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How has the global financial crisis affected syndicated loan terms in emerging markets? Evidence from China

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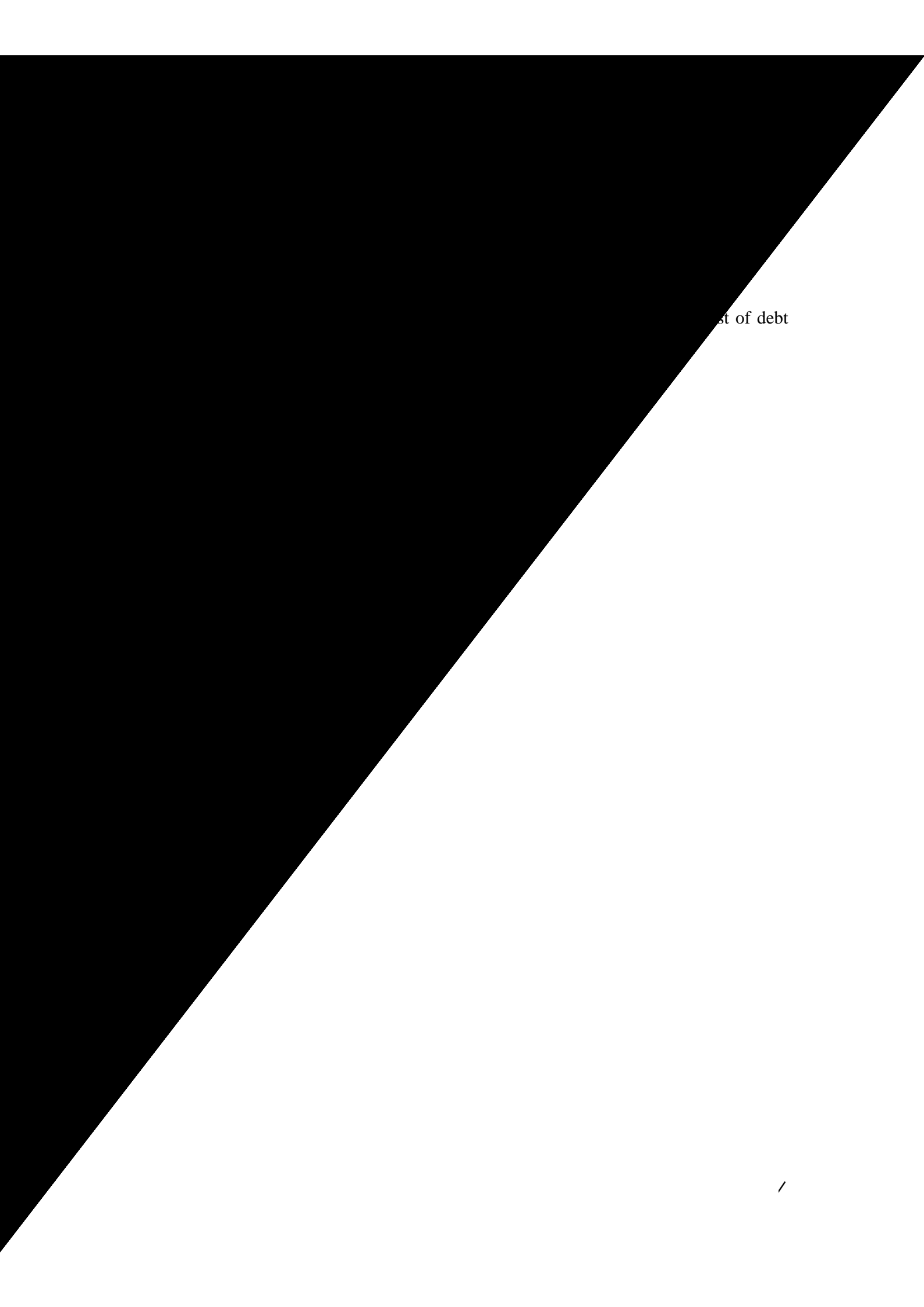Email: s.lodh@mdx.ac.uk
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1. Introduction

During the last two decades loans have dominated the corporate debt market in the developed economies (Drucker and Puri, 2007); in particular, the volume of syndicated loans has increased at a very rapid rate (Ferreira and Matos, 2012). A similar trend has been observed in emerging markets (Godlewski and Weill, 2008). However, the recent financial crisis has led to a sharp decline (by 67 percent) in gross syndicated lending. Since in most cases the lead arrangers are international banks and financial institutions (Chui et al., 2010), the financial crisis that originated in the developed economies has also affected emerging markets (Dovern and Roye, 2014). Given the borrower-lender and arranger-participant relationship in syndicated loans (Esty, 2001), financial shocks can be transmitted across countries through cross-border syndicated lending (Cetorelli, and Goldberg, 2011; De Haas and Van Horen, 2012; Ding et al., 2013). The increase in international infrastructure financing has resulted in foreign banks participating more in syndicated loans to reduce the risk of default from a single bad project (Brealey, Cooper and Habib, 1996; Ramamurti and Doh, 2004). Factors such as institutional weakness (Young et al., 2014), bank-level governance, country-level governance and previous profitability position (Beltratti and Stulz, 2009; Ivashina and Scharfstein, 2010; Berger and Bouwman, 2013) have all had a negative impact on syndicated loans. The performance of bank-dependent borrowers has also been affected (e.g. Chava and Purnanandam, 2011). A 'flight home effect' (Giannetti and Laeven, 2012) is another possible explanation for the decline of the syndicated loan market.

China being one of the biggest economies in the world (Berger et al., 2010), it is interesting to examine the impact of the crisis on its banking system (for some of its

features see Hasan et al., 2009, and Jia, 2009). In China, state controlled banks make

most loan decisions expecting corporate borrowers to perform poorly (Bailey et al. 2011),

and therefore syndicated loans are the most popular source of corporate finance

(Pessarossi and Weill, 2013). The syndicate0 g q 0 35.279998 m 0 806.160001 l 595.680002 806.160001

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correlated with the loan contract terms. Therefore, unlike existing studies on China only focusing on the volume of syndicated loans during the crisis (Chui et al., 2010), in this paper we examine the impact of the financial crisis on both price and non-price his

the growth of syndicated loans (Focarelli et al., 2008; Dennis and Mullineaux, 2000) in both developed (Sufi, 2007) and emerging markets (Godlewski and Weill, 2008). A difference in bank capital before and during the crisis creates difficulties for bank-dependent borrowers (Demirguc-Kunt et al., 2013; Chava and Purnanandam, 2011). This is evident from the sharp fall in the volume of syndicated loans (Ivashina and Scharfstein, 2010). However, the spread remains quite high and the amount borrowed from banks associated to Lehman Brothers and other failed banks is quite low (Santos, 2011). Syndicated loans have generally declined, but China has been an exception (Okazaki, 2007).

Organising syndication, monitoring and due diligence are the responsibility of one or more lead arrangers (Dennis and Mullineaux 2000). For emerging markets, these are generally international banks (Chui et al., 2010) and the contraction in banks' foreign claims affects the syndicated loan market (De Haas and Van Horen, 2012). Ramamurti and Doh (2004) argue that lenders of a syndicated loan can earn attractive fees and interest rates. Moreover, the pro-market reforms in China allows them to 'securitise' their loans and pass the financial risk onto other investors. This type of securitisation activity has changed the role of lenders, and also stabilises the financial system as risk is allocated economy-wide. Another way of reducing risk is to involve local banks and investors to maintain a business network with political parties. These strategies possibly have enabled China to keep a constant growth of issuance of syndicated loans during the financial crisis.

Chui et al. (2010) find ample supply of credit through local banks in China during that period. This evidence could partially explain the changes in the loan contract terms

in China as the country underwent a series of banking sector reforms from 2002 to become a leading market-based economy (see Okazaki, 200; Ahlstrom et al., 2003; Young et al., 2011), and also joined the World Trade Organization in 2001. Murali and Banalieva (2015) showed that the relationship between market reforms and firms' performance is U-shaped because in the initial stages profitability decreases due to a monitoring vacuum but then, when the reforms are implemented, it rises, which attracts foreign banks. Foreign participants started their local currency business in China in December 2006. Their participation, in addition to other initiatives from the government (such as tax exemptions, strict disclosure rules, acceptance of international accounting rules, enhancing corporate governance norms etc.), has expanded the syndicated loan market in China. Moreover, in China most of the loans originate from state-owned and joint stock commercial banks (Okazaki, 2007). Resource endowment and organising capabilities together help Chinese firms aiming for outward internationalisation (Liang et. al., 2012). Globalisation and faster economic growth also create a greater need for domestic capital, with the presence of foreign banks increasing competition and improving the overall culture of the banking industry (Hasan et al., 2009). Domestic banks expand their activities through their networks (Bartoli et al., 2013), with borrowers preferring them because the government acts as a guarantor in most cases (Jia, 2009). Therefore, since 2008, whilst foreign banks started withdrawing from the Chinese market, the volume of syndicated loans arranged by domestic banks has stayed quite high, and on the whole the syndicate loan market has grown.

The volume of non-performing loans in China has been increasing, despite banking sector reforms and more monitoring of borrowers; this has led to poor

2.2 Hypothesis development

The cost of bank credit remained quite high in the US during the crisis compared to the pre-crisis period (Santos, 2011). Shocks were transmitted to emerging markets through different channels such as cross-border lending, direct foreign bank participation etc. Information asymmetry has kept rising in countries such as China, and therefore foreign arrangers have been finding it difficult to assess the credit worthiness of borrowers.

Before the crisis, domestic banks were the lead arrangers for most syndicated loans in China. Usually, firms prefer to establish relations with well-capitalised banks (Berger et al., 2008); consequently, banks with a higher capital ratio tend to have more information about borrowers and charge a spread premium. In a hierarchical banking structure, it becomes difficult to produce and transmit soft information (Stein, 2002). As a result, information asymmetry between lead domestic arrangers and domestic participants increases. Chinese small and medium industries, in particular, may suffer from a credit crunch (see Berger et al., 2005). Following Rajan (1992), one can argue that, because of information asymmetry and less transparency, the interest rate on syndicated loans is higher during a crisis period. Recent studies also show that firms have paid more to obtain guaranteed access to liquidity during the global financial crisis (Santos, 2011; Bord and Santos, 2014). Jiangli et al. (2008) concluded that lending relationships mattered during the Asian crisis. There is evidence of a strong relationship between domestic banks and firms before the crisis that also continued during the crisis (Bartoli et al., 2013; Chodorow-Reich, 2014). Therefore, domestic arrangers are always in a more advantageous position than foreign arrangers because of their past relationships with

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firms. On the other hand, during the crisis foreign arrangers, mainly from the developed countries, have viewed China as a more financially stable market than their own economically imbalanced domestic ones. Thus, in order to offset the losses arising from non-performing loans in their home countries, they have offered lower interest to credit-worthy Chinese borrowers. The above discussion suggests the following hypotheses to test:

H1: During the financial crisis in China the interest rate increased less for foreign than for domestic syndicated loans.

Syndicated loans contribute towards financial development and stability in emerging markets (Godlewski and Weill, 2008). During the crisis they fell in developed markets where lead arrangers were severely hit (Santos, 2011). However, in China, where the financial sector had been growing steadily and had been strengthened by various reforms (Okazaki, 2007), the supply of credit remained steady during the crisis. Because of the sovereign debt crisis and the collapse of several financial institutions in 2008-2009, with the consequent crisis in confidence for the syndicated loan arrangers (mainly from developed markets), lending fell during the financial crisis (Popov and Van Horen, 2013). Foreign arrangers withdrew from the Chinese syndicated loan market, and also made more use of securitisation and reduced their loan supply (Bonaccorsi di Patti and Sette 2012). Since the liquidity position of the domestic lead arrangers did not change during the crisis, the total amount of syndicated loans was affected.

H2: During the financial crisis in China foreign syndicated loans decreased relative to domestic syndicated loans.

Usually banks prefer to lend for longer maturities to reduce moral hazard (Coleman et al., 2006). In China, the banking system is almost 100 percent government-owned (Dobson and Kashyap, 2006), and owing to lack of monitoring by state-owned banks and a weak institutional framework, the country is far behind in terms of capital allocation efficiency. Moreover, if there are many lenders the necessary monitoring decreases because the lead arrangers may exploit their informational advantage to obtain an information rent (Bruche and Llobet, 2014). Then, participants cannot understand the willingness of lead arrangers to monitor borrowers, which leads to non-performing loans. In the case of syndicated loans, when there is a need for diligence and monitoring by borrowing firms, the lead arrangers usually prefer concentrated loans, i.e. holding a large fraction of the loan (Sufi, 2007); however, if there is less information asymmetry, they tend to have a preference to hold smaller amounts (Focarelli et al., 2008). Consequently, the syndicate requires more arrangers and participants. Many banks take this opportunity to diversify their risks by becoming a member of the syndicate.

Loan maturity reflects the borrower risk (Nandy and Lodh, 2012), which is also associated with the loan spread. According to the credit quality hypothesis, lenders prefer a short maturity period for any loan as it gives them the opportunity to assess regularly the credit position of firms (Diamond, 2004). On the other hand, the trade-off hypothesis states that the loan spread increases with the maturity period (Gottesman and Roberts, 2004). A recent study (Alexandre et al., 2014) provides evidence that firms managed to

obtain longer maturities during the crisis when they had a stronger lending relationship before the crisis. Therefore, we hypothesise that in China more domestic banks' participation and poor accounting disclosure allow the arrangers to assess the credit worthiness of firms, and as a result information asymmetry between the syndicated lenders and the borrowers is significant

1990; Saidenberg and Strahan, 1999): the lead arrangers may charge less interest and may arrange loans with a longer maturity to attract more borrowers for the syndicated loans.

Banks' lending portfolios carry a considerable amount of country-specific risk (Fang and Lelyveld, 2014). During the financial crisis, the capital position of the foreign arrangers in their home country remained quite weak. They were attracted to China because of its financial stability. A single lead arranger cannot provide the required syndicated loan amount due to capital inadequacy and therefore might involve other lead arrangers from the domestic and foreign markets. This leads to formulating the following hypothesis:

H4: During the financial crisis in China the number of lead arrangers increased for foreign syndicated loans compared to domestic syndicated loans.

3. Data and Methodology

3.1 Sample and Variable Description

To test the effects of the global financial crisis on both price and non-price terms of syndicated loans we use loan information for China from the ThomsonOne Deal database. We also match a few companies with the Worldscope and Bloomberg database to increase the number of observations. We start with all borrowers in the database and then identify the non-financial firms. In China in our sample period, which goes from 2000 to 2012, there are 809 non-financial borrowers and 1018 firm-bank pairs of which 749 have at least two loans.

Following the literature (e.g. Santos, 2011), the "crisis period" is defined as 2007-2009. More specifically, the fourth quarter of 2007 is taken to be the start of the crisis. Because of

loan. The mandated arranger title has been in use since January 2000. In Asia, mandated arrangers are the named lead agents in a mandate letter for a particular syndicate and may not be restricted to the Administration, Syndication or Documentation Agents.

Banks assess the creditworthiness of firms before deciding on loan contract terms and focus on several firm-level factors. Therefore, following the literature (e.g. Santos, 2011; Strahan, 1999) we control for firm characteristics. Big firms are assumed to have a lower default probability; therefore we include *Firm Size*, which is defined as the log of total assets. These may need more loans with long maturities for their activities but the spread could be lower than for smaller firms because of the lower default probability. *Profitability* is measured by the return on assets (ROA). Higher returns for firms implies less risk from the bank's perspective. More profitable firms may require more loans but may pay less interest as they are considered to be less risky. Older firms are more established and are also viewed as less risky. We capture this by including *Firm Age*,

for the percentage of loans (principle amount) of lead arrangers. The variable *Share of lead arranger* is also included in the model. Most banks check credit ratings. We use Moody's *Credit Rating*. According to their generic rating, firms have minimal default risk if they belong to Aaa and the risk is higher for category B and C. Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks at the higher end of its generic rating category; 2 indicates a mid-range ranking, and 3 a ranking at the lower end of that generic rating category. Different industries may be associated with different levels of risk, therefore we also include *Industry*.

3.2 Data Summary

Table 1 shows the summary statistics for three categories: *domestic syndicated loans* (all lead arrangers in a syndicated loan are from China), *foreign syndicated loans* (at least one lead arranger of a syndicated loan is from a foreign country) and the full sample. The maximum loan amount is 39,000 (US$, mil), which is for a domestic syndicated loan group. The maximum foreign syndicated loan is 6,000 (US$, mil); it is arranged by a maximum of 23 lead arrangers, whereas a maximum 8 lead arrangers are involved in a domestic syndicated loan. The average all-in-drawn spread for domestic syndicated loans is higher than for foreign syndicated loans. However, the average maturity period (years) is higher for the former than for the latter.

Insert Table 1 about here

4. Empirical results

We proceed in two steps to test the hypotheses of interest: first, we analyse an unbalanced panel; second, we aggregate the data to create time series at the loan-month level and estimate a dynamic conditional correlation-GARCH model to investigate the co-movement of loan contract terms in China during the financial crisis.

4.1 Panel data approach (Difference-in-differences)

4.1.1 Model

To examine the impact of the global financial crisis on the price and non-price terms of syndicated loan terms in China we estimate the following model:

$$Y_{it} = \alpha_i + \beta_1 Foreign_{it} + \beta_2 Crisis_{it} + \beta_3 Foreign_{it} \cdot Crisis_{it} + \beta_4 FollowUp_{jt} + \beta_5 X_{it} + \epsilon_{it}$$

where Y_{it} indicates the Loan Spread, Loan Amount, Loan Maturity and Lead Arranger respectively for the ith loan in year t, and α_i is the firm's fixed effect capturing any time-invariant and unobserved firm characteristic. *Foreign* is a dummy equal to 1 for the treatment group when one or more lead arrangers are from foreign banks and 0 otherwise. Note that in the control group all the lead arrangers are from China. Crisis is a dummy equal to zero if the loan is issued during the period from the fourth quarter of 2007 to the fourth quarter of 2009, and is equal to one from the first quarter of 2010 to the fourth quarter of 2012 (the post-crisis or follow-up period). We also include three dummies to capture any changes in the follow-up period (T=2010-2012) relative to the crisis period, namely FollowUp10, FollowUp11 and FollowUp12, each of which is equal to 1 for the corresponding year and 0 otherwise. X_{it} is the vector of controls explained in Section 3.1.

positive and significant. It may be the case that from 2011, when the financial markets of the developed countries started improving, the foreign lead arrangers found ways to recover their financial position in their domestic markets. Moreover, during the crisis they established good relationships ('guanxi' or personal relationships or networks) with the Chinese borrowers, and to compensate their low spread during the crisis increased interest rates in the post-crisis period.

Insert Table 3 about here

Table 3 shows that the coefficient of the interaction term is statistically significant and negative in all cases. In particular, there was a 19 percent decrease (significant at the 5 percent level) of foreign syndicated loans relative to the pre-crisis period (see Colum 0 806.1Ž95.?1=?m [(

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including their own. Moreover, due to financial market and banking reforms in China, the improved credit scoring reduced uncertainty about borrowers (see Berger et al. 2005).

Insert Table 5 about here

The statistically significant and positive coefficient in Table 5 supports Hypothesis 4, i.e. that during the financial crisis the number of lead arrangers increases for the foreign syndicated loans to diversify risk and to compensate capital inadequacy in their home country. It also appears that in the follow-up period (in 2012) the number of lead arrangers continued to increase.

Overall, we find empirical support for the hypotheses formulated above. During the financial crisis foreign syndicated loans decreased despite a higher number of lead arrangers and longer maturities. However, to cope with the imbalances in the global economy and the credit market crunch, the foreign syndicated loan providers kept lower spreads by diversifying their risk through a number of lead arrangers.

4.2 Time-series approach (DCC-GARCH model)

In this section, we explore the effects of the financial crisis on the aggregate loan spread-maturity, loan spread-amount and loan amount-maturity relationships. A simple correlation analysis would not be sufficient for this purpose; we use instead Engle's (2002) time-varying dynamic conditional correlation (DCC)-GARCH model.

To begin with, we carry out some diagnostic tests. The results are presented in Table 6. The Ljung-Box Q statistic indicates serial correlation in all the variables. The ADF (augmented Dickey-Fuller) results imply that they are all stationary, except the loan amount, which contains a unit root. We find a structural break in August 2009, which

corresponds to the collapse of Lehman Brothers. The Zivot and Andrews statistics indicate that the spread and maturity of domestic syndicated loans are stationary in levels with structural breaks in the post-financial crisis periods. The opposite holds for the loan amount. The Lagrange multiplier (LM) test for ARCH with 15 and 10 lags respectively for foreign and domestic syndicated loans rejects the null hypothesis of homoscedasticity for all the variables and justifies the use of GARCH-type models to capture the time-varying volatility present in the series.

<div align="center">**Insert Table 6 about here**</div>

In order to investigate the impact of financial shocks on the co-movement between loan amount, spread and maturity, we follow the following DCC-GARCH modelling approach (Engle 2002). Let $Y_t = \{y_{1t}y_{2t}\}$ be a 2×1 vector containing any two of the variables such as the Loan amount or maturity or Loan spread and amount series in a conditional mean equation as below:

$M (L) Y_t = \epsilon_t$, where $\epsilon_t | \phi_{t-1} \sim N(0, H_t)$, and t=1, 2…,T

where M (L) is a matrix in the lag operator L and ϵ_t is a vector of innovations based on the information set, ϕ, available at time t-1.

The vector ϵ_t has the following conditional variance-covariance matrix:

$$H_t = D_t R_t D_t$$

where $D_t = diag\{\sigma_{it}\}$ is a 2×2 diagonal matrix of time-varying standard deviations from univariate GARCH models, and $R_t = \{\theta_{ij}\}_t$ for i, j=1 and 2, is a correlation matrix containing conditional coefficients. Note that R_t varies over time. The standard deviations in D_t follow the univariate GARCH (P,Q) process as follows:

for all i=1,2.

The DCC-

the syndicated loan is purely from domestic banks. The significance of the GARCH parameters indicates the presence of time variation and dependence of the variance. A sum of a_m and b_n close to 1 indicates high persistence in the conditional variance (see Equation (5)).

Insert Table 7 about here

Although the Chinese government opened up the banking sector to foreign players with an agreement with the World Trade Organization (WTO) in December 2001, it took five

fluctuated. In particular, Kalman filtering 39613 vc3(ors)-6J;ET:Q0 g q 637 270998 m 390-0( )713(e)41(e)ou)-9

fourth quarter of 2008 (see Figure 2).

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Owing to the rapid growth of the economy, the corporate sector in China required

diversified channels of funding, stable and strong credit growth and interest rate reforms.

Interestingly, during 2000-2007 the share of assets held by foreign banks rose with a peak

of above 2 percent, but as a result of the financial crisis it fell to 1.75 percent (Global

Financial Development Database, 2013). This can be seen in Figure 3, which shows a

considerable decrease in the correlation between the spread of foreign syndicated loan

and maturity peri

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risk-sensitive capital requirement effects drive our results. A future study could investigate this issue.

5. Conclusions

The importance of syndicated loans in the corporate debt market has been highlighted both in the theoretical and empirical literature. During the global financial crisis their volume was squeezed in most countries (Ivashina and Scharfstein, 2010) and banks from the developed countries quit the emerging markets (Chava and Purnanandam, 2011). In China, however, the reforms implemented before the crisis enabled domestic banks and financial institutions to play a bigger role in the syndicated loan market. As a result the volume of syndicated loans in China grew steadily during the crisis (Chui et al., 2010). The present paper examines not only lending volumes, but also the cost of debt, and more generally both the price and non-price terms of syndicated loans. It emerges that foreign syndicated loans offered lower interest rates to attract more Chinese borrowers. Moreover, the loan amount was lower for longer maturities in the case of foreign syndicated loans in China. Domestic syndicated loan arrangers tended to offer better non-price than the price-terms. This has resulted in a constant credit supply

mitigated by appropriate syndicated loan contract terms. It provides important information to policy makers of other emerging countries aiming to design an effective debt market strategy to tackle future global crises, since bank credit has a significant impact not only on firms' activities but also on the macroeconomy (Campello et al., 2010). A follow-up study will investigate such effects in the post-crisis period.

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Strahan, P. E.,

Table 1: Descriptive statistics

Variables	Domestic					Foreign					Full		
	Obs	Mean	Std. Dev.	Min.	Max.	Obs	Mean	Std. Dev.	Min.	Max.	Obs	Mean	Std. Dev.

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Table 2: Effect of the financial crisis on the syndicated loan spread

	Loan Spread

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Table 3: Effect of the financial crisis on the syndicated loan amount

	Loan Amount			
	1	2	3	4
Crisis	17.81**	12.43*	20.72**	15.29*

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Table 4: Effect of the financial crisis on the syndicated loan maturity

	Loan Maturity			
	1	2	3	4
Crisis	-2.37	-3.49	-3.64***	-3.72
	[-0.74]	[-0.58]	[-4.15]	[-0.62]
Foreign	-2.71	-1.90	-2.92*	-2.37*
	[-0.82]	[-0.65]	[-1.93]	[-3.87]
Foreign*Crisis	0.28	1.51**	2.51*	1.92**
	[0.11]	[4.26]	[2.18]	[5.16]
Follow Up10			-2.42	-2.06
			[-1.17]	[-1.02]
Follow Up11			-2.62	-2.11
			[-1.53]	[-1.14]
Follow Up12			0.19	0.96**
			[0.13]	[2.65]
Loan amount		0.05		0.02
		[0.24]		[0.07]
Number of lead arrangers		-0.08		-0.05
		[-0.52]		[-0.31]
Share of lead arrangers (%)		0.02		0.04
		[1.98]		[1.63]
Firm level controls	Yes	Yes	Yes	Yes
Constant	-7.35	-7.86	-2.48	-4.26
	[-0.88]	[-0.87]	[-0.23]	[-0.38]
Observations	94	94	94	94
Adj. R^2	0.20	0.19	0.21	0.20

Notes: Robust t-statistics are in parentheses. The standard errors are obtained using clustering on industry as explained in the methodology. *, ** and *** represent coefficients significant at the 5%, 1% and 0.1% respectively. Models are estimated with firm fixed effect. In all models, firm level controls, such as firm size, financial leverage, profitability and price-

fit

Table 5: Effect of the financial crisis on the number of lead arrangers in syndicated loans
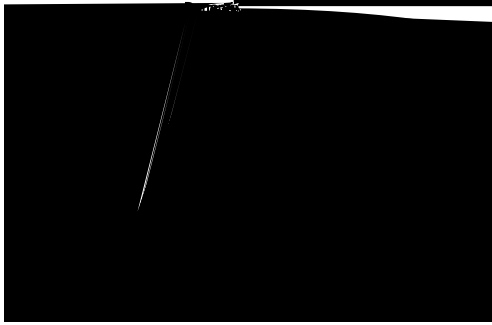
	Number of Lead Arrangers

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Figure 1: Foreign syndicated loan amount and spread

Figure 2: Kalman estimates on correlation of foreign syndicated loan amount and loan spread

Figure 3: Foreign syndicated loan maturity and spread

Figure 4: Foreign syndicated loan amount and maturity

Table 6: Diagnostic test results

	Foreign Syndicated Loan	Domestic Syndicated Loan

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Table 7: DCC-GARCH model for the relationship between syndicated loan terms

	Foreign Syndicated Loan			Domestic Syndicated Loan		
	A	B	C	A	B	C
	77.98	97.52	51.74	84.13	57.87	93.81
	[22.36]	[9.32]	[5.96]	[4.97]	[2.91]	[7.10]
	0.07	0.47	0.08	-0.01*	0.45	0.05*
	[4.18]	[19.26]	[4.97]	[-0.06]	[11.90]	[1.28]
	0.11	0.61	0.10	-0.04*	-0.46	0.20
	[4.81]	[12.95]	[2.50]	[-0.39]	[-6.12]	[2.78]
	0.13	0.31	0.07*	-0.08*	-0.40*	0.17*
	[4.79]	[15.19]	[1.01]	[-1.17]	[0.00]	[1.57]
	-0.11	0.29	-0.10	0.07*	0.06	-0.11*
	[-5.36]	[13.74]	[-4.77]	[0.43]	[2.27]	[-1.11]
	61.72	13.41	5.26	67.13*	25.87*	83.75
	[15.98]	[28.48]	[5.44]	[-0.06]	[1.70]	[4.11]
	0.16	0.41	0.10	67.13	-0.01*	0.07*
	[11.39]	[27.29]	[2.36]	[7.78]	[-0.11]	[0.86]
	0.11*	0.64	0.11*	0.38	0.60	0.20
	[0.11]	[13.83]	[1.63]	[12.82]	[11.01]	[2.80]
	0.13	0.31	0.11*	-0.03*	-0.84	0.17*
	[4.79]	[14.95]	[1.63]	[-0.34]	[-3.69]	[1.58]
	-0.10	0.11	-0.14	-0.19	0.05*	0.03*
	[-2.62]	[87.78]	[-4.96]	[-20.51]	[0.38]	[0.14]
	0.26	0.82	0.28*	0.08*	0.08*	0.14*
	[7.36]	[16.95]	[1.55]	[0.53]	[0.52]	[0.46]
	0.74	0.22	0.35*	0.75	0.66*	0.00*
	[22.26]	[146.10]	[0.86]	[4.85]	[1.18]	[0.00]

Notes: T-statistics are in parentheses. * indicates statistically insignificance. All othenl39(s)3(i)-1h0tl39(s2)iit1(t)-160001 l 593160

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Table 8: Robustness tests

	Panel A				Panel B			
	Loan Amount	Loan Maturity	Loan Spread	No. of Lead Arrangers	Loan Amount	Loan Maturity	Loan Spread	No. of Lead Arrangers
Crisis	5.10*	-2.59	59.41	0.94*	15.2*	-3.71	52.72	0.32
	[2.35]	[-0.45]	[0.79]	[2.66]	[2.45]	[-0.62]	[0.78]	[0.18]
Foreign	-							

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