# The market reaction to borrowing announcements: UK evidence 

## surrounding the global financial crisis

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#### Abstract

We examine the stock market response to announcements of public, bank and non-bank private debt by large UK firms surrounding the global financial crisis of 2008. Prior to the financial crisis, we find positive announcement returns surrounding bank loan announcements. However, abnormal returns on announcement of bank loans have significantly declined since 2008 and are now insignificantly different from zero. Our findings show that it is syndicated bank loans rather than the more traditional bilateral bank loans that drive the positive abnormal returns to bank loans.


JEL Classification: G14, G20
Keywords: public debt, bilateral loans, syndicated loans, non-bank private debt, event study, borrower value

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## 1. Introduction

As a result of the underdeveloped public bond markets in the UK companies have traditionally sought to borrow debt finance from banks. The Bank of England Trends in Lending October 2014 publication highlights that over the period January 2013 to June 2014, UK companies raised funds totalling $£ 181.9$ bn from banks but only $£ 83.7$ bn from the public capital markets. In addition to borrowing from bank and public sources, firms can also seek debt finance from non-bank private sources such as insurance companies and pension funds. Breedon (2012) argues that non-bank private debt, which typically takes the form of private bonds, potentially plays an important role in the UK debt markets as a result of the underdeveloped public bonds markets. This study examines how the stock market responds to announcements of these different types of debt.

Both theoretical and empirical literature has examined the differences between public (bond) debt and private (bank and non-bank private) debt. Theoretical studies have argued that private debt have many advantages over public debt. For example, in addition to offering loans, unlike other lenders, banks provide additional services to borrower firms, including deposit and payroll services, presenting them with information on the creditworthiness of potential borrowers that other lenders do not have access to. As repeat lenders, banks also have superior monitoring, screening, insurance and certification functions, alongside specialisation in making loans (Nakamura (1993)), and observing repayment history. Signalling models such as those discussed by Fama (1985) and Bernanke (1983) emphasise that if banks are privy to inside information through bank lending activities, they would not offer or renew a loan to a firm if it had gathered unfavourable information about it.

This study contributes to existing literature on the market response to debt issues in three main ways. First, we extend prior US literature on the market response to debt source announcements to the UK market. To date, Armitage's (1995) study of syndicated loans during

1988-91 has been the only paper to examine the stock market response to debt announcements in a UK setting. Armitage (1995) finds no evidence of a significant equity market response to announcement of syndicated loans by UK firms.

Second, given the differences between syndicated and bilateral bank loans we examine the stock market response to each separately. It is of interest to examine bilateral and syndicated loans individually as they differ from one another in at least two crucial ways that may engender a different response from the market. The first difference concerns the parties involved in the loans: a bilateral loan is a loan between an individual borrower and an individual lender, whereas a syndicated loan can be viewed as a hybrid between a traditional bank loan and borrowing from public markets (Dennis and Mullineaux, 2000). The potential free rider problems created in a lending syndicate could restrict the monitoring benefits of bank debt to bilateral loans. The second difference concerns the value of the loan: given that there is only one lender in a bilateral lending agreement, bilateral loans tend to be for smaller amounts than syndicated loans. The average syndicated loan in our sample is $£ 457.66$ million while the average bilateral loan value is $£ 195.16$ million. If loan size is correlated with the incentive to monitor, the market response may be higher for syndicated loans.

Finally, our sample period encompasses the beginning of the financial crisis of 20072008. Therefore we also contribute to existing literature by examining whether the financial crisis and the associated restricted access to bank credit had an impact on how the market views the announcement of debt offerings from public, bank and non-bank private sources.

We analyze the stock market response to public, bank and non-bank private debt for a sample of 1,537 debt announcements made by 337 UK non-financial firms listed on the FTSE350 index of the London Stock Exchange (LSE) between 2001 and 2013.

Consistent with theories of relationship lending that propose bank loans to be special, we find no evidence of announcement returns surrounding public and non-bank private debt
issuance and a positive announcement to bank loan announcements. We show that the positive market response to bank loans is driven by the syndicated loans in our sample rather than the more traditional bilateral bank loans. While we do find evidence consistent with bank loans being 'special', we also find that bank loans announced during the beginning of the financial crisis in 2008 were viewed negatively by the market.

The remainder of this paper is structured as follows. Section 2 summarizes prior literature on the market response to debt issuance. Section 3 outlines our sample construction and empirical testing. We present our results in section 4 and conclude with a summary of our findings in section 5 .

## 2. Literature review

Over the last 30 years there has been a considerable amount of literature dedicated to examining the choice between public, bank and non-bank private debt, and the market's response to the announcement of such debt offerings from a US perspective. ${ }^{1}$ These studies have almost uniformly reported little or no systematic response to issues of public debt (e.g. Mikkelson and Partch (1986), James (1987) and Hadlock and James (2002)), and a positive response to issues of bank debt (e.g. James (1987), Billett, Flannery and Garfinkel (1995), Hadlock and James (2002), Lee and Sharpe (2009)). Lummer and McConnell (1989) distinguish between new bank loans and loan renewals and report that the market responds positively to loan renewals but no find no evidence of a market response to new loans. The evidence on the market response to non-bank private debt is a mixed; James (1987) also examines the market response to non-bank private debt and finds that the market responds negatively to these announcements. ${ }^{2}$ However, Preece and Mullineaux (1994) and Chandra and

[^1]Nayar (2008) have found a positive response to non-bank private debt for their sample of nonbank private debt issues. These findings have resulted in bank loans generally being viewed as 'special' relative to other sources of external debt and equity finance (James (1987)). Our study aims to extend the US literature by considering the market response to debt source announcements to the UK market.

Specifically these studies have suggested that the monitoring and screening services provided by private lenders (banks) help reduce information asymmetries between borrowers and lenders, endorsing firm quality and signal creditworthiness to outside investors which has led to companies enjoying a favourable market response to issues of bank debt. Diamond (1984) and Gomes and Phillips (2012) argue that ex ante banks are better positioned to make informed decisions regarding a borrower's quality than other private and public lenders because they have acquired proprietary information in the process of (repeated) lending and other banking activities (such as deposit history) that is unavailable to outside lenders, and having built up expertise in monitoring borrowing firms are also better positioned than other lenders to continue to monitor the borrowing firm ex post.

Diamond (1991) models the choice between borrowing from monitored markets (bank debt) and unmonitored markets (public markets) and proposes that firms follow a life cycle when borrowing funds from external sources; firms with low reputation will borrow from nonbank private sources because they cannot access bank debt, medium reputation borrowers will borrow from banks to establish a reputation as a good borrower through repeated borrowing and once firms have built up a good reputation as a borrower they will borrow from the public markets.

Preece and Mullineaux (1994) reason that the market should respond similarly to announcements of private debt from sources other than commercial banks, if these non-bank
private lenders have the traits comparable to commercial banks, such as similar contracts, information collection and analysing procedures and lending processes but empirical studies have found differences in the responses to bank and non-bank private loans (see James (1987)) which suggests that the market views banks as having a comparative advantage over non-bank private lenders.

However, there has been some doubt cast upon the extent of the apparent specialness of bank loans over different sample periods and across different markets which is suggestive of the significance of bank loan financing having weakened over time. For example, Fields et al (2006) find no evidence of a positive response to loan announcements made between 2000 and 2003. Fields et al report a statistically significant abnormal return of $0.46 \%$ between 1980 and 2003 but when they split their sample into 3 time periods - 1980-1989, 1990-1999 and 2000-2003 - they find that this result is driven from the earlier periods in their sample. Armitage (1995) examines syndicated loans in the UK and finds no evidence of a market response, and Bailey et al (2011), Godlewski et al (2012) and Godlewski (2014) have found evidence of a negative market reaction to bank loan announcements in China, Russia and France, respectively. ${ }^{3}$ The recent global financial crisis provides us with an opportunity to examine whether bank loans continue to be special during a period of restricted access to bank credit.

## Hypotheses Development

Following on from prior empirical studies and the outlined differences between the different types of bank loan, in this paper we test three explicit hypotheses:

Hypothesis 1: The stock market response to bank loans will be larger than the stock market response to other source of debt.

[^2]Hypothesis 2: The stock market will respond differently to syndicated and bilateral bank loans.

Hypothesis 3: The global financial crisi will have affected the market's response to debt announcements

## 3. Data and methodology

The data used in this study tracks announcements of issuances of straight corporate debt for all 401 non-financial and utility companies included in the FTSE-350 index of the London Stock Exchange (LSE) over the period 2001-2013. For these firms we hand collect announcements of debt issuance from public, bank, and non-bank private sources through Nexis UK. Following Hadlock and James (2002), we use the following list of keywords to search for articles on debt issues: "line of credit," "loan agreement," "bank loan," "credit agreement," "credit line," "credit facility," "credit extension," "new loan," "loan renewal," "loan revision," "loan extension," "term loan," " debt issue," "debt offer," "public debt issue," and "public debt offer." Additionally, to augment the sample, the following keywords are also employed: "bond," "bond issue," "debt notes," "line of credit," "loan facility," "working capital facility," "private placement," and "overdraft." We do not collect announcements of convertible debt, warrants, or other hybrid securities.

It has been noted that approximately only one-quarter of US bank loans are announced in the media (Maskara and Mullineaux, 2011). To confirm that our sample comprises the population of loans for our sample firms, we cross-reference our hand collected sample of loan announcements with a number of financial databases. We verify data on public bonds through SDC Platinum and DataStream. DealScan is used to confirm our sample of announced bank loans, and we cross-check our sample of announced non-bank private debt loans against the Private Placement Letter database.

Following the approach of Johnson (1997), announcements of private debt issuance are classified as bank debt only where it is explicitly noted that the lending institution was a bank. Issuances of private debt that are not explicitly identified as being bank debt are classed as announcements of non-bank private debt, as are announcement explicitly labelled as private placements of debt. ${ }^{4}$

We relate the market reaction to debt issuance announcements to loan characteristics at the time of the announcement and firm characteristics at the financial year-end prior to the announcement. For loan characteristics we include loan size, loan maturity, the stated use of proceeds, and whether the loan is a new financing or represents the renewal of an existing loan. Firm level variables include controls for firm size, asset tangibility, investment opportunities, existing leverage, and profitability. We summarize these variables in Table 1.
[Insert Table 1 about here]
Table 2 presents the distribution of the sample of announcements of debt issuance by type. Our initial search generates a sample of 1,682 announcements of debt by 337 distinct firms. We eliminate 85 loan announcements from our sample which contain information which could influence the market response over the event period, such as proceeds being used to finance a newly announced acquisition, simultaneous equity issuances, and profit warnings. A further 60 loan announcements are eliminated from the sample due to a lack of stock market data to estimate event study abnormal returns.

This provides a sample of 1537 debt announcements of debt comprised of 370 issues of public debt, 967 issues of bank debt, and 200 issues of non-bank private debt. Of the 967 bank loan announcements, 767 are syndicated loans and the remaining 200 are bilateral loans. The apparent limited use of non-bank private debt suggests that companies prefer to borrow

[^3]from mainstream public and bank debt sources, and limit issues of non-bank private debt to specific circumstances, such as financial distress (see Denis and Mihov, 2003).
[Insert Table 2 about here]
Table 2 also presents the annual distribution of loan announcements in the sample. Issues of public and non-bank private debt are less frequent since 2008 as the economy enters the financial crisis. In contrast, we find that issues of bilateral bank debt increase towards the end of our sample period.

Summary statistics for the samples of public, bank (syndicated and bilateral) and nonbank private debt are presented in Table 3. Issuers of bank debt are typically younger and smaller than issuers of public debt, irrespective of whether these are syndicated or bilateral loans. The average firm that issues bank debt has been incorporated for 41.59 years and has total assets of $£ 3.99$ billion, compared to 49.20 years and $£ 13$ billion for firms that issue public debt. Non-bank private issuers are older but smaller than firms that issue bank debt. Firms issuing public debt have higher fixed assets ratios than firms that issue any type of bank debt, who in turn have more tangible assets than firms relying mainly on non-bank private debt. These firms, with low levels of collateral to secure against their debt, may have been forced to borrow from the private debt markets as they have been screened out of borrowing in the public debt markets (Diamond, 1991). The median issuer of public debt has higher leverage than those that issue bank or non-bank private debt.
[Insert Table 3 about here]
When focusing on loan characteristics we find that bank loans are for larger amounts than all other debt types for our sample firms. The average bank loan is for $£ 421$ million, which is one and a half times larger than the average public bond issue ( $£ 275$ million) and over four times greater than the average issue of non-bank private debt ( $£ 97.3$ million). Indicating the importance of examining the market response to the two types of bank loan independently, the
average syndicated loan (£464 million) is considerably larger than the average bilateral loan (£262 million). Syndicated borrowers are smaller than public debt issuers but they use the syndicated loan market to raise the largest amounts of finance.

Consistent with prior US studies (see Denis and Mihov, 2003; Arena, 2011), public debt has the longest maturity of all debt sources. The average loan has a maturity of 12.67 years, which is three times the 4 year maturity of the average syndicated or bilateral bank loan. Nonbank private debt is typically issued at maturities between these two other sources ( 8.69 years). Consistent with Preece and Mullineaux (1996), syndicated and bilateral loans have similar maturities.

We use the standard market model to estimate abnormal returns using an estimation window of 170 days ( -200 to -31 days) relative to announcement of debt issuance. We use the FTSE-350 as our benchmark index. The announcement date, day 0 , is defined as the date of the first public announcement of the borrowing agreement or debt offering in the press and we calculate cumulative abnormal returns for a three day window $[-1,+1]$ surrounding the announcement. We assess the significance of abnormal returns surrounding debt issuance using standard student's $t$-tests. ${ }^{5}$

## 4. Empirical analysis

### 4.1.Market reaction to public, bank, and non-bank private loan announcements

The univariate analysis of loan announcement abnormal returns are presented in Panel A of Table 4 where we report 3-day CARs for our sample of public, bank (syndicated and bilateral) and non-bank private loans. We find no evidence of either a statistically or economically significant response to announcements of public debt issuance, consistent with Mikkelson and Partch (1986), Shyam-Sunder (1991) and Johnson (1995). Similarly, the results

[^4]also indicate no significant market response to non-bank private debt announcements. This is in contrast with a small number of studies which have reported a small positive response (see James, 1987; Szewczyk and Varma, 1991). However, consistent with the notion of bank loans being special we report positive CARs of $0.56 \%$ surrounding bank loan announcements, which is statistically significant at the $5 \%$ level. This result is comparable to the findings of James (1987) and Billett et al. (1995). The presence of a positive stock market response for bank loans, and a lack of market response for both public debt and non-bank private debt can be interpreted as support for Fama's (1985) view of banks being to obtain otherwise private information on borrower creditworthiness and, thus, that banks are special as relationship lenders who are able to actively monitor borrower firms.
[Insert Table 4 about here]
Given the differences between syndicated and bilateral bank loans discussed previously, we examine the stock market response to each separately. We find that the positive market response to bank loans is driven by the sample of syndicated loans where the average CAR is $0.57 \%$, statistically significant at the $5 \%$ level. Returns are indistinguishable from zero for the sample of bilateral bank loan announcements. This is in contrast to Armitage (1995) who reports no evidence of a market response to syndicated loan announcements for UK firms and is perhaps somewhat a surprising result when compared to the lack of market response to the more traditional bilateral bank loans. However, given the importance of the banking sector in the UK as a result of the underdeveloped public bond markets, we argue that the positive market response to syndicated loans is indicative of syndicated loans conveying a signal of creditworthiness. Not only has one bank, the lead arranger in a syndicate, undertaken screening and monitoring and considered the firm creditworthy, but in addition further banks within the syndicate will have undertaken their own screening and monitoring, and also considered it creditworthy.

In Panel B of Table 4 we regress one loan source against another with no control variables to investigate whether the market response is significantly lower between the different sources of debt. Returns to announcements of non-bank private loans are significantly lower than those for the omitted bank debt group, robust to separating bank loans between syndicated and bilateral bank loans. This result is consistent with James (1987) who also reported a difference between the response to bank and non-bank private debt.
4.2. Impact of Global financial crisis on the market reaction to public, bank, and non-bank private loan announcements

Our sample covers the period of credit expansion prior to 2008 and the reported collapse in the availability of bank financing worldwide. Given the expected reduction in bank lending surrounding this period, we extend the literature by examining the impact of the global financial crisis on how the market reacts to borrowing announcements. We define the start of the financial crisis as $1^{\text {st }}$ January 2008. Loans announced prior to January 2008 are defined as precrisis period loans. Loans announced from $1^{\text {st }}$ January 2008 are defined as crisis period loans.

## [Insert Table 5 about here]

Table 5 presents the distribution of loan announcements in the sample between the precrisis and crisis periods. Issues of public and non-bank private debt are less frequent since 2008 as the economy enters the financial crisis. Issues of bank debt between the pre-crisis and crisis periods are relatively unchanged between the two periods but we find that issues of bilateral bank debt increase towards the end of our sample period. This suggests that for our sample of firms, the relationships they have with their main bank lenders become important in weak economic conditions where there is reduced access to bank financing.

Table 5 also presents the summary statistics for the samples of public, bank (syndicated and bilateral) and non-bank private debt issues in the pre-crisis and crisis periods. Panel A reports the loan characteristics between the two periods. The average non-bank private debt
issue in the crisis period is significantly larger than in the pre-crisis period, but there is no difference between sample periods for the other types of debt. However, the average loan maturity is significantly lower in the crisis period for public bonds, syndicated loans and nonbank private debt. This suggests that during the crisis period lenders were increasing their monitoring of managerial decision making at the point where loans are rolled over (Barclay and Smith, 1995; Dang, 2011).

Panel B reports the firm characteristics for both periods. In the crisis period, the median issuer of public debt is larger than in the pre-crisis period and the median issuer of (syndicated) bank debt is smaller than in the pre-crisis period. Issuers of public and non-bank private debt have lower fixed asset ratios in the crisis period.

## [Insert Table 6 about here]

Announcement returns surrounding the global financial crisis are presented in Panels A and B of Table 6. Similar to Table 4, we find no evidence of a market response to issues of public bonds or non-bank private debt in either the pre-crisis or crisis period but we do find some difference in the response to bank loan announcements, driven by the sample of syndicated loans between the two periods. There is no evidence of a market response to bilateral bank loans in either period. In the pre-crisis period, we find a positive market response to syndicated bank loans but in the crisis period abnormal returns are indistinguishable from zero. We examine the differences in CARs between the two periods in Panel C of Table 6 to test whether the market responded differently to debt issues as a result of the global financial crisis. The results show a decline in the market response to (syndicated) bank loans in the crisis period, but there is no evidence in the market responding differently to public and non-bank private debt during the crisis period. This suggests that banks are less special during the crisis period in a way that public and non-bank private securities were not.

This result of banks being less special during the crisis period is consistent with Godlewski (2014) However, we do not believe that this result is suggestive of the unique or special nature of bank loan financing having weakened over time, as per Fields et al (2006). We argue that given the poor economic environment surrounding our crisis period sample it is possible that the negative response is a consequence of the market realising that borrowing firms are paying inflated rates to access debt finance from banks, as a result of banks tightening lending requirements.

### 4.3.Multivariate Analysis of the market reaction to debt issuance surrounding the global financial crisis

The univariate event study analysis presented thus far assumes that the market's response to debt announcements is influenced by only the type of lender or by the economic conditions surrounding the announcement. However, previous studies have noted that borrower and loan characteristics can also affect the market response to debt issuance announcements. Therefore to determine the influence of the type of lender on the market's response to announcements of issuances of debt, we estimate cross sectional of the market response to borrowing announcements that control for these factors.

The results of Table 6 show a decline in the market response to (syndicated) bank loans in the crisis period, but no evidence of the market responding differently to public and nonbank private debt during the crisis period. However, it is not enough to test whether the market response surrounding the financial crisis changes for banks in isolation, so we compare banks to other types of security issue to determine whether the market response to bank debt announcements has declined more than for our other types of security issuance in Table 7 where we re-run Panel B of Table 6 with interaction for financial crisis. Although we have a univariate result that suggests returns on bank loan announcements have not gone down, we do not find
any of our crisis interaction terms to be significant this suggests that banks have not become less special. In models 4-6 we control for firm characteristics such as firm size, firm performance and a leverage measure based on low interest coverage, and similarly we do not find any of our crisis interaction terms to be significant. We still find a negative co-efficient for non-bank private debt in the crisis period and now also find a negative co-efficient for public bonds. Therefore, we can only argue that banks may have become less special in absolute terms but that they change that they have suffered is not statistically different from the change experience by any other loan type.

## [Insert Table 7 about here]

Given our multivariate results suggest that the returns on bank loan announcements have not declined in the crisis period, we test whether any firm or loan characteristics can explain the changing stock price response to bank loans over the two periods. Table 8 presents the abnormal returns to bank loan announcements surrounding the financial crisis and Table 9 presents the abnormal returns to syndicated bank loan announcements surrounding the financial crisis. Given the results are largely the same for both samples, for brevity we discuss the results together. In models 1 and 5 the crisis co-efficient is significantly negative but the results show that after controlling for the interaction effects between firm characteristics, loan size and maturity, and use of proceeds, that the financial crisis no longer leads to a weakened response to bank loan announcements.

## 5. Conclusions

A large body of literature has examined how stock markets respond to announcements of public and private (bank) debt in a US setting. In this study we extend this and examine the stock market response to announcements of debt issuance for a sample of 1,537 announcements of public, bank and non-bank private loans made by UK firms listed on the FTSE-350 index of the London Stock Exchange over the period 2001 to 2013.

This study contributes to existing literature in three main ways. First, we extend prior US literature on the market response to debt source announcements to the UK market. Second, given the different characteristics of syndicated and bilateral bank loans we examine the stock market response to each separately. Finally, as our sample period encompasses the beginning of the recent financial crisis, we examine whether the recent financial crisis had an impact on how the market viewed the announcement of debt offerings from public, bank and non-bank private sources.

Bank loans have been traditionally viewed as being "special" compared to other sources of external debt and equity finance, and our pre-crisis results are consistent with this view; whilst we find no evidence of a market response to public or non-bank private debt announcements, our event study results show that that the market responds significantly positively to announcements of bank loans. We then investigate the differences between syndicated and bilateral loans and our findings suggest that that the market responds positively to borrower certification from multiple lenders; our finding of a positive market response to bank loans is driven exclusively by syndicated loans and we surprisingly find no evidence of a market response to the more traditional bilateral bank loans.

However when we consider the more constrained financial climate surrounding the global financial crisis we find mixed evidence. Our univariate results suggest that bank loans are less special in the crisis period but our multivariate results imply that the change in market response suffered by bank loans is not statistically different from the change experienced by any other loan type.

To conclude, our results suggest that in a UK setting bank loan announcements continue to be viewed positively by the market whilst in other markets there has been some evidence suggestive of the specialness of bank loans diminishing. Future research may seek to examine
the impact of the constrained financial climate and restricted access to debt finance surrounding the financial crisis using a wider sample period which covers the complete financial crisis.

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Table 1: Description of variables
The table reports variable definitions for loan and firm characteristics for our sample of loan announcements. Data is for 1,597 loan announcements for a sample of 401 non-financial and non-utility companies whose shares were included in the FTSE-350 index of the London Stock Exchange at any time between 2000 and 2012. Loan announcements taken place in the subsequent year. All data is deflated at consumer price inflation to the financial year end 2000. All accounting data is taken at the financial year end preceding the loan announcement.

| Variable | Description | Source |
| :---: | :---: | :---: |
| Panel A: Loan announcements |  |  |
| CRISIS | A dummy variable set equal to 1 for announcements made on or after January 1st 2008, and zero otherwise. | Datastream, Dealscan, Nexis <br> UK, Private Placement <br> Letter and ThomsonOne <br> Datastream, Dealscan, Nexis |
| LOAN SIZE | The amount borrowed. | UK, Private Placement Letter and ThomsonOne Datastream, Dealscan, Nexis |
| MATURITY | The years to maturity of the loan. | UK, Private Placement Letter and ThomsonOne |
| RENEWAL | A dummy variable set equal to one for loans where the announcement states that the loan is a renewal, revision, renegotiation or extension of an existing credit agreement, and zero otherwise. | Datastream, Nexis UK, Private Placement Letter and ThomsonOne |
| REFINANCE | A dummy variable set equal to one for loans where the announcement notes that the stated use of proceeds is to refinance existing debt, and zero otherwise. | Datastream, Dealscan, Nexis <br> UK, Private Placement <br> Letter and ThomsonOne |
| ACQUISITION | A dummy variable set equal to one for loans where the announcement notes that the stated use of proceeds is to finance acquisitions, and zero otherwise. | Datastream, Dealscan, Nexis <br> UK, Private Placement <br> Letter and ThomsonOne |
| OTHER | A dummy variable set equal to one for loans where the announcement notes the stated use of proceeds is not to refinance existing debt or to finance acquisitions, and zero otherwise. | Datastream, Dealscan, Nexis <br> UK, Private Placement <br> Letter and ThomsonOne |
| UNCLASSIFIED | A dummy variable set equal to one for loans where the announcement does not state the intended use of proceeds for the loan, and zero otherwise. | Datastream, Dealscan, Nexis UK, Private Placement Letter and ThomsonOne |
| Panel B: Firm characteristics |  |  |
| ASSETS | Book value of total assets in £bn. | Worldscope |
| FIXED ASSETS RATIO | The ratio of net plant, property, and equipment to total assets. | Worldscope |
| FIRM AGE | Number of years since incorporation. | Worldscope |
| LEVERAGE | Book value of total debt divided by book value of total assets. | Worldscope |
| ROA | Earnings before interest, tax, depreciation and amortization (EBITDA) divided by book value of total assets. | Worldscope |
| LOW IC | A dummy variable set equal to one if the firm has an interest coverage ratio of less than 0.8 , and zero otherwise. Interest coverage is calculated as EBITDA divided by interest expense. Firms with no debt outstanding are coded as zero. | Worldscope |
| MTB | Book value of total assets minus the book value of equity plus the market value of equity, divided by book of value total assets | Worldscope |
| BHAR | The daily buy-and-hold return over the firm's accounting year minus the return on the FTSE 350 index over the same time period. | Worldscope |







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| $0 \mathcal{E V}^{\circ} \mathrm{L}$ | S61 | 00．z92 | 261 | $00 \cdot t 9 t$ | O2L | $00^{\circ}$ Iてt | 216 | $00^{\circ} \mathrm{C} L Z$ | てSદ | （a）JZIS NVOT |
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Table 4: Abnormal returns surrounding loan announcements
The table reports three day abnormal returns centred on the announcement day, zero. Data are for 1,597 loan announcements for a sample of 401 non-financial and non-utility companies whose shares were included in the FTSE-350 index of the London Stock Exchange at any time between 2000 and 2012. Loan announcements taken place in the subsequent year. BOND is a dummy variable set equal to one where the borrowing source is a public bond issue, and zero otherwise. NBP is a dummy variable set equal to one where the borrowing source is a private, non-bank lender. BILAT is a dummy variable set equal to one where the borrowing source is a single lender bank loan. T-statistics are reported in parenthesis. Regression $t$-statistics are calculated with standard errors clustered by issuing firm. ${ }^{* * *}$, ${ }^{* *}$, and ${ }^{*}$ denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ level respectively. Regression t -statistics are clustered by issuing firm.

|  | Public Bonds | Bank Loans | Syndicated Loans | Bilateral Loans | Non-Bank Private Debt |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Panel A: Univariate event study results Market model returns |  |  |  |  |  |
| CAAR ( $-1,+1$ ) | $\begin{aligned} & 0.18 \% \\ & (0.83) \end{aligned}$ | $\begin{gathered} 0.56 \% \\ (2.55)^{* *} \end{gathered}$ | $\begin{gathered} 0.57 \% \\ (2.35)^{* *} \end{gathered}$ | $\begin{gathered} 0.50 \% \\ (1.01) \end{gathered}$ | $\begin{aligned} & -0.16 \% \\ & (-0.60) \end{aligned}$ |
| Market-adjusted model returns |  |  |  |  |  |
| CAAR ( $-1,+1$ ) | $\begin{aligned} & 0.29 \% \\ & (1.32) \end{aligned}$ | $\begin{gathered} 0.65 \% \\ (2.98)^{* * *} \end{gathered}$ | $\begin{gathered} 0.69 \% \\ (2.82)^{* * *} \end{gathered}$ | $\begin{aligned} & 0.52 \% \\ & (1.05) \end{aligned}$ | $\begin{gathered} 0.13 \\ (0.50) \end{gathered}$ |
| Number of observations | 370 | 967 | 767 | 200 | 200 |
| Panel B: OLS regression of market model CARs against loan type |  |  |  |  |  |
| Model 1 | Intercept | BOND | NBP | BILAT | 2.47* |
|  | 0.0055 | -0.0037 | -0.0071 |  |  |
|  | (2.63)*** | (-1.24) | (-2.20)** |  |  |
| Number of observations | 1,537 | R-squared | 0.0019 | F statistic |  |
| Model 2 | 0.0057 | -0.0039 | $-0.0073$ | -0.0007 |  |
|  | (2.46)** | (-1.22) | $(-2.09)^{* *}$ | (-0.13) |  |
| Number of observations | 1,537 | R -squared | 0.0019 | F statistic | 1.65 |

Table 5: Loan and borrower summary statistics
The table reports summary statistics for loan and firm characteristics for 1,597 loan announcements for a sample of 401 non-financial and non-utility companies whose shares were included in the FTSE-350 index of the London Stock Exchange at any time between 2000 and 2012. Loan announcements taken place in the subsequent year. The stated use of loan proceeds is not mutually exclusive. All variables are defined in Table 1. Medians are reported in brackets below means. ${ }^{* * *}$, ${ }^{* *}$, and ${ }^{*}$ denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ level respectively for the difference in sample means and medians between the pre-crisis and crisis time periods for two-tailed t-tests of means and Wilcoxon rank-sum tests of difference in medians respectively.

|  | Public Bonds | Bank Loans | Syndicated Loans | Bilateral <br> Loans | Non-Bank Private Debt |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Panel A: Loan characteristics Pre-crisis period: |  |  |  |  |  |
| Number of observations | 276 | 502 | 435 | 67 | 136 |
| LOAN SIZE (£m) | $\begin{gathered} 274.00 \\ {[172.00]} \end{gathered}$ | $\begin{gathered} 424.00 \\ {[242.00]} \end{gathered}$ | $\begin{gathered} 459.00 \\ {[273.00]} \end{gathered}$ | $\begin{gathered} 180.00 \\ {[119.00]} \end{gathered}$ | $\begin{gathered} 71.00 \\ {[49.30]} \end{gathered}$ |
| LOAN SIZE / ASSETS | $\begin{gathered} 0.0987 \\ {[0.0346]} \end{gathered}$ | $\begin{gathered} 0.2340 \\ {[0.1988]} \end{gathered}$ | $\begin{gathered} 0.2375 \\ {[0.2052]} \end{gathered}$ | $\begin{gathered} 0.2099 \\ {[0.1119]} \end{gathered}$ | $\begin{gathered} 0.0565 \\ {[0.0313]} \end{gathered}$ |
| LOAN MATURITY | $\begin{gathered} 13.57 \\ {[10.00]} \end{gathered}$ | $\begin{gathered} 4.12 \\ {[5.00]} \end{gathered}$ | $\begin{gathered} 4.08 \\ {[5.00]} \end{gathered}$ | $\begin{gathered} 4.51 \\ {[5.00]} \end{gathered}$ | $\begin{gathered} 8.25 \\ {[7.00]} \end{gathered}$ |
| Loan Status: |  |  |  |  |  |
| - Renewal | 0.0072 | 0.1305 | 0.1167 | 0.2239 | 0.0074 |
| Use of Proceeds: |  |  |  |  |  |
| - Refinance Debt <br> - Acquisition Purposes <br> - Other <br> - Unclassified | $\begin{aligned} & 0.2754 \\ & 0.0652 \\ & 0.0870 \\ & 0.6051 \end{aligned}$ | $\begin{aligned} & 0.4376 \\ & 0.2342 \\ & 0.0557 \\ & 0.3378 \end{aligned}$ | $\begin{aligned} & 0.4559 \\ & 0.2357 \\ & 0.0374 \\ & 0.3458 \end{aligned}$ | $\begin{aligned} & 0.3134 \\ & 0.2239 \\ & 0.1791 \\ & 0.2836 \end{aligned}$ | $\begin{aligned} & 0.2206 \\ & 0.0147 \\ & 0.4485 \\ & 0.3824 \end{aligned}$ |
| Crisis period: |  |  |  |  |  |
| Number of observations | 94 | 465 | 767 | 200 | 200 |
| LOAN SIZE (£m) | $\begin{gathered} 279.00 \\ {[267.00]^{* *}} \end{gathered}$ | $\begin{gathered} 419.00 \\ {[233.00]} \end{gathered}$ | $\begin{gathered} 468.00 \\ {[273.00]} \end{gathered}$ | $\begin{gathered} 295.00 \\ {[151.00]^{*}} \end{gathered}$ | $\begin{gathered} 145.00^{* * *} \\ {[126.00]^{* * *}} \end{gathered}$ |
| LOAN SIZE / ASSETS | $\begin{gathered} 0.0563 * * * \\ {[0.0294]} \end{gathered}$ | $\begin{gathered} 0.2213 \\ {[0.1617]} \end{gathered}$ | $\begin{gathered} 0.2260 \\ {[0.1699]} \end{gathered}$ | $\begin{gathered} 0.2089 \\ {[0.1487]} \end{gathered}$ | $\begin{gathered} 0.0990^{* * *} \\ {[0.0777]^{* * *}} \end{gathered}$ |
| LOAN MATURITY | $\begin{gathered} 10.22 * * \\ {[7.03]} \end{gathered}$ | $\begin{gathered} 3.79 * * \\ {[4.00]^{* * *}} \end{gathered}$ | $\begin{gathered} 3.74^{* *} \\ {[3.92]^{* * *}} \end{gathered}$ | $\begin{gathered} 3.90 \\ {[4.00]} \end{gathered}$ | $\begin{gathered} 9.64^{* *} \\ {[10.11]^{* * *}} \end{gathered}$ |
| Loan Status: |  |  |  |  |  |
| - Renewal | 0.0000 | 0.1443 | 0.1558 | 0.1151 | 0.0000 |
| Use of Proceeds: |  |  |  |  |  |
| - Refinance Debt | 0.1531*** | 0.3476*** | 0.3314*** | 0.3885 | 0.1216* |
| - Acquisition Purposes | 0.0204** | 0.1341*** | 0.1190*** | 0.1727 | 0.0135 |
| - Other | 0.6837*** | 0.4858*** | 0.5241*** | 0.3885*** | $0.1351 * * *$ |
| - Unclassified | 0.1429*** | 0.0407*** | 0.0312*** | 0.0647*** | 0.7297*** |


| Panel B: Firm characteristics Pre-crisis period: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASSETS (£bn) | $\begin{gathered} 10.50 \\ {[3.89]} \end{gathered}$ | $\begin{gathered} 4.16 \\ {[1.26]} \end{gathered}$ | $\begin{gathered} 3.10 \\ {[1.30]} \end{gathered}$ | $\begin{gathered} 11.40 \\ {[0.94]} \end{gathered}$ | $\begin{gathered} 2.96 \\ {[1.45]} \end{gathered}$ |
| FIXED ASSETS RATIO | $\begin{gathered} 0.3735 \\ {[0.3075]} \end{gathered}$ | $\begin{gathered} 0.3092 \\ {[0.2407]} \end{gathered}$ | $\begin{gathered} 0.3044 \\ {[0.2380]} \end{gathered}$ | $\begin{gathered} 0.3412 \\ {[0.2702]} \end{gathered}$ | $\begin{gathered} 0.2819 \\ {[0.2175]} \end{gathered}$ |
| FIRM AGE | $\begin{gathered} 50.92 \\ {[51.50]} \end{gathered}$ | $\begin{gathered} 42.72 \\ {[24.00]} \end{gathered}$ | $\begin{gathered} 44.65 \\ {[27.00]} \end{gathered}$ | $\begin{gathered} 29.16 \\ {[16.00]} \end{gathered}$ | $\begin{gathered} 50.84 \\ {[44.00]} \end{gathered}$ |
| LEVERAGE | $\begin{gathered} 0.3603 \\ {[0.3104]} \end{gathered}$ | $\begin{gathered} 0.3079 \\ {[0.2576]} \end{gathered}$ | $\begin{gathered} 0.3113 \\ {[0.2580]} \end{gathered}$ | $\begin{gathered} 0.2846 \\ {[0.2548]} \end{gathered}$ | $\begin{gathered} 0.3202 \\ {[0.2900]} \end{gathered}$ |
| ROA | $\begin{gathered} 0.1397 \\ {[0.1303]} \end{gathered}$ | $\begin{gathered} 0.1227 \\ {[0.1258]} \end{gathered}$ | $\begin{gathered} 0.1262 \\ {[0.1260]} \end{gathered}$ | $\begin{gathered} 0.0990 \\ {[0.1223]} \end{gathered}$ | $\begin{gathered} 0.1380 \\ {[0.1389]} \end{gathered}$ |
| LOW IC | 0.1685 | 0.2012 | 0.1946 | 0.2462 | 0.1128 |
| MTB BHAR | $\begin{gathered} 1.8467 \\ {[1.5151]} \\ 0.1279 \\ {[0.0700]} \end{gathered}$ | $\begin{gathered} 1.8838 \\ {[1.5187]} \\ 0.1806 \\ {[0.1286]} \end{gathered}$ | $\begin{gathered} 1.8703 \\ {[1.5155]} \\ 0.1620 \\ {[0.1154]} \end{gathered}$ | $\begin{gathered} 1.9749 \\ {[1.5407]} \\ 0.3038 \\ {[0.2000]} \end{gathered}$ | $\begin{gathered} 1.8165 \\ {[1.4749]} \\ 0.1186 \\ {[0.1100]} \end{gathered}$ |
| Crisis period: |  |  |  |  |  |
| ASSETS (£bn) | $\begin{aligned} & 20.10^{* * *} \\ & {[6.43]^{* * *}} \end{aligned}$ | $\begin{gathered} 3.80 \\ {[1.00]^{* *}} \end{gathered}$ | $\begin{gathered} 3.95 \\ {[1.19]^{*}} \end{gathered}$ | $\begin{gathered} 3.40^{*} \\ {[0.80]} \end{gathered}$ | $\begin{gathered} 2.66 \\ {[1.85]} \end{gathered}$ |
| FIXED ASSETS RATIO | $\begin{gathered} 0.2908^{* * *} \\ {[0.1714]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.2892 \\ {[0.2233]} \end{gathered}$ | $\begin{gathered} 0.2926 \\ {[0.2201]} \end{gathered}$ | $\begin{gathered} 0.2805 \\ {[0.2256]} \end{gathered}$ | $\begin{gathered} 0.1868 * * * \\ {[0.1335]^{* * *}} \end{gathered}$ |
| FIRM AGE | $\begin{gathered} 44.08 \\ {[26.50]} \end{gathered}$ | $\begin{gathered} 40.35 \\ {[24.00]} \end{gathered}$ | $\begin{gathered} 40.87 \\ {[23.00]} \end{gathered}$ | $\begin{gathered} 39.08^{*} \\ {[25.00]^{* * *}} \end{gathered}$ | $\begin{gathered} 43.23 \\ {[30.00]} \end{gathered}$ |
| LEVERAGE | $\begin{aligned} & 15.8629^{* *} \\ & {[0.2800]^{*}} \end{aligned}$ | $\begin{gathered} 43.5101^{* * *} \\ {[0.2559]} \end{gathered}$ | $\begin{gathered} 51.1809 * * * \\ {[0.2602]^{*}} \end{gathered}$ | $\begin{gathered} 23.93 * * * \\ {[0.2460]} \end{gathered}$ | $\begin{gathered} 8.8913 \\ {[0.2620]} \end{gathered}$ |
| ROA | $\begin{gathered} 0.1278 \\ {[0.1299]} \end{gathered}$ | $\begin{gathered} 0.1230 \\ {[0.1199]} \end{gathered}$ | $\begin{gathered} 0.1208 \\ {[0.1194]} \end{gathered}$ | $\begin{gathered} 0.1283 \\ {[0.1222]} \end{gathered}$ | $\begin{gathered} 0.1385 \\ {[0.1305]} \end{gathered}$ |
| LOW IC | 0.1327 | 0.2484* | 0.2690** | 0.1971 | 0.0833 |
| MTB | $\begin{gathered} 1.1707 * * * \\ {[1.0414]^{* * *}} \end{gathered}$ | $\begin{gathered} 1.1710^{* * *} \\ {[0.9614]^{* * *}} \end{gathered}$ | $\begin{gathered} 1.1891^{* * *} \\ {[0.9735]^{* * *}} \end{gathered}$ | $\begin{gathered} 1.1138^{* * *} \\ {[0.9345]^{* * *}} \end{gathered}$ | $\begin{gathered} 1.1036^{* * *} \\ {[1.0070]^{* * *}} \end{gathered}$ |
| BHAR | $\begin{gathered} 0.0878 \\ {[0.0550]} \end{gathered}$ | $\begin{gathered} 0.1208 \\ {[0.0369]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.1330 \\ {[0.0525]^{* *}} \end{gathered}$ | $\begin{gathered} 0.0906^{* *} \\ {[-0.0300]^{* * *}} \end{gathered}$ | $\begin{gathered} 0.1387 \\ {[0.1100]} \end{gathered}$ |

Table 6: Abnormal returns surrounding loan announcements
The table reports market model event study abnormal returns for a sample of loan announcements. Data is for 1,597 loan announcements for a sample of 401 non-financial and non-utility companies whose shares were included in the FTSE-350 index of the London Stock Exchange at any time between 2000 and 2012. Loan announcements take place in the subsequent year. The pre-crisis period includes all loan announcements from 2001 to 2007. The crisis period includes all loan announcements from 2008 to 2013. ${ }^{* * *, * *}$, and ${ }^{*}$ denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ level respectively.
$\left.\begin{array}{lccccc}\hline & \text { Public Bonds } & \text { Bank Loans } & \begin{array}{c}\text { Syndicated } \\ \text { Loans }\end{array} & \begin{array}{c}\text { Bilateral } \\ \text { Loans }\end{array} & \begin{array}{c}\text { Non-Bank } \\ \text { Private Debt }\end{array} \\ \hline \text { Panel A: Pre-crisis period } & 0.22 \% & 0.92 \% & 1.04 \% & 0.10 \% & 0.08 \% \\ \text { CAAR }(-1,+1) & (0.94) & \begin{array}{c}(3.71 \%)^{* * *}\end{array} & \begin{array}{c}(3.93)^{* * *} \\ \text { Number of observations }\end{array} & 272 & 506\end{array} \begin{array}{c}(0.14)\end{array}\right](0.24)$

Table 7: Difference in abnormal returns across loan announcements surrounding financial crisis The table reports regressions of the determinants of abnormal returns surrounding loan announcements. The dependent variable is the three-day market model abnormal return centred on the announcement day, zero. Data is for 1,597 loan announcements for a sample of 401 non-financial and non-utility companies whose shares were included in the FTSE-350 index of the London Stock Exchange at any time between 2000 and 2012. Loan announcements take place in the subsequent year. BOND is a dummy variable set equal to one where the borrowing source is a public bond issue, and zero otherwise. NBP is a dummy variable set equal to one where the borrowing source is a private, non-bank lender. BANK is a dummy variable set equal to one where the borrowing source is a bank entity, and zero otherwise. SYND is a dummy variable set equal to one where the borrowing source is a multi-lender bank loan, and zero otherwise. BILAT is a dummy variable set equal to one where the borrowing source is a single lender bank loan. All other variables are defined in Table 1. T-statistics for standard errors clustered by issuing firm are reported in parenthesis. ${ }^{* * *, * *}$, and ${ }^{*}$ denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ level respectively.

|  | (1) | (2) | (3) | (4) | (5) | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intercept | $\begin{gathered} 0.0092 \\ (3.78)^{* * *} \end{gathered}$ | $\begin{gathered} 0.0017 \\ (0.92) \end{gathered}$ | $\begin{gathered} 0.0017 \\ (0.92) \end{gathered}$ | $\begin{gathered} 0.0574 \\ (2.43)^{* *} \end{gathered}$ | $\begin{gathered} 0.0473 \\ (2.03)^{* *} \end{gathered}$ | $\begin{gathered} 0.0463 \\ (1.99)^{* *} \end{gathered}$ |
| CRISIS | $\begin{aligned} & -0.0076 \\ & (-1.74)^{*} \end{aligned}$ | $\begin{gathered} -0.0036 \\ (-0.86) \end{gathered}$ | $\begin{gathered} -0.0036 \\ (-0.86) \end{gathered}$ | $\begin{gathered} -0.0102 \\ (-2.26)^{* *} \end{gathered}$ | $\begin{gathered} -0.0041 \\ (-0.91) \end{gathered}$ | $\begin{gathered} -0.0040 \\ (-0.90) \end{gathered}$ |
| BOND | $\begin{gathered} -0.0070 \\ (-2.11)^{* *} \end{gathered}$ |  |  | $\begin{gathered} -0.0047 \\ (-1.41) \end{gathered}$ |  |  |
| NBP | $\begin{gathered} -0.0084 \\ (-2.17)^{* *} \end{gathered}$ |  |  | $\begin{gathered} -0.0095 \\ (-2.39)^{* *} \end{gathered}$ |  |  |
| BANK |  | $\begin{gathered} 0.0074 \\ (2.44)^{* *} \end{gathered}$ |  |  | $\begin{gathered} 0.0063 \\ (2.12)^{* *} \end{gathered}$ |  |
| SYND |  |  | $\begin{gathered} 0.0087 \\ (2.71)^{* * *} \end{gathered}$ |  |  | $\begin{gathered} 0.0075 \\ (2.33)^{* *} \end{gathered}$ |
| BILAT |  |  | $\begin{gathered} -0.0007 \\ (-0.11) \end{gathered}$ |  |  | $\begin{gathered} -0.0013 \\ (-0.26) \end{gathered}$ |
| BOND * CRISIS | $\begin{gathered} 0.0063 \\ (0.87) \end{gathered}$ |  |  | $\begin{gathered} 0.0085 \\ (1.10) \end{gathered}$ |  |  |
| NBP * CRISIS | $\begin{gathered} 0.0011 \\ (0.16) \end{gathered}$ |  |  | $\begin{gathered} 0.0044 \\ (0.61) \end{gathered}$ |  |  |
| BANK * CRISIS |  | $\begin{gathered} -0.0040 \\ (-0.67) \end{gathered}$ |  |  | $\begin{gathered} -0.0061 \\ (-0.98) \end{gathered}$ |  |
| SYND * CRISIS |  |  | $\begin{gathered} -0.0074 \\ (-1.13) \end{gathered}$ |  |  | $\begin{gathered} -0.0089 \\ (-1.31) \end{gathered}$ |
| BILAT * CRISIS |  |  | $\begin{gathered} 0.0095 \\ (0.96) \end{gathered}$ |  |  | $\begin{gathered} 0.0059 \\ (0.64) \end{gathered}$ |
| Ln TA |  |  |  | $\begin{gathered} -0.0022 \\ (-2.06)^{* *} \end{gathered}$ | $\begin{aligned} & -0.0020 \\ & (-1.96)^{*} \end{aligned}$ | $\begin{aligned} & -0.0020 \\ & (1.92)^{*} \end{aligned}$ |
| LOW IC |  |  |  | $\begin{gathered} -0.0035 \\ (-0.54) \end{gathered}$ | $\begin{gathered} -0.0030 \\ (-0.46) \end{gathered}$ | $\begin{gathered} -0.0026 \\ (-0.40) \end{gathered}$ |
| BHAR |  |  |  | $\begin{gathered} -0.0050 \\ (-1.31) \end{gathered}$ | $\begin{gathered} -0.0050 \\ (-1.31) \end{gathered}$ | $\begin{gathered} -0.0047 \\ (-1.24) \end{gathered}$ |
| Number of observations | 1,537 | 1,537 | 1,537 | 1,430 | 1,430 | 1,430 |
| R -squared | 0.0049 | 0.0045 | 0.0064 | 0.0123 | 0.0113 | 0.0128 |
| F-statistic | $2.29 * *$ | 2.96** | 2.36** | 1.99* | 2.19** | 1.87* |

Table 8: Abnormal returns to bank loan announcements surrounding financial crisis
The table reports market model event study abnormal returns for a sample of bank loan announcements for a sample of 401 non-financial and non-utility companies whose shares were included in the FTSE-350 index of the London Stock Exchange at any time between 2000 and 2012. Loan announcements taken place in the subsequent year. All variables are defined in Table 1. T-statistics for standard errors clustered by issuing firm are reported in parenthesis. ${ }^{* * *, * *}$, and ${ }^{*}$ denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ level respectively.

|  | (1) | (2) | (3) | (4) | (5) | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intercept | 0.0649 | 0.1183 | 0.0118 | 0.0630 | 0.0641 | 0.0630 |
|  | (2.16)** | (3.04)*** | (0.65) | (1.90)* | (2.15)** | (2.17)** |
| Ln TA | -0.0025 | -0.0052 | -0.0016 | -0.0025 | -0.0025 | -0.0024 |
|  | (-1.88)* | (-2.92)*** | (-0.65) | (-1.74)* | (-1.86)* | (-1.80)* |
| LOW IC | -0.0055 | 0.0105 | -0.0062 | -0.0092 | -0.0056 | -0.0047 |
|  | (-0.59) | (1.27) | (-0.54) | (-0.98) | (-0.60) | (-0.50) |
| BHAR | -0.0042 | -0.0025 | -0.0073 | -0.0044 | -0.0039 | -0.0043 |
|  | (-0.83) | (-0.47) | (-1.27) | (-0.71) | (-0.76) | (-0.85) |
| CRISIS | -0.0109 | -0.0332 | -0.0080 | -0.0074 | -0.0097 | -0.0322 |
|  | (-2.35)** | (-0.48) | (-0.88) | (-0.75) | (-1.97)** | (-1.06) |
| Ln TA * CRISIS |  | 0.0014 |  |  |  |  |
|  |  | (0.45) |  |  |  |  |
| LOW IC * CRISIS |  | -0.0393 |  |  |  |  |
|  |  | (-1.66)* |  |  |  |  |
| BHAR * CRISIS |  | -0.0053 |  |  |  |  |
|  |  | (-0.54) |  |  |  |  |
| LOAN SIZE / TA |  |  | 0.0267 |  |  |  |
|  |  |  | (0.99) |  |  |  |
| LOAN SIZE / TA * |  |  | 0.0019 |  |  |  |
| CRISIS |  |  | (0.06) |  |  |  |
| MATURITY |  |  |  | -0.0002 |  |  |
|  |  |  |  | (-0.25) |  |  |
| MATURITY * CRISIS |  |  |  | 0.0002 |  |  |
|  |  |  |  | (0.13) |  |  |
| RENEWAL |  |  |  |  | 0.0011 |  |
|  |  |  |  |  | (0.14) |  |
| RENEWAL * CRISIS |  |  |  |  | -0.0083 |  |
|  |  |  |  |  | (-0.63) |  |
| REFINANCE |  |  |  |  |  | -0.0042 |
|  |  |  |  |  |  | (-0.79) |
| REFINANCE * CRISIS |  |  |  |  |  | 0.0170 |
|  |  |  |  |  |  | (0.54) |
| ACQUISITION |  |  |  |  |  | 0.0016 |
|  |  |  |  |  |  | (0.25) |
| ACQUISITION * |  |  |  |  |  | 0.0471 |
| CRISIS |  |  |  |  |  | (1.47) |
| OTHER |  |  |  |  |  | -0.0135 |
|  |  |  |  |  |  | (-1.49) |
| OTHER * CRISIS |  |  |  |  |  | 0.0315 |
|  |  |  |  |  |  | (0.99) |
| Number of observations | 901 | 901 | 753 | 787 | 901 | 901 |
| R -squared | 0.0109 | 0.0256 | 0.0166 | 0.0081 | 0.0132 | 0.0282 |
| F-statistic | 1.94 | 1.84* | 1.40 | 0.64 | 1.30 | 2.56 *** |

Table 9: Abnormal returns to syndicated bank loan announcements surrounding financial crisis The table reports market model event study abnormal returns for a sample of syndicated bank loan announcements for a sample of 401 non-financial and non-utility companies whose shares were included in the FTSE-350 index of the London Stock Exchange at any time between 2000 and 2012. Loan announcements taken place in the subsequent year. All variables are defined in Table 1. T-statistics for standard errors clustered by issuing firm are reported in parenthesis. ${ }^{* * *}$, ${ }^{* *}$, and ${ }^{*}$ denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ level respectively.

|  | (1) | (2) | (3) | (4) | (5) | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intercept | 0.0595 | 0.1330 | -0.0001 | 0.0626 | 0.0593 | 0.0600 |
|  | (1.63) | (2.74)*** | (-0.00) | (1.58) | (1.62) | (1.69)* |
| Ln TA | -0.0023 | -0.0059 | -0.0000 | -0.0025 | -0.0023 | -0.0021 |
|  | (-1.38) | $(-2.63)^{* * *}$ | (-0.01) | (-1.45) | (-1.38) | (-1.32) |
| LOW IC | -0.0007 | 0.0119 | -0.0029 | -0.0078 | -0.0008 | -0.0001 |
|  | (-0.06) | (1.26) | (-0.22) | (-0.73) | (-0.07) | (-0.01) |
| BHAR | -0.0033 | -0.0003 | -0.0072 | -0.0031 | -0.0033 | -0.0032 |
|  | (-0.51) | (-0.04) | (-0.96) | (-0.39) | (-0.50) | (-0.51) |
| CRISIS | -0.0139 | -0.0683 | -0.0078 | -0.0123 | -0.0139 | 0.0019 |
|  | $(-2.57) * *$ | (-0.77) | (-0.66) | (-0.96) | (-2.33)** | (0.14) |
| Ln TA * CRISIS |  | 0.0029 |  |  |  |  |
|  |  | (0.72) |  |  |  |  |
| LOW IC * CRISIS |  | -0.0316 |  |  |  |  |
|  |  | (-1.10) |  |  |  |  |
| BHAR * CRISIS |  | -0.0080 |  |  |  |  |
|  |  | (-0.60) |  |  |  |  |
| AMT ISSUED / TA |  |  | 0.0396 |  |  |  |
|  |  |  | (1.19) |  |  |  |
| Ln AMT ISSUED / TA * |  |  | -0.0101 |  |  |  |
| CRISIS |  |  | (-0.26) |  |  |  |
| MATURITY |  |  |  | -0.0001 |  |  |
|  |  |  |  | (-0.09) |  |  |
| MATURITY * CRISIS |  |  |  | 0.0007 |  |  |
|  |  |  |  | (0.25) |  |  |
| RENEWAL |  |  |  |  | 0.0043 |  |
|  |  |  |  |  | (0.50) |  |
| RENEWAL * CRISIS |  |  |  |  | -0.0007 |  |
|  |  |  |  |  | (-0.05) |  |
| REFINANCE |  |  |  |  |  | -0.0060 |
|  |  |  |  |  |  | (-1.03) |
| REFINANCE * CRISIS |  |  |  |  |  | -0.0226 |
|  |  |  |  |  |  | (-1.42) |
| ACQUISITION |  |  |  |  |  | -0.0017 |
|  |  |  |  |  |  | (-0.24) |
| ACQUISITION * |  |  |  |  |  | 0.0103 |
| CRISIS |  |  |  |  |  | (0.66) |
| OTHER |  |  |  |  |  | -0.0154 |
|  |  |  |  |  |  | (-1.36) |
| OTHER * CRISIS |  |  |  |  |  | -0.0046 |
|  |  |  |  |  |  | (-0.26) |
| Number of observations | 718 | 718 | 594 | 640 | 718 | 718 |
| R -squared | 0.0132 | 0.0256 | 0.0190 | 0.0094 | 0.0136 | 0.0270 |
| F-statistic | 2.23* | 1.63 | 1.21 | 0.79 | 1.51 | $2.27 * *$ |


[^0]:    * Marshall and McColgan are from the Department of Accounting and Finance, University of Strathclyde, UK. McCann is from the Business School, University of Aberdeen, UK. The authors are grateful to Paul Draper for helpful comments on earlier versions of this work. We also thank Martin Kemmitt for helpful research assistance on this project. All errors remain our own. Address for correspondence: Laura McCann, Business School, University of Aberdeen, Aberdeen, UK, AB24 3QY. Email: 1.mccann@abdn.ac.uk.

[^1]:    ${ }^{1}$ See Carey et al (1993) and Marshall et al (2016) for a summary of the different debt sources available to firms.
    ${ }^{2}$ James compares the market response to both bank and non-bank private debt and reports that the difference between his bank and non-bank private debt samples is statistically different at the $1 \%$ level.

[^2]:    ${ }^{3}$ A number of studies have also reported that the positive market response exhibited are restricted only to particular sub-sections of their data set; Fery et al (2003) find that the market responds positively only to bank loan announcements published in the financial press; Maskara and Mullineaux (2011) illustrate that the positive response to bank loan announcements is restricted to only the smallest firms in their sample.

[^3]:    ${ }^{4}$ One problem with this approach is that it may understate the use of bank debt, and that it equally may overstate the importance of non-bank private debt. However, it appears that since more than $75 \%$ of sample private debt announcements are classed as bank debt that this categorisation is not likely to have had a sizeable impact.

[^4]:    ${ }^{5}$ For robustness we also estimate abnormal returns using the market-adjusted model and find similar results.

[^5]:    

