Bank Loans and Bubbles: How Informative are the Announcements?

by

Laura Gonzalez*

Department of Finance and Economics
Fordham University
New York, NY

November 2010

*Corresponding author. Email: gonzalezalan@fordham.edu

Abstract

This paper examines the reporting of bank loans in the financial press during the 2004-2007 period. More specifically, it uses a unique hand-collected data set to examine the frequency and determinants of loan reporting. The motivation is double folded. First, virtually all publicly traded firms borrow from banks. However, despite their widespread use, the reporting of bank loan agreements in the financial press is historically associated with a positive share price reaction. Furthermore, this investor reaction has been interpreted as evidence of bank certification or "specialness". However, historical work on the specialness of bank loans considers only loans that are reported in the press, although the subset of press reported loans and borrowers could arguably differ from the subset of non-reported loans and borrowers. Second, changes in the frequency and determinants of bank reporting during bubbles could arguable be evidence of the financial press being caught in the frenzy and the announcements being less informative. Overall, results show that the frequency of loan reporting in the press significantly increased, practically doubled the historical 22% reporting frequency, during the 2004-2007 bubble period. However, reported loans and borrowers are still significantly different from non-reported ones. Reported loans have longer maturities, and reported borrowers present lower operating cash flows during the year preceding loan activation. Following the activation of the loans, reported borrowers present decreasing debt/EBITDA ratios. This suggests that loan new articles during the most recent bubble are still noteworthy and to some extent informative about the borrowers.

I. Introduction

A recent study (Sufi, 2009) documents that 94% of publicly traded firms have bank lending relationships. In light of this fact, the reporting in the financial press of bank loan agreements should be a routine, predictable event. Nevertheless, a number of previous studies document a positive and statistically significant return associated to press articles on loan agreements (James, 1987, James & Smith, 2000). Furthermore, the positive share price reaction to bank loan announcements (in contrast to the negative stock price reaction to most other financing events) has been widely interpreted as evidence that banks play a unique or special role in the capital acquisition process (James & Smith, 2000).

However, previous work on the specialness of bank loans considers only loans that are reported in the press, and the subset of press reported loans and borrowers could arguably differ from the subset of non-reported loans and borrowers. Furthermore, if the subset of reported loans is found not to be random, then the share price reaction to loan announcements would have more to do with the circumstances in which loan agreements are reported than with a general uniqueness of bank borrowing as a financing source. In addition, changes in the frequency and determinants of bank reporting during bubbles could arguable be evidence of the financial press being caught in the frenzy and the announcements being less informative.

To further explore these issues, this paper examines the frequency and determinants of bank loan reporting in Dow Jones during the 2004 through 2007 period. It also examines the long run operating performance of the bank borrowers during three years following the activation of the bank agreement to examine whether press coverage is informative about the potential of the firm.

Overall, the analysis finds that about 40 % of all syndicated Loan Pricing Corporation (LPC) DealScan loans obtained by public firms are reported in the financial press. This practically doubles the historical 22% reporting frequency (Gonzalez, 2010) during the 2004-2007 bubble period. However, reported loans and borrowers are still significantly different. Reported loans have longer maturities, and reported borrowers present lower operating cash flows during the year preceding loan activation. Following the activation of the loans, reported borrowers present decreasing debt/EBITDA ratios, a statistically significant improvement in one of the most commonly used covenant ratios. This suggests that loan new articles during the most recent bubble are still noteworthy and to some extent informative about the borrowers.

The remainder of the paper is organized as follows. Section II provides a summary of the literature. Section III describes the unique hand-collected sample of bank debt. It also provides summary statistics of the deals and borrowers. Section IV examines the determinants of bank loan reporting in the press. Section V studies long-term operating performance. Section VI presents the conclusions and limitations of the study.

II. Literature Review

II.a. The specialness of bank loans

The literature on the specialness of bank loans spans for several decades. In general, for a comprehensive coverage of findings in how bank relations are special, there are some recent reviews of the literature on banking relations (Boot, 2000). In relation to this paper, previous empirical studies show that bank loans are more special for firms with acuter information asymmetry problems. This specialness appears to be a consequence of the ongoing relation between the banks and their

borrowing customer. Through time, bankers gain access to information that is not available to other firm claimants, and this allows the borrowers to have access to credit at a lower cost. However, for firms with a single bank relationship, the reliance on bank debt is negatively related to the importance of growth opportunities, while among firms borrowing from multiple banks, the relationship is positive (Houston & James, 1996).

The private information banks build about their opaque customers overtime is generally soft in nature, and is used in conjunction with current financial and other hard data when making credit decisions. In fact, it is the use of non public information in granting loans and monitoring what is often used to distinguish bank lending from arm's - length funding arrangements (Rajan, 1992). In consequence, banks and other private lenders are credited as superior screeners, besides monitors, that reduce ex-ante information asymmetries (Diamond, 1991, Fama, 1985; Ramakrishnan & Thakor, 1984, Berger, Klapper & Udell, 2001).

Furthermore, banking relations are expected to be particularly informative about the borrowing firm's future prospects in the case of not only more opaque, but also riskier firms. In this context, there is, for example, a positive and significant relation between improvements in post-IPO operating performance and the existence and size of pre-IPO banking relations among technology firms during the so-called 'tech' bubble (Gonzalez & James, 2007).

II.b. Loan Covenants

Over 90% of long-term debt contracts are renegotiated prior to their stated maturity (Roberts & Sufi, 2009). Renegotiations result in large changes to the amount, maturity, and pricing of the contract, occur relatively early in the life of the contract, and are rarely a consequence of distress or default. In addition, recent work finds 5.4% increased annualized profits during the month following loan renegotiations in trading by institutional investors that are members of loan syndicates (Ivashina & Sun, 2010). Thus, it ca be argued that there is generation of valuable information about the quality of the firm during the renegotiations of loan contracts, especially following covenant violations, and that covenant restrictions may positively impact long run operating performance.

In this context, 32% of the agreements are found to contain an explicit restriction on the firm's capital expenditures (Nini, Smith & Sufi, 2009). Furthermore, net debt issuing activity experiences a sharp and persistent decline following debt covenant violations, especially when the borrower's alternative sources of finance are costly, like is the case of the more opaque borrowers (Roberts & Sufi, 2009). However, following the restrictions, there are subsequent increases in market value and operating performance (Nini, Smith & Sufi, 2009).

II.c. Press reporting and disclosure decisions

How do bank loans to public firms get published? Given that bank loans are good news, a press release by the borrower should arguably be the most likely source of information in the first step of the process that conveys the information to investors. Following the press process, and once reporters or firms transmit the story to Dow Jones, the editors summarize them, weight their

importance, and determine whether to make them press news. The time frame is short, just a few hours or, in most cases, not more than one day (Thompson et al., 1987).

It is important to note that the dissemination of news information through wire services does not target only Dow Jones. In fact, the New York Stock Exchange regulations require simultaneous disclosure of firm-specific news to Dow Jones and Reuters, and the American Stock Exchange requires simultaneous disclosure to Dow Jones, Reuters, Associated Press, United Press International, the *Wall Street Journal*, the *New York Times*, Standard & Poor's, and Moody's Investor Service (Thompson et al., 1987). Nevertheless, both practitioners and academics rely on Dow Jones as the primary source of news existence and timing, most likely because of its longer tradition and wider dissemination of information[1]. In any case, for the sake of reassurance, a random subsample of loans in this study is news searched without limiting the source, and Dow Jones is found to capture all the reported cases.

The literature on discretionary disclosure finds that firms are more likely to disclose higher values of private information when financial reports do not contain sufficient good news and performance is significantly different than expected (Bagnoli & Watts, 2007). Moreover, firms are less likely to withhold information in material contract filings when they issue long-term debt (Verrecchia & Weber, 2006). Thus, opaque riskier firms with long maturity loans would arguable be more compelled to disclosure their loans. And in general, since bank loans are good news, which is when firms are more forthcoming (Miller, 2002), one would expect firms to try to disclose all bank loans. Accordingly, the source of loan news in the sample study is usually the borrower.

However, firms are not only willing to disclose loans, they may be required to disclose. Securities and Exchange Commission (SEC) regulation requires public firms to disclose any 'material' event that can affect the stock price. Thus, the timing of the disclosure is important. In this context, the disclosure literature documents how managers time voluntary disclosures in a manner that maximizes insider trading profits while minimizing potential litigation costs associated with disclosure (Cheng & Ko, 2006).

Given all these findings, it is important to note that all LPC DealScan loans, from which the sample of this study is drawn, are disclosed in some way, whether or not they are reported in the press. More specifically, DealScan cites as sources of loan information SEC 8-K filings, other public SEC filings, and industry sources. In addition, DealScan offers affordable real-time web access to agreed-upon but not-yet-active loans. Hence, the loans reported in Dow Jones that the financial press views as noteworthy are a subset of a pool of disclosed loans. This distinction between 'reported' and 'disclosed' loans is subtle but nevertheless important. If there is disclosure about the deals but, as found, no significant market reaction surrounding the activation of non-reported bank loans, and one assumes reported loans to be significant, it can be argued that the market views reported loans differently from non-reported loans.

II.d. Market reaction to bank loan announcements

Several studies document the statistically significant positive market reaction to bank loan announcements in the financial press even when the borrower is a public firm (James, 1987, Lummer & McConnell, 1989, James & Smith, 2000, Ongena & Roscovan, 2009). This is surprising, given that 94% of publicly traded firms have bank lending relationships (Sufi, 2007). Bank lending seems then

important not only for small firms that lack access to public debt markets, but also for large and medium-size firms as well. In this context, Dealscan constitutes a good source, since it includes all syndicated US loan agreements for medium-sized and large firms.

Thus, given its widespread use, is there any special reason for public firms to choose bank financing and for investors to react to it? Previous studies find that commitment-based financing is used by larger companies when they believe themselves to be undervalued in the market (James & Smith, 2000), which would explain why announcements of these types of loans elicit a positive stock price reaction. Recently, investors are also found to react more positively to loan announcements when the loans are made by local banks (Ongena & Roscovan, 2009), since local media, apart from the information transmitted, is more likely to affect investor behavior (Engelberg & Parsons, 2009).

Then, if most public firms borrow from banks and bank loans are always good news, can financial press editors influence returns and trading volume through editing? Also, how much news is there in successive announcements? In this context, previous work finds that the number of news stories and market activity are directly related, and that this relation is robust to the size of the headlines and macroeconomic announcements. Moreover, the association between larger size headlines and higher market returns does not have a significant effect on trading volume (Mitchell & Mulherin, 1994). Finally, only preliminary announcements and interim statements seem to convey substantial amounts of new information (Rippington & Taffler, 1996).

Thus, in light of the findings in previous work, one could argue that multiple incomplete announcement returns could be aggregated in the study of the market reaction to loan news. However,

the loans in the sample are reported in most cases through unique articles, and in the few cases where there is more than one article about a loan (in most cases just two articles) they are either dated the same day with practically verbatim information or one article is a summary of the key points in the other one, or distant enough in time not to affect the two-day event study results.

II.e. Determinants of Bank Loan Reporting

A large theoretical literature in banking focuses on banks as screeners that reduce *ex ante* information asymmetries when compared with public "arm's length" debt (Diamond, 1991; Fama, 1985; Ramakrishnan and Thakor, 1984). Furthermore, the banking literature argues that loans constitute a unique source of financing because, among other reasons, banks have access to information that is not available to other lenders and market participants while screening loans and monitoring borrowers (Rajan, 1992). So, if non-reported loans require less access to private information due to their less severe information asymmetries, one could argue that the lenders of non-reported loans do not know significantly more than other market participants about their non-reported borrowers. Consequently, those loans would constitute a weaker signal of firm quality and be, therefore, less noteworthy.

Previous empirical studies document that more opaque firms are more likely to use bank debt (Houston and James, 1996; Johnson, 1997; Sufi, 2007)[1] when the returns of the borrower decrease with respect to the market (Hadlock and James, 2002), and that relatively riskier firms also choose bank debt over public debt (Denis and Mihov, 2003). Moreover, in relation to disclosure decisions, Bagnoli and Watts (2007) find that firms are more likely to disclose private information when the operating performance in financial reports falls below expectations and/or does not contain sufficient

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[1] Recent studies by Sufi (2007) find increased access to capital of less informed investors following the introduction of bank loan ratings as well as more concentrated syndicated loans in the case of opaque borrowers.

good news. Thus, besides measures of asymmetric information, market timing and leverage, EBITDA to assets ratio could also constitute a significant determinant of reporting likelihood.

Roberts and Sufi (2007) report that, although over 90% of long term loan contracts are renegotiated prior to their stated maturity, only 16% of the renegotiations are due to default events such as covenant violations. In addition, a related study by Nini et al. (2008) shows that following loan covenant violations and subsequent waivers there is an efficient reduction in firm investment and subsequent increases in market valuation and operation performance. Finally, in relation to loan characteristics that could make reporting more likely, Verrecchia and Weber (2006) find that firms are less likely to withhold information in material contract filings when they issue long-term debt. This suggests that loans with longer maturity could also be more newsworthy.

III. Sample selection, data and summary statistics

This section describes in detail the unique hand collected data set. It also emphasizes the most relevant differences between the firms whose loans are reported and those whose loans are not, as well as between press-reported loans and not reported loans.

III. a. Sample Selection and Data

The sample consists of 679 randomly selected loans that were activated between 2004 and 2007 recorded in the DealScan database. The number of loans per year is initially determined so that each year the proportion of loans in the sample equals the corresponding annual proportion of loans in the banking DealScan database. Moreover, the loan sample includes only completed loans involving U.S. banks with roles other than participant, and excludes loans granted to financial

institutions. Table 1 reports the yearly proportion of reported loans, both in numerical and percentage terms.

DealScan is the source of data regarding the identity and role of all members of the loan syndicate, loan maturity, type and purpose, credit risk measures, and covenant information. Securities Data Corporation provides information on the proceeds and payment conditions of public debt and non-bank private debt issues. In addition, since the Securities and Exchange Commission (SEC) requires all firms to submit their filings electronically, the analysis uses information on loan restructurings from 8-K, 10-Q and 10-K filings.

For the classification of reported and non-reported loans, a Dow Jones News Service search is conducted for news, wire articles and headlines published between three months prior to one month after the effective date of the issue. The search specifically looks for articles and headlines that contain the issue size and/or the usual key terms used in previous studies. In the case of bank loan announcements the key terms are “line of credit”, “credit line”, “credit facility”, “credit agreement”, “credit extension”, “new loan”, “loan agreement”, “loan renewal”, “loan revision”, “loan extension”, “finance company loan”, “term loan”, “commercial loan”, and “bank loan”. Once the news and wire articles are selected, the author collected data for the loan sample on the frequency of wire and press articles, timing of the earliest article with respect to the issue date, news or wire source, and bundling of information with other non-issue-related news in the earliest article. Furthermore, this hand-collected news information identifies articles in which the only loan-related information is the agreement size, those in which bank lending is inferred through terms such as “loan”, and those that

specify it is a bank agreement, whether the identity of one or more members of the loan syndicate is reported or not.

In some cases, the earliest news is accompanied by other news concerning dividends, earnings, or control activity. Most empirical studies of loan announcements exclude these "contaminated" announcements so as to focus solely on the information content of the financing news. In this paper, contaminated articles are included in the examination of reporting likelihood given that earnings or dividend announcements, for example, may reduce information asymmetries associated with selling securities, a factor identified as leading to press attention. Thus, excluding contaminated reporting may bias the results and conclusions.

The media information on bank loans was supplemented with information from filings with the Securities and Exchange Commission (SEC). More specifically, the author collected data from the SEC filings whenever available on whether the loans constituted a new agreement, renewal or a restructure deal following a covenant violation and subsequent waiver. This manual search within SEC filings covered the two years prior to loan activation, because Roberts and Sufi (2007) found that the average effective maturity of bank loans is half the average stated maturity, which DealScan reported to be of around four years for the loans in the sample.

More specifically, the author searched the SEC filings for specific expressions used in previous studies, and checked each passage to ensure that the expressions indeed referred to financial covenant violations, waivers, and loan restructurings. The specific terms are those also used by Roberts and Sufi (2007): "in violation of covenant", "in violation of a covenant", "in default of

covenant”, “in technical violation of covenant”, “in technical violation of a covenant”, “in violation of financial covenant”, “in violation of a financial covenant”, “in technical violation of a financial covenant”, “in technical violation of financial covenant”, “in technical default of a financial covenant”, “in technical default of financial covenant”, “not in compliance”, “out of compliance”, “received waiver”, receiver a waiver”, “obtained a waiver”, “obtained waiver”. The data on issuing firm characteristics was obtained from Compustat.

Finally, the Form 8-K filings follow the SEC regulation that requires firms to report any “material” event that may affect the stock price, or definitive agreement “not made in the ordinary course of the registrant’s business.” An agreement is deemed as material definitive when it “provides for obligations that are material to and enforceable against the registrant or rights that are material to the registrant and enforceable by the registrant against one or more parties to the agreement, in each case whether or not subject to conditions”. The Form 8-K requires the agreement date, the identity of the parties and a brief description of any material relationship between the registrant or its affiliates and any of the parties, other than in respect of the material definitive agreement. Moreover, the Additional Form 8-K, effective August 2004, expands the number of events that are reportable on Form 8-K and shortens the filing deadline for most items to four business days. These amendments are said to further the goals of Section 409 of the Sarbanes-Oxley Act.

As Nini et al. (2008) note, as private agreements, loans are not legal securities and, thus, are not subject to direct SEC regulation. However, the SEC precedent has established a requirement that public companies include copies of all ”material” contracts, including bank loan agreements, with

relevant SEC disclosures. These contracts typically appear as exhibits at the end of a 10-K or 10-Q report, or as an attachment to an 8-K filing.

Tables 3, 4 and 5 show that the reported firms and loans are significantly different from the non reported ones. More specifically, reported loans have significantly larger maturities, i.e. are riskier, and are to be used to repay previous debt. On the contrary, non-reported loans are established significantly more frequently for general corporate purposes of operation. Their borrowers are also significantly different. Those whose loans get reported in the press are significantly smaller by assets, sales and shareholders' equity, and present significantly lower operating cash flows the year prior to loan activation. These results support the hypothesis that during the recent bubble the bank deals featured in the press still identified bank agreements and borrowers that were special. Furthermore, the specialness of those reports was in the riskiness of the loans (longer maturities) as well as the riskiness and opacity of the borrowers (more opaque given their smaller size and subsequent analyst coverage, and riskier given their inferior operating performance).

IV. Determinants of loan reporting

Firms are more likely to disclose private information when the operating performance in financial reports falls below expectations and/or does not contain sufficient good news (Bagnoli & Watts, 2007). Thus, besides measures of asymmetric information and leverage, the EBITDA to assets ratio is also considered as potential determinant of press reporting. On the other hand, firms are less likely to withhold information in material contract filings when they issue long-term debt (Verrecchia & Weber, 2006). Therefore, besides larger loans, loans with longer maturity could also be more newsworthy.

In terms of covenant violations and loan restructures, although over 90% of long term loan contracts are renegotiated prior to their stated maturity, only 16% of the renegotiations are due to default events such as covenant violations (Roberts & Sufi, 2009). Therefore, since summary statistics show heterogeneity in all the above-mentioned borrower and loan characteristics suspected to determine reporting likelihood, the analysis of bank loan reporting determinants includes proxies for information asymmetries, credit risk, loan restructuring following violations, loan size, and loan maturity.

In addition, one could argue that the largest firms are less opaque and the smallest firms of less interest to the general investor, and that, consequently, their loans could be less likely to be reported. Thus, given that the likelihood of reporting is suspected to have a non-linear dependency with respect to borrower size, the analysis also considers a medium-firm-size dummy variable. This dummy equals one if the firm has assets of less than $1 billion and more than $400 million in order to include non-reported borrowers with below-median firm size and reported borrowers with above-median firm size.

Overall, since summary statistics show heterogeneity in the borrower and loan characteristics suspected to determine reporting likelihood, the examination of bank loan reporting determinants includes proxies for borrower information asymmetries (as measured by tangibles), borrower credit risk (as measured by operating cash flows), and loan risk (as measured by loan maturity).

The analysis of loan-reporting is based on a series of probit models. The mail results are reported in Table 6. The binary dependent variable equals one if the bank loan is reported in the

financial press and zero otherwise. The results show, as suggested in the descriptive statistics, that bank deals are more likely to be reported in the case of longer maturities, i.e. riskier loans, as well as riskier borrowers with lower performance, as measured by operating cash flows during the fiscal year before deal activation.

These findings are statistically significant and overall indicative that, despite the increased frequency of loan reporting in the press with respect to the previous 20 percent of previous periods of time, loan news were still noteworthy. Even if lending standards were relaxed and press reporting increased, the financial press was still filtering the most interesting and potentially informative loans.

IV. Long-term performance of bank borrowers

In a related study, and since reported loans are more likely to be restructured loans following covenant violations, it is found that, following covenant violations, there is an effective reduction of capital expenditures that leads to higher performance and valuation (Nini, Smith & Sufi, 2008). In the study of long-term operating performance, the debt to EBITDA ratio is used. The reason is that it is used in the literature and closely linked to the borrower's ability to service both current and future bank borrowings. While stock returns and net income are also important measures of performance used in previous studies, the debt to EBITDA ratio is more removed from the banker's principal focus. In addition, the debt to EBITDA ratio is present in about half the loans that include financial covenants. Thus, firms have an incentive to improve this ratio.

To limit the effect of outliers, the medians of operating performance measures are examined for a period of seven years that covers four fiscal years preceding loan activation and the three

subsequent ones. The summary statistics are presented in Table 7. Year 0 refers to the fiscal year prior to the activation of the loan.

Overall, it is observed that reported borrowers present poorer operating performance with respect to non-reported loans during the year prior to the activation of the loan. However, there is no significant difference at the 5% level in debt to EBITDA after one year following loan activation. Furthermore, it is important to note that the improvement in the operating performance of reported borrowers would be more pronounced if the firms whose loans are reported mainly on the basis of loan size or maturity were excluded from the study sample.

VI. Conclusions

An important strand of the banking literature holds that banks play a special role in the capital acquisition process through the close relationship they establish with their borrowers. However, it is not clear why the more established less opaque public firms would need to establish the same type of “unique” relationships with banks in all cases. Also, it is puzzling why there is a significant positive stock price reaction surrounding the press reporting of bank loans, given that practically all public firms have bank loans. Furthermore, the financial press reporting of bank loans increases during bubbles, the press could arguably have been caught up, at least to a certain extent, in the market frenzy.

To address these issues, the analysis uses a unique hand-collected data set of 679 bank deals to examine the frequency and determinants of loan reporting in the financial press between 2004 and 2007. Overall, the results show that about 40% of bank loans are reported, doubling the 20% of the

1996 to 2004 period (Gonzalez, 2010). In addition, the subsample of reported loans and borrowers is not representative of the entire population of syndicated loans. Reported loans have longer maturities, and reported borrowers present lower operating cash flows during the year preceding loan activation

Following loan activation, and consistent with the view that bank loans are more informative about firm potential when they are reported in the press, reported borrowers improve their debt to EBITDA ratio with respect to non-reported ones over the two years following the activation of the loan. This suggests that loan new articles during the most recent bubble are still noteworthy and to some extent informative about the borrowers.

VII. References

Bagnoli, M. & Watts, S. 2007, 'Financial Reporting and Supplemental Voluntary Disclosures', *Journal of Accounting Research*, vol. 45, no. 5, pp. 885-923.

Berger, A., Kappler, L. & Udell, G. 2001, 'The ability of banks to lend to informationally opaque small businesses', *Journal of Banking and Finance*, vol. 25, no. 12, pp. 2127-2167.

Bradley, M., Roberts, M. 2004, 'The structure and pricing of corporate debt covenants', working paper.

Boot, A. W.A. 2000, 'Relationship banking: what do we know?', *Journal of Financial Intermediation*, vol. 9, no.1, pp. 7-25.

Cheng, Q. & Lo, K. 2006, 'Insider trading and voluntary disclosures', *Journal of Accounting Research*, vol. 44, no. 5, pp. 815-848.

Demiroglu, C. & James, C. 2010, 'The information content of bank loan covenants', *Review of Financial Studies*, forthcoming.

Diamond, D. 1991, 'Monitoring and reputation, the choice between bank loans and directly placed debt', *Journal of Political Economy*, vol. 99, no. 4, pp. 688-721.

Engelberg & Parsons, 2009, 'The causal impact of media in financial markets', working paper.

Fama, E. 1985, 'What's different about banks?', *Journal of Monetary Economics*, vol. 15, no. 1, pp. 240-249.

Gonzalez, L. 2010, 'Dogs that bark: Why are bank loan announcements newsworthy?', *Global Economy and Finance Journal*, forthcoming.

Gonzalez, L. & James, C. 2007, 'Banks and bubbles: How good are bankers at spotting winners?', *Journal of Financial Economics*, vol. 86, no.1, pp. 40-70.

Guner, A.B. 2006, 'Loan sales and the cost of corporate borrowing', *Review of Financial Studies*, vol. 19, no. 2, pp. 687-716.

Houston, J. & James, C. 1996, 'Bank information monopolies and the mix of private and public debt claims', *Journal of Finance*, vol. 51, no. 5, pp. 1863-1889.

Ivashina, V., Sun, Z. 2010, 'Institutional stock trading on loan market information', *Journal of Financial Economics*, forthcoming.

James, C. 1987, 'Some evidence on the uniqueness of bank loans', *Journal of Financial Economics*, vol. 19, no. 2, pp. 217-235.

James, C. & Smith, D. 2000, 'Are banks still special? New evidence on their role in the corporate capital-raising process', *Journal of Applied Corporate Finance*, vol. 13, no. 1, pp. 52-63.

Lummer, S. & McConnell, J. 1989, 'Further evidence on the bank lending process and the capital-market response to bank loan agreements', *Journal of Financial Economics*, vol. 25, no. 1, pp. 99-122.

Mikkelson, W.H. & Partch, M.M. 1986, 'Valuation effects of securities offerings and the issuance process', *Journal of Financial Economics*, vol. 15, no. 1-2, pp. 31-60.

Miller, G. 2002, ‘Earnings performance and discretionary disclosure’, *Journal of Accounting Research*, vol. 40, no. 1, pp. 173-204.

Mitchell, M. & Mulherin, J.H. 1984, ‘The impact of public information on the stock market’, *Journal of Finance*, vol. 49, no. 3, pp. 923-950.

Moerman, R. W. 2005, ‘The impact of information asymmetry on debt pricing and maturity’, working paper.

Nini, G., Smith, D., Sufi, A. 2009, ‘Creditor control rights and firm investment policy, *Journal of Financial Economics*, vol. 92, no. 3, pp. 400-420.

Onjena, S., & Roscovan, V. 2009, ‘Bank loan announcements and borrower stock returns. Does bank origin matter?’, working paper.

Rajan, R. G. 1992, ‘Insiders and outsiders: the choice between informed and arm’s length debt’, *Journal of Finance*, vol. 47, no. 4, pp. 1367-1400.

Ramakrishnan, R.T.S. & Thakor, A. 1984, ‘Information reliability and a theory of financial intermediation’, *Review of Economic Studies*, vol. 51, no. 3, pp. 415-432.

Rippington, F. & Taffler, R.J. 1996, ‘The information content of firm financial disclosures’, *Journal of business Finance & Accounting,* vol. 22, no. 3, pp. 345-362.

Roberts, M. & Sufi, A. 2009, ‘Control rights and capital structure: An empirical investigation’, *Journal of Finance*, vol. 64, no. 4, pp. 1657-1695.

Roberts, M. & Sufi, A. 2009, ‘Renegotiation of financial contracts: Evidence from private credit agreements’, *Journal of Financial Economics*, vol. 93, no. 2, pp. 159-184.

Sufi, A. 2009, 'The real effects of debt certification: Evidence from the introduction of bank loan ratings', *Review of Financial Studies,* vol. 22, no. 4, pp. 1659-1691.

Sufi, A. 2007, 'Information asymmetry and financing arrangements: evidence from syndicated loans', *Journal of Finance*, vol. 62, no. 2, pp. 629-668.

Sufi, A. 2009, 'Bank lines of credit in corporate finance: An empirical analysis', *Review of Financial Studies,* vol. 22, no. 3, pp. 1057-1088.

Thompson, R. B., Olsen C. &. Dietrich, R. 1987, 'Attributes of news about firms: An analysis of firm-specific news reported in the Wall Street Journal Index', *Journal of Accounting Research*, vol. 25, no. 2, pp. 245-274.

Verrecchia, R. & Weber, J. 2006, 'Redacted disclosure', *Journal of Accounting Research*, vol. 44, no. 4, pp. 791-814.

Table 1

Annual Distribution by Year of Deal Activation for Reported and Non-reported Loans

The sample consists of 679 randomly selected syndicated bank loan agreements activated between January 2004 and December 2007. The loans are randomly selected so that each year the proportion of loans in the sample equals the corresponding annual proportion of loans in DealScan database. In addition, the sample requires the borrowers to be publicly traded firms at the time of loan activation. Reported and non-reported loans are identified searching Dow Jones sources for news articles that contain the deal amount and/or the key words used in the literature on loan announcements. The study requires the financial press information to be published between three months prior to one month after the activation of the loan as reported in DealScan, the study period used previously in the literature.

Year of Deal Activation	All Sample N=679	Reported N=318	Reported %
2004	159	75	47.2%
2005	176	91	51.7%
2006	167	70	41.9%
2007	177	82	46.3%

Table 2

Deal Purpose for Reported and Non-reported Loans

The sample consists of 679 randomly selected syndicated bank loan agreements activated between January 2004 and December 2007, out of which 318 are featured in the financial press between three months prior and one month following deal activation. The loans are randomly selected so that each year the proportion of loans in the sample equals the corresponding annual proportion of loans in DealScan database. In addition, the sample requires the borrowers to be publicly traded firms at the time of loan activation. Reported and non-reported loans are identified searching Dow Jones sources for news articles that contain the deal amount and/or the key words used in the literature on loan announcements. Deals or packages usually include several facilities such as a line of credit, a term loan and notes. Corporate purposes include working capital, capital expenditures, equipment purchases, or project financing. Merger and acquisition purposes include takeovers. Leverage buy-out purposes include LBOs, stock buybacks and debtor in possessions.

Loan Purpose	Reported	Non-reported
Corporate Purposes	80.82%*	85.59%
M&A	10.38%	7.76%
LBO	3.46%	4.16%
Debt Repay	5.03%*	2.22%
Other	0.31%	0.28%

*Significantly different from non-reported loan issue sample at the 0.1 level

Table 3

Firm Summary Statistics

The sample consists of 679 randomly selected syndicated bank loan agreements activated between January 2004 and December 2007, out of which 318 are featured in the press. The loans are randomly selected so that each year the proportion of loans in the sample equals the corresponding annual proportion of loans in DealScan database. In addition, the sample requires the borrowers to be publicly traded firms at the time of loan activation. Reported and non-reported loans are identified searching Dow Jones sources for news articles that contain the deal amount and/or the key words used in the literature on loan announcements. The study requires the financial press information to be published between three months prior to one month after the activation of the loan as reported in DealScan. Tangible refers to plant, property and equipment net measures.

	Reported Loans				Non-reported Loans			
	Mean	Median	High	Low	Mean	Median	High	Low
Firm Characteristics								
Assets	4,936.42*	1,591.6*	104,270	13.6	11,491.28	1,277	448,507	20.3
Sales	4,129.76*	1,577.9*	70,324	0.92	8,176.77	1,186.1	182,005	30.2
Shareholders Equity	1,713.49*	536.88*	39,619	-6,215	3,368.76	496.7	82,646	-758
Tangible/Assets	0.62	0.56	3.06	0.01	0.62	0.54	3.61	0.03
Debt/EBITDA	2.78*	1.94*	36.7	0	2.52	1.85	35.3	0
EBITDA/Assets	0.14	0.13	0.55	-0.23	0.14	0.13	0.52	-0.12
Operating Cash Flows	447.89*	135.78*	13,586	-334.3	1,006.34	119.24	24514	-424

*Significantly different from non-reported loan issue sample at the 0.1 level

Table 4

Bank Deal Summary Statistics

The sample consists of 679 randomly selected syndicated bank loan agreements activated between January 2004 and December 2007, out of which 318 were featured in the press. Commitment is expressed in millions. DealScan expresses the all-in-drawn spread as a basis point mark-up over the 6-month LIBOR that includes recurring fees associated with the credit facility. The spread is used as a measure of per dollar cost of borrowing in a number of previous empirical studies on loan pricing.

	Reported Loans				Non-reported Loans			
	Mean	Median	High	Low	Mean	Median	High	Low
Loan Characteristics								
Commitment	651.44	300	9500	1.82	702.15	250	11500	2
Commitment/Assets	0.29	0.22	2.73	0.01	0.29	0.16	5.84	0.01
Maturity (months)	55.19*	60*	240	1	51.57	60	241	3
Deal-all-In-Drawn	143.69	100	1100	15	142.99	120	1250	10
Collateral	0.57	1	1	0	0.59	1	1	0

*Significantly different from non-reported loan issue sample at the 0.1 level

Table 5

Bank Deal and Borrower's Bank Deal History Summary Statistics

The sample consists of 679 randomly selected syndicated bank loan agreements activated between January 2004 and December 2007, out of which 318 were featured in the press. Commitment is expressed in millions. The breach of bank deal covenants within two years preceding deal activation is usually followed by covenant waivers and in some cases by deal amendments. All data on covenant breechings and waivers, as well as on deal amendments, is hand-collected from SEC filings.

	Reported	Non-reported loans
Breach of Covenants	0.06+	0.04
Covenant Waiver	0.07+	0.05
Bank Deal Amended	0.4+	0.31

+Significantly different from non-reported loan issue sample at the 0.1 level

Table 6

Determinants of Likelihood of Bank Deal Reporting in the Press

The panel provides the estimates of a probit model that relates firm and loan characteristics to the likelihood that the press deems a bank deal noteworthy. The analysis is based on a sample of 679 randomly selected syndicated bank loan agreements activated between January 2004 and December 2007, out of which 318 were featured in the press. Reported and non-reported loans are identified by Dow Jones article sources containing the deal amount and/or the key words used in the literature. *Tangible* refers to plant, property and equipment measures. *Commitment Amount* is the size of the bank deal commitment. *Maturity* is the maturity in months of the agreement as reported in Dealscan. Z statistics are reported in parenthesis

	Likelihood of loan reporting
Tangible/Assets	0.03
	(0.21)
Deal Amount (millions)	0.001
	(0.26)
Deal Maturity (months)	0.01
	(2.51)
Operating Cash Flows	-0.01
	(-2.18)
Deal All-in-Drawn	-0.0001
	(-0.55)
Constant	-0.34
	(-1.09)

Table 7

Long-run performance. Median Measures.

Table 6 provides summary statistics of operating performance for the four years before and three fiscal years following the bank deal activation. The sample consists of 679 randomly selected syndicated bank loan agreements activated between January 2004 and December 2007, out of which 318 are featured in the financial press. It includes loans involving US banks and US publicly traded firms at the time of loan activation. Reported and non-reported loans are identified searching Dow Jones sources for news articles that contain the deal amount and/or the key words used in the literature on loan announcements. The study requires the financial press information to be published between three months prior to one month after the activation of the loan as reported in DealScan. Year zero refers to the last fiscal year prior to the activation date.

	Debt/EBITDA (%)	
	Reported	Non-reported
Year -3	2.23	2.13
Year -2	2.13	2.1
Year -1	1.96	1.95
Year 0	1.94*	1.85*
Year 1	2.36*	1.9
Year 2	2.15	1.77
Year 3	2.21	1.78

* Significantly different from the non-reported loan median at the .05 level