flexibility should be valued by the market.

A second issue involves the impact of earnings announcements on firms' market returns pre- and post- security issues. Prior to security issuance, Denis and Sarin (2001) report positive reactions to the earnings announcements. However, Denis and Sarin (2001), Brous, Datar and Kini (2001), and Billett, Flannery, and Garfinkel (2006) report that subsequent to a security issuance, earnings announcements have been viewed unfavorably. Billett, Flannery, and Garfinkel (2006) also examine the volatility of returns associated with earnings announcements subsequent to the acquisition of a bank loan. Surprisingly, return volatility appears to increase, inconsistent with the view that banks' screening and monitoring reduce information asymmetry. To date, the impact of earnings announcements associated with firms acquiring a revolving credit, a term loan or a hybrid loan has not been examined.

We provide evidence that different types of syndicated loans are valued differently. Our results indicate that the market values revolving credit loans, initially and over the long run, more highly than term loans and hybrid loans. These results are consistent with the asymmetric information and market timing explanations found

[1]Although many term loans have adjustable interest rates, their overall flexibility is much less than revolving credit loans.

in the finance literature. In addition, the results show that market reaction is more positive for the earnings announcements of firms with revolving credit loans compared to those carrying term loans or hybrid loans.

II. LITERATURE REVIEW

A. Evidence on short- and long-run issuer performance

A number of studies have examined the short-run share price response to the announcements of security issues. For both equity and debt issues either a negative or insignificant share price reaction is observed. Bank loans, however, appear to be unique since they elicit a positive stock price reaction. This uniqueness has been attributed to the banks' screening and monitoring expertise in mitigating information asymmetry.

Fama (1985) suggests that small firms without access to external debt may find the contracting costs of bank loans to be lower than external debt. Also, he suggests that a bank loan signals creditworthiness and that reduces the costs associated with other forms of financing. James (1987), Lummer and McConnell (1989), Best and Zhang (1993), Billett, Flannery and Garfinkel (1995), and Gasbarro et al. (2004) focus on the short-run share price response to the announcement of bank loans. They report that bank loan announcements favorably impact the borrowers' equity value. These results are consistent with bank loans being unique. More recently, Fields et al. (2006) report that the positive market response to loan announcements has disappeared in recent years although a banking relation may still benefit the smaller, high credit risk firms.

However, a number of studies have reported a puzzling negative performance in the long run following a security issue.[2] Surprisingly, the issuing firms' stock price reacts negatively or insignificantly to equity issues, debt issues and bank loans. The uniqueness of bank loans in the short run appears to evaporate in the long run. This is surprising because banks' screening and monitoring expertise in mitigating information asymmetry should still be present.

Spiess and Affleck-Graves (1999) examine the performance of firms that issue straight and convertible debt. They find that the pre-issue returns of firms that issued both types of debt outperform their benchmark, with the convertible issues being statistically significant. However, the post-issue returns for both types of securities underperform the benchmark.

Eckbo, Masulis and Norli (2000) report a negative but insignificant stock price reaction to both convertible and straight debt offerings. Billett, Flannery, and Garfinkel (2006) examine the impact of bank loans on long-term performance and report significantly negative excess stock returns for three years following a loan announcement. Elsas, Flannery and Garfinkel (2008) consider simultaneously the investment and financing decision and examine stock price reaction to debt and equity issues. They find evidence that investments funded by internal funds do not generate underperformance while debt financing leads to the most pronounced long-run underperformance. However, they acknowledge that the maturity structure impacts monitoring incentives and accordingly may influence the firm's performance subsequent to large investments. Eckbo, Masulis and Norli (2006) contend that underperformance following a straight debt issue is puzzling since debt is

[2] See Eckbo, Masulis and Norli (2006) for a comprehensive summary of stock price reactions to security offerings.

characterized by low adverse selection, reflecting managers' optimistic beliefs about a firm's future earning prospects.

Lummer and McConnell (1989) classify loans based on their structure and find that the renegotiation feature of revolving credit loans is positively valued by the market. Chemmanur and Fulghieri (1994) contend that banks' ability to renegotiate debt can avoid inefficient liquidation. Hadlock and James (2002) examine bank loans to determine whether they provide financial slack. Their results suggest that asymmetric information motivates undervalued firms to seek bank loans rather than enter the public debt or equity markets.

In addition, revolving credit loans provide the ability to match financing and investment decisions, but also to manage corporate liquidity. Sufi (2007) examines the factors associated with corporate liquidity management. He explains that many debt covenants are based on adequate cash flow and reports that bank lines of credit are more likely to be used by firms with high cash flow which mitigates the need for a liquidity buffer. Conversely, a liquidity buffer is needed by firms with low expected cash flows. Ostensibly, firms select the most flexible type of debt to cover short-term variations in funding needs, and the greater flexibility provided by revolving credit loans should be valued more highly.

B. Earnings Announcements

Revisions in investors' expectations concerning future earnings influence the pricing of both debt and equity. Recent studies have examined the relation between equity offerings and abnormal returns associated with earnings announcements. Denis and Sarin (2001) report positive excess returns in the four quarterly earnings announcements prior to a seasoned equity offering, but primarily negative (though not

generally significant) excess returns for the 20 quarters post-issue. Brous, Datar and Kini (2001) also report negative excess returns associated with earnings announcements following seasoned equity offerings, but when they adjust for non-announcement period returns, they find that the market's negative reaction is not due to the earnings announcement. Baker and Wurgler (2002) examine the impact of earnings announcements on management's decision to issue new equity. They suggest that if earnings announcements are viewed too favorably by the markets, then managers would be encouraged to seek additional equity because they have an opportunity to sell shares at a premium.

The relation between earnings announcements subsequent to a debt issue has also been examined. Billett, Flannery, and Garfinkel (2006) test whether the announcement of a bank loan will cause borrowers to become more transparent by examining the return volatility associated with the announcements. They argue that if a banking relation results in improved transparency, the volatility of abnormal returns should be lower after a firm announces a bank loan because of reduction in information asymmetry. Surprisingly, they report that the volatility of abnormal returns around earnings announcement dates is greater subsequent to the acquisition of the loan.

III. DATA DESCRIPTION AND METHODOLOGY

Thomson Financial Publishing's International Financing Review (IFR) is used to identify 5,465 syndicated loan announcements in the U.S. over the 1995–2000 period. The Center for Research in Security Prices (CRSP) database is screened to identify those firms with return data over 1992–2003 to allow the examination of the three-year pre- and post-announcement periods. These constraints reduce the sample

to 2,061 loan announcements, comprised of 1,551 revolving credit loans, 387 term loans and 123 hybrid loans.[3] In addition, earnings announcement dates are obtained from Compustat.

Standard event study methodology is used to examine borrowers' immediate share price response to the announcement of syndicated loans using three- and five-day event windows.[4] In addition, market-adjusted buy-and-hold abnormal returns are used to examine long-term performance. Specifically, for each loan-announcing firm, three-year pre- and post-loan announcement excess returns are examined. Next, excess returns for a five-day event window are associated with quarterly earnings announcements from 12-quarters preceding to 12-quarters subsequent to the loan announcement. For all tests, the sample is partitioned into revolving credit loans, term loans, and hybrid loans.

IV. EMPIRICAL RESULTS

A. Performance associated with announcements of syndicated loans

From Table 1 it is apparent that three years prior to the loan announcement the cumulative average abnormal returns (CAARs) of the borrowing firms are statistically significantly positive and the results are driven by both the revolving credit and term loans. This suggests the borrowing firms were performing well relative to the market and could have engaged in market timing by issuing equity if funds had been needed.

[3] The set of loan announcements used in this study are those reported in Gasbarro et al. (2004).

[4] Kothari and Warner (2006) confirm that event studies with narrow event windows that are examining market reaction with short-horizons are reliable and robust. A generalized autoregressive conditional heteroskedasticity model, GARCH (1,1), is used to accommodate time-varying systematic risk and conditional variances. The parametric t-test and, in order to avoid non-normal distribution problems, the non-parametric generalized Z test are used.

Subsequently, but still prior to the loan, apart from term loans, the CAARs were negative, but insignificant. However, the need for financing motivated the firms to acquire funds in the form of bank loans.

[Insert Table 1 about here]

Table 1 also reveals that for all holding periods except the year immediately following the announcement, CAARs are statistically significantly positive when all loans are included. Positive CAARs are observed for the very short periods of three- and five-days[5] around the announcement date and, surprisingly, and in contrast to earlier studies, for the very long holding periods of up to three years following the announcement. When the loans are partitioned on type, it is apparent that revolving credit loans are driving the overall results. The market reacts positively in the short run and the positive CAARs persist over the following three years. This is consistent with the market recognizing that revolving credit loans are being used effectively to increase shareholder wealth. The initial positive responses suggest that the market values the screening and monitoring signals provided by the lender. In addition, this indicates that the financial flexibility provided by the loans is valued. The fact that positive CAARs persist over time suggests the borrowers are creating value by investing in positive net present value projects above what the market originally anticipated and value creation is facilitated by the flexibility of the loan structure.

For term loans, a different story emerges. The initial reaction of the market is indifference. This is shown by the insignificant negative CAARs for the days around the announcement. However, over the following three years, the CAARs become strongly negative, consistent with the inflexibility of term loans and/or poorly

[5] The results for the three- and five-day window are slightly different from those reported in Gasbarro et al. (2004) because the GARCH (1,1) model is used in the present study.

performing investment choices. Hybrid loans exhibit results that vary over time. A positive reaction is observed immediately, followed by no abnormal return for the first year, but becoming increasingly positive over the last two years. We speculate that the hybrid nature of the loan allows increased flexibility to match the financing with investment needs.

The nature of the distributions of positive and negative CAARs can be inferred from the positive/negative values. For instance, for revolving credit loans, there are a greater number of negative CAARs than positive CAARs in the three- and five-day windows. However, since the mean cumulative abnormal returns are positive for these windows, the positive returns must be greater in magnitude than the negative returns. In each of the subsequent three years, the signs reverse and there are more positive than negative CAARs; however the mean CAAR is still positive. A different pattern emerges for the term loans. Here the initial ratios of positive/negative CAARs are similar to the revolving credit loans, but the positive CAARs are outweighed by negative CAARs resulting in a negative, but insignificant, cumulative abnormal return. Over the longer periods, unlike revolving credit loans, the number of negative CAARs for term loans generally outweighs the number of positive CAARs. Because hybrids have characteristics of both revolving credit and term loans, the results are mixed.[6]

B. Investors' reaction to earnings announcements of bank borrowers.

The top half of Table 2 reports the impact of earnings announcements on the borrower prior to the loan announcement, while the lower half reports the post-announcement impact. Substantial differences can be observed in market responses to

[6] The results using a value-weighted market index are virtually identical to those shown here.

the earnings announcements before and after the loan. Prior to the loan being approved, the market views the earnings announcements positively and all are statistically significant. This is consistent with earnings announcements being more positive or less negative than the market anticipates. The positive reaction to the announcements implies that the earnings these firms are reporting are viewed favorably by the market. In the pre-announcement stage the market is unable to distinguish if and what type of financing each firm will pursue and how the financial markets will accommodate their needs.

[Insert Table 2 about here]

Subsequent to the loan announcements, the market recognizes differences among the firms and reacts differently depending on the type of loan. The only earnings announcements that are statistically significant for all periods are for firms receiving revolving credit loans. Earnings announcements signal to the market past operating and financial performance, but not future investment opportunities. Firms with revolving credit loans have greater flexibility concerning future investment opportunities. Hence, their financial flexibility is better matched to their investment opportunity schedules. If investment opportunities change over time, their financing structure expands or contracts to accommodate their needs. In addition, improving financial performance may allow the borrower to renegotiate more favorable terms. In contrast, earnings announcements for firms with term loans are not as powerful a signal initially because borrowers cannot react as easily to changing circumstances. Furthermore, management may believe future performance may deteriorate, reducing their creditworthiness. Thus, they prefer to avoid revolving credit renegotiation. However, by the ninth quarter after the loan, the financing decision is relatively old

news, and earnings announcements are viewed favorably as in the years before the loan.

V. CONCLUSIONS

The results provide direct evidence on post-announcement performance of bank borrowers with different types of loans. Insights into the impact of the loan structure on the financial slack provided by bank loans are also presented. First, similar to previous studies by James (1987), Lummer and McConnell (1989), Best and Zhang (1993), Billett, Flannery, and Garfinkel (1995), and Gasbarro et al. (2004), announcements of bank loans are viewed favorably by the market as evidenced by short-term abnormal returns. However, unlike previous studies by Spiess and Affleck-Graves (1999) in the context of debt financing, and by Billett, Flannery, and Garfinkel (2006) in the context of bank financing, we find that overall, borrowing firms outperform the market over a three-year period following the loan.[7] When the data are partitioned based on the type of loan, we find the results are driven by revolving credit loans. That is, the performance of revolving credit firms is significantly greater than the market over the three years following the loan. However, the longer-term performance for firms acquiring term loans is not significantly different from the market index. The longer-term results are mixed for the firms receiving hybrid loans. These results support Chemmanur and Fulghieri

[7] Kothari and Warner (2006) indicate that numerous studies use matched-firm BHAR and Jensen-alpha as benchmarks in the determination of abnormal performances. However, long-horizon returns can depart from non-normality assumptions, exhibit cross-correlation and be characterized by higher event-induced volatility. In long-horizon event windows, selecting the appropriate risk adjusted benchmark is crucial. Small errors in risk adjustments can cause a substantial difference in quantifying the abnormal return and the selection of the return-generating model is an unresolved issue.

(1994) who contend that financial flexibility increases shareholder wealth. In addition we find support for Hadlock and James (2002) who indicate that bank loans reduce adverse selection issues and that the market values financial slack. Our findings suggest that the flexibility offered by revolving credit loans to the borrowing firm increases their shareholders' wealth because it allows the matching of financing with investment needs and increases financial slack

Prior to the loan announcement the market's reactions to the earnings announcements suggest the market was unable to differentiate between the borrowing firms because they are all strongly significantly positive. At this time, the market does not know when the firms will seek a loan, but the earnings are viewed favorably indicating a window of opportunity for the acquisition of funds. Subsequent to the loan announcement the market knows the type of loan that the banks have provided and can process the information accordingly. The earnings announcements attract significantly positive reactions for revolving credit loan firms for all three years following the loan announcement. For term loan firms, the responses are insignificant for the two years following the loan, but become significantly positive in the third year. Hybrid loans exhibit significantly positive excess returns in the first and third years only. Again, the attractiveness of revolving credit loans is shown by the reaction of the market. These results are inconsistent with those reported by Billett, Flannery, and Garfinkel (2006). However, their study covered the 1980–1989 period when interest rates were high and decreasing, while our study covers a period of lower and more stable interest rates. We suggest that the difference in results may be due, at least in part, to the very different interest rate environments. Empirical support for this conjecture is provided by Antweiler and Frank (2005) who report that

the magnitudes of the share price responses are greater in economic downturns than in expansionary periods.

The type of loan granted by the bank provides a signal to the market concerning the nature of the firm. A revolving credit loan provides greater flexibility for the firm to match the sources of funds with the characteristics of its investment opportunities. If managers are optimistic about future creditworthiness, they will request a revolving credit loan that will give them the flexibility to renegotiate terms such as size, maturity, and borrowing rates, over time. Conversely, managers with less optimistic outlooks will seek a term loan in order to lock in the funding for a longer period and defer screening and monitoring associated with a new or revised loan. A revolving credit loan has an embedded option that allows renegotiation not only if the borrower's financial position changes, but also if the interest rate environment becomes more attractive.

References

Antweiler, W., and M.Z. Frank (2005), 'Do US Stock Markets Typically Overreact to Corporate News Stories?', Available at SSRN.

Baker, M., and J. Wurgler (2002), 'Market Timing and Market Structure', *Journal of Finance*, 57, 1-32.

Best, R., and H. Zhang (1993), 'Alternative Information Sources and the Information Content of Bank Loans', *Journal of Finance*, 48, 1507-1522.

Billett, M.T., M.J. Flannery, and J.A. Garfinkel (1995), 'The Effect of Lender Identity on a Borrowing Firm's Equity Return', *Journal of Finance*, 50, 699-718.

Billett, M.T., M.J. Flannery, and J.A. Garfinkel (2006), 'Are Bank Loans Special? Evidence on the Post-Announcement Performance of Bank Borrowers', *Journal of Financial and Quantitative Analysis*, 41, 733-751.

Brous, P.A., V. Datar, and O. Kini (2001), 'Is the Market Optimistic about the Future Earnings of Seasoned Equity Offering Firms?', *Journal of Financial and Quantitative Analysis*, 36, 141-168.

Chemmanur, T. J., and P. Fulghieri (1994), 'Reputation, Renegotiation, and the Choice between Bank Loans and Publicly Traded Debt', *Review of Financial Studies*, 7, 475-506.

Denis, D. J., and A. Sarin (2001), 'Is the Market Surprised by Poor Earnings Realization following Seasoned Equity Offerings?', *Journal of Financial and Quantitative Analysis*, 36, 169-193.

Eckbo, B.E., and O. Norli (2000), 'Seasoned Public Offerings: Resolution of the 'New Issues Puzzle'', *Journal of Financial Economics*, 56, 251-291.

Eckbo, B.E., R.W. Masulis, and O. Norli (2006), 'Security offerings', in: Eckbo (ed.), Handbook of Corporate Finance: Empirical Corporate Finance 1, Chapter 6. North-Holland/Elsevier.

Elsas, R., M.J. Flannery, and J.A. Garfinkel (2008), 'Financing Major Investments: Information about Capital Structure Decisions', Working paper: University of Florida.

Fama, E. F. (1985), ''What's Different about Banks?'' *Journal of Monetary Economics*, 15, 29-39.

Gasbarro, D., K.S. Le, R.G. Schwebach, and J.K. Zumwalt (2004), 'Syndicated Loan Announcements and Borrower Value', *Journal of Financial Research*, 27, 133-141.

Hadlock, C. J., and C.M. James (2002), 'Do Banks Provide Financial Slack?' *Journal of Finance*, 57, 1383-1419.

James, C. (1987), 'Some Evidence on the Uniqueness of Bank Loans', *Journal of Financial Economics*, 19, 217-235.

Kothari, S.P., and J.B. Warner (2006), 'Econometrics of Event Studies', in: Eckbo (ed.), Handbook of Corporate Finance: Empirical Corporate Finance 1. North-Holland/Elsevier.

Loughran, T., and J.R. Ritter (1997), 'The Operating Performance of Firms Conducting Seasoned Eequity Offerings', *Journal of Finance*, 53, 1823-1850.

Lummer, S. L., and J.J. McConnell (1989), 'Further Evidence on the Bank Lending Process and the Capital Market Response to Bank Loan Agreements', *Journal of Financial Economics*, 25, 99-122.

Spiess, D.K., and J. Affleck-Graves (1999), 'The Long-run Performance of Stock Returns following Debt Offerings', *Journal of Financial Economics*, 54, 45-73.

Sufi, A. (2007), 'Bank Lines of Credit in Corporate Finance: An Empirical Analysis', *Review of Financial Studies*, (forthcoming).

Table 1 Borrower share returns for alternative time intervals (Equally-weighted)					
Days	N	Mean Cumulative Abnormal Return	Positive: Negative	t	Generalized Sign Z
Panel A: All loans					
(-756,-505)	1693	4.54%	940:753	4.658***	7.080***
(-504,-253)	1817	-1.20%	885:932	-1.131	1.439
(-252,-1)	1949	-0.86%	970:979	-0.829	2.307*
(-2,+2)	2061	0.43%	1018:1043	2.815**	1.813*
(-1,+1)	2061	0.31%	1020:1041	2.603**	1.901*
(+1,+252)	2047	1.16%	1040:1007	1.076	3.087**
(+253,+504)	1889	2.07%	1018:871	1.917*	5.650***
(+505,+756)	1693	2.89%	936:757	2.677**	6.499***
Panel B: Revolving Credit					
(-756,-505)	1298	3.67%	730:568	3.370***	6.715***
(-504,-253)	1384	-1.68%	661:723	-1.385	0.477
(-252,-1)	1470	-1.57%	719:751	-1.258	1.255
(-2,+2)	1551	0.51%	771 : 780	2.917**	1.723*
(-1,+1)	1551	0.31%	758 : 793	2.290*	1.062
(+1,+252)	1543	3.39%	802 : 741	2.711**	3.502***
(+253,+504)	1425	2.98%	774 : 651	2.382**	5.133***
(+505,+756)	1293	2.86%	732 : 561	2.291*	6.543***

Table 1 (continued)					
Panel C: Term Loan					
(-756,-505)	308	8.90%	166:142	3.744***	2.414***
(-504,-253)	335	-2.60%	165:170	-1.167	0.817
(-252,-1)	367	5.20%	204:163	2.565**	3.304***
(-2,+2)	387	0.04%	186 : 201	0.141	0.446
(-1,+1)	387	0.02%	198 : 189	0.099	1.668*
(+1,+252)	384	-3.22%	191 : 193	-1.463	1. 102
(+253,+504)	352	0.65%	185 : 167	0.295	2.115*
(+505,+756)	309	-1.88%	146 : 163	-0.854	0. 112
Panel D: Hybrid Loan					
(-756,-505)	87	2.06%	44:43	0.393	0.751
(-504,-253)	98	10.40%	59:39	1.844*	2.899**
(-252,-1)	112	-11.51%	47:65	-2.275*	-0.905
(-2,+2)	123	0.56%	61 : 62	0. 801	0. 512
(-1,+1)	123	1.13%	64 : 59	2. 070*	1.054
(+1,+252)	120	-13.44%	47 : 73	-2. 686**	-1.782*
(+253,+504)	112	-4.98%	59 : 53	-0.996	1. 143
(+505,+756)	91	19.53%	58 : 33	3.902***	3.143***

The number of trading days relative to the loan announcements is designated by Days. The number of loans is indicated by N. The mean cumulative abnormal returns were obtained using a GARCH (1,1) market model with equal weighting. Positive (negative) indicates the number of announcements with positive (negative) cumulative abnormal returns. Levels of significance are indicated by t-values and the generalized sign Z. The data include loan announcements over the 1995–2000 period.

The symbols *,**, and *** denote statistical significance at the 5%, 1% and 0.1% levels, respectively, using a 1-tail test.

Table 2 Earnings announcement returns pre- and post-syndicated loan announcements for a five-day event window

Loan Type	N	Mean Cumulative Abnormal Return	Positive: Negative	t-value	Generalized Sign Z
Panel A: Earnings Announcements (-12,-9) Quarters					
All	3450	0.64%	1827:1623	5.864***	7.013***
RC	2852	0.57%	1500:1352	5.010***	5.957***
TL	428	0.84%	236:192	2.871**	3.345***
HY	170	1.24%	91:79	2.475**	1.887*
Panel B: Earnings Announcements (-8,-5) Quarters					
All	4372	0.47%	2287:2085	4.688***	6.847***
RC	3464	0.41%	1801:1663	3.663***	5.722***
TL	679	0.40%	349:330	1.859*	2.031*
HY	229	1.54%	137:92	3.570***	4.171***
Panel C: Earnings Announcements (-4,-1) Quarters					
All	4877	0.58%	2591:2286	5.910***	8.154***
RC	3799	0.47%	1995:1804	4.107***	6.328***
TL	805	0.94%	448:357	4.586***	4.861***
HY	273	1.06%	148:125	2.375**	2.514**
Panel D: Earnings Announcements (1,4) Quarters					
All	4949	0.48%	2596:2353	4.773***	6.979***
RC	3860	0.46%	2005:1855	3.976***	5.419***
TL	807	0.30%	427:380	1.403	3.269***
HY	282	1.21%	164:118	2.414**	3.659***
Panel E: Earnings Announcements (5,8) Quarters					
All	4706	0.37%	2469:2237	3.191***	6.377***
RC	3679	0.45%	1947:1732	3.279***	6.085***
TL	769	0.15%	388:381	0.683	1.659*
HY	258	-0.05%	134:124	-0.091	1.390
Panel F: Earnings Announcements (9,12) Quarters					
All	4510	0.43%	2297:2213	3.822***	3.789***
RC	3548	0.30%	1800:1748	2.396**	3.052**
TL	734	0.66%	376:358	2.842**	1.817*
HY	228	1.58%	121:107	2.348**	1.553

This table presents the results associated with quarterly earnings announcements. Loan announcements are: all announcements (All), revolving credit (RC), term loan (TL) and hybrid loan (HY). N indicates the number of earnings announcements. The mean cumulative abnormal return was obtained using the GARCH (1,1) market model. Earnings announcements are indicated by negative (positive) signs for pre- and post-loan announcements. Positive (negative) indicates the number of announcements with positive (negative) cumulative abnormal returns. Levels of significance are indicated by t-values and the generalized sign Z. The data include loan announcements over the 1995–2000 period.

The symbols *,**, and *** denote statistical significance at the 5%, 1% and 0.1% levels, respectively, using a 1-tail test.