Home sweet home: bank lending characteristics and the impact of the recent global financial crisis

Burietz, A. and Ureche-Rangau, L.

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The objective is to study the evolution of the credit supply and its determinants after the collapse of Lehman Brothers. In this paper, we built an original handmade database of syndicated loans granted by banks located in four European countries, *i.e.* France, Germany, Italy and Spain, to jointly estimate the spread and the amount of each loan. Our conclusions highlight a significant impact of the subprime crisis on bank lending behaviour, and even more precisely, a flight-to-home effect for banks located in France and Germany. In addition, the results show a significant sectoral bias for banks located in Germany while banks located in France highlight a preference for portfolio diversification, granting loans with better terms to companies that belong to industries they are not used to lending to. Finally, we find that banks with strong balance sheets are more able to support the credit supply following the subprime crisis promoting the implementation of banking regulations such as Basel III.

Keywords: Credit supply, financial crisis, home bias, syndicated loan market

1 Introduction

Following the 2008 financial institutions crisis, bank lending activity in the US and Europe decelerated (Panetta et al. (2009)). Two major reasons may explain this trend. First, the financial institutions crisis deeply affected the confidence both in the functioning of financial markets and among investors, leading to banks becoming reluctant to lend money (supply effect). Second, the credit risk of companies and households increased, leading to a drastic reduction of their demand for funds (demand effect) (Panetta et al. (2009)). The three main questions addressed in this paper investigate the potential shifts in banks' lending behaviour in the crisis period.

First, we aim at checking for a potential home and/or industry bias in bank lending after the collapse of Lehman Brothers. Giannetti and Laeven (2012) have argued that banks located in a country which experiences a banking crisis extend loan origination more to domestic borrowers disregarding their credit level (flight-to-home effect) and the quality of domestic financial institutions.

Second, we analyse the mechanisms and circumstances which affect the bank lending behaviour and contribute to the flight-to-home effect and/or to the sectoral reorientation of bank lending. Previous work suggests that lender characteristics such as their financial position or the macroeconomic context of the country they are located in may explain their credit policy.

Third, we assess to what extent the flight-to-home effect and its determinants may be generalized to explain bank lending behaviour in a country which suffers from a banking crisis. We investigate whether the geographical location of banks may be an explanation of the similarities and/or differences in bank lending behaviour.

These questions are addressed using an original, handmade database on the syndicated loan market of four European countries, namely France, Germany, Italy and Spain, between 2005 and 2013. The methodology developed by Calomiris and Pornrojnangkool (2009) is applied to simultaneously assess the supply and the demand effects on bank lending, by controlling for loans' characteristics, borrower and lender's financial position in addition to the relationship that may exist between them. It also integrates a variable that proxies the impact of government interventions on banks' behaviour following the collapse of Lehman Brothers. Finally, the list of variables is completed

with several indicators that allow capturing the home and the sectoral biases in bank lending.

During the financial institutions crisis, bank lending behaviour tends to be associated with home bias, *i.e.* an increase of the share of domestic loans in banks' portfolios, especially for international banks with weak financial positions (Giannetti and Laeven (2012)). The results we obtain in this paper on the supply side of banking activities provide evidence that after the collapse of Lehman Brothers all banks tend to increase the loan's spread in general, regardless of the nationality of the borrower. However, French, German and, to a lower extent, Italian banks grant domestic companies with lower spreads and more favourable lending conditions. As such, borrowing money from domestic banks in a context of crisis seems to be less costly for domestic firms compared to foreign firms. This lending behaviour may thus finally lead to an increase in the share of domestic loans, resulting in a flight-to-home effect.

Regarding the sectoral bias, our results point out that banks tend to decrease the loan's cost when they lend to companies that belong to an industry they are specialized in. This trend can be observed in France before the crisis and in Germany after the collapse of Lehman Brothers. Previous evidence (*e.g.* Calomiris and Pornrojnangkool (2009) among others) has already underlined that when a bank is used to lending to a specific industry, the loan can benefit from more competitive terms. However, the result for France does not hold after the collapse of Lehman Brothers. On the contrary, the share of loans in bank's specialized industry tends to decrease after the collapse of Lehman Brothers. This result may be explained by diversification reasons: French banks may want to diversify their portfolio of loans by decreasing the share of loans in their specialized industry, increasing their spread. The analysis does not highlight significant trends for Italy and Spain.

Our empirical evidence also points out that, in general, banks with a strong financial position are able to provide better lending conditions to companies which want to borrow funds. A bank with a high level of capital and liquidity is able to decrease the loan's spread even after the collapse of Lehman Brothers, facilitating the access to credit and reducing the effect of credit crunch.

With respect to the demand effect on bank lending, the loan's characteristics in addition to the borrower's situation (financial and geographical) are particularly significant. The loan demand fluctuates according to the type of

loan and its objective. The demand is significantly higher in the four countries for loans devoted to finance takeovers. In addition, after the collapse of Lehman Brothers, the loan demand of European companies, with large amounts of assets or highly levered increases.

This paper is structured as follows. The next section is dedicated to the literature on bank lending determinants. Section 3 presents the data and is followed by section 4 which describes the methodology. Section 5 provides the results and their interpretation while section 6 concludes.

2 Bank lending determinants: an overview

The collapse of Lehman Brothers in September 2008 and the following financial institutions crisis have initiated a global update of the literature on bank lending activities. The academic community has largely contributed to develop this literature, confirming several previous results but also highlighting new ones. From the standpoint of measuring the lending supply shock following a banking crisis, six main categories of determinants have been considered in the literature. First, during banking crises, global risk aversion and funding pressures increase, leading to credit crunch (Dell' Ariccia et al. (2007); Claessens et al. (2010) among others). Sometimes, this credit crunch can be associated to a flight-to-home effect (Cetorelli and Goldberg (2011a); Giannetti and Laeven (2012); Cerutti (2013)). In the context of a banking crisis, banks become reluctant to lend money, especially to companies located in foreign countries. Hence, the decrease in credit supply can be associated to a reorientation of the loans to the benefit of domestic companies. Second, the lending supply shock depends on the asymmetry of information between the lender and the borrower. Third, the quality of the bank's balance-sheet will affect bank's reaction in times of crisis. Fourth, the relationship established over time between the lender and the borrower may impact the access to credit and the terms of the loan. Fifth, the loan's characteristics may also affect the lending supply. Finally, the country's authorities, such as regulators or the government, may interfere in banks' lending activities.

One approach to describe the lending supply shock during a banking crisis investigates the geographical distribution of new loans. Giannetti and Laeven (2012) use data on the syndicated loans market to analyse the lending behaviour of banks located in 55 countries hit by a crisis. They provide evidence that after the collapse of Lehman Brothers, the occurrence of credit crunch is mainly due to a home bias in bank lending. Loan origination to

domestic firms is more significant regardless of the firm's credit quality. They show that the flight-to-home effect is more significant when the bank does not benefit from stable sources of funding. Hence, during a banking crisis, banks tighten their credit offer, especially via a raise in costs or tougher requirements (Panetta et al. (2009)) while they also express the need to decrease risks by giving priority to domestic companies (Giannetti and Laeven (2012)).

An alternative approach to understanding the effects of a banking crisis on the credit supply focuses on cross-border lending. Cetorelli and Goldberg (2011a) examine the international transmission of a financial institutions crisis occurring in 17 developed countries to 24 emerging markets. They highlight a flight-to-home effect during the financial institutions crisis which started in 2008. They identify two main channels of transmission: following the collapse of Lehman Brothers, banks in the developed countries impacted by the crisis decrease their lending supply to emerging markets both directly, through cross-border loans, and indirectly through their branch located in those emerging markets. In other words, when a bank is affected by a crisis, it exhibits a flight-to-home effect through the reduction of cross-border loans. One potential explanation of the home bias, developed by Epstein (2001), is the concept of "ambiguity aversion" when banks allocate more resources to domestic companies because they are more able to quantify the risk of domestic assets.

However, De Haas and Van Horen (2011) argue that the conclusions on cross-border lending cannot be generalized to all banks. They observe that despite the crisis, cross-border lending in some countries can be stable. They find that this lending behaviour is related to bank's access to borrower information (Hubbard et al. (2002); De Haas and Van Horen (2011); De Haas and Van Horen (2012)). Hence, when the information asymmetry is important, banks are unable to assess the credit risk of the firm and thus become more reluctant to lend. For example, Hubbard et al. (2002) and Chakravarty and Yilmazer (2009) highlight significant relationships between the financial position of small business and the constraints they experience when getting access to credit. Moreover, the financial position of the borrower influences its access to credit and the terms of its loans (Hubbard et al. (2002); Brick and Palia (2007); Chakravarty and Yilmazer (2009)). The better the borrower's financial position is, the lower the loan rate is.

A third approach considers banks' financial fragility during a crisis and liq-

uidity shocks to measure the impact of a banking crisis on banks' lending behaviour. Kapan and Minoiu (2013) aim at quantifying the relation between the quality of a bank's balance-sheet and its lending supply during the recent financial turmoil. They use micro-data on the syndicated loan market provided by more than 800 financial institutions for a large number of both developed and emerging countries over the period 2006-2010. To run their analysis, they have to disentangle demand and supply effects to isolate the crisis effect on credit supply. This challenge, which is also taken into account in our work, is highly significant in the literature because both demand and supply can affect bank lending in times of crisis (Calomiris and Pornrojnangkool (2009); Panetta et al. (2009); Cetorelli and Goldberg (2011a)). They find that a bank with a strong balance sheet, a large capital of high quality and which is highly liquid is more able to maintain the lending supply. It is now well established by the literature that banks' characteristics represent significant determinants of the lending supply (Beltratti and Stulz (2009)). In line with the CAMEL[1] bank model, a bank which is well-capitalized, liquid, with high-quality assets, large earnings, stable funding sources, independent managers and supervisors, performs better and is able to support lending during a crisis (Hubbard et al. (2002); Gambacorta (2008); Beltratti and Stulz (2009); Popov and Udell (2010); Altunbas et al. (2011); Cetorelli and Goldberg (2011a); Cetorelli and Goldberg (2011b); De Haas and Van Horen (2011); Fahlenbrach and Stulz (2011); De Haas and Van Horen (2012); Fahlenbrach et al. (2012); Giannetti and Laeven (2012); Kapan and Minoiu (2013)). Moreover, De Haas and Van Horen (2012) exploit banks' funding characteristics and their balance-sheet constraints as another determinant of the flight-to-home effect. They conclude that shocked banks with significant funding constraints have more difficulties in sustaining the credit offer to other countries and especially to small borrowers. Moreover, the decision to maintain cross-border lending also depends on the pre-crisis lending experience the bank has in a specific country.

A fourth approach to understand the lending supply shock during a banking crisis considers the relationship that may exist between the lender and the borrower. De Haas and Van Horen (2011) and De Haas and Van Horen (2012) insist on the role of this relationship. They show that banks maintain lending in countries which are geographically closer and where they have established networks with domestic banks. Indeed, the flight-to-home effect

[1]CAMEL stands for Capital adequacy, Asset quality, Management, Earnings and Liquidity and is used by regulators to assess banks (Wheelock and Wilson (2000); Bongini et al. (2002)).

is even more significant when the firm is located far abroad, compared to a domestic firm, because getting information becomes more challenging and costly. In addition, Calomiris and Pornrojnangkool (2009) argue that an investment bank will charge less for a loan which follows an equity underwriting, highlighting the significant role of the relationship between a bank and its borrower. Finally, Brick and Palia (2007) show how a firm can benefit from a long-term relationship with its lender to have a better access to credit with lower fees and without the obligation of posting collateral (Jiangli et al. (2008); Chakravarty and Yilmazer (2009)).

A fifth approach measures the impact of loan's characteristics on bank lending. Brick and Palia (2007) contribute to the debate on using collateral to reduce moral hazard. They show evidence that a loan with collateral can be associated with higher risk, leading to an increase of the loan rate. Moreover, when a loan is quoted against prime rate, borrowers pay a higher rate (Beim (1996); Hubbard et al. (2002); Calomiris and Pornrojnangkool (2005); Brick and Palia (2007)). Indeed, over the recent years, the prime rate has usually been associated to low-quality corporate loans while high-quality loans are based on other rates such as the London Inter-Bank Offer Rate (LIBOR) (Beim (1996)). Other characteristics such as the type of loan or its objective may also impact the credit terms (Hubbard et al. (2002); Calomiris and Pornrojnangkool (2005)).

Finally, bank lending depends on regulators' and government's intervention. First, bank regulation such as the implementation of Basel III agreements signed on December 16, 2010 which aim at controlling credit supply and bank risk and its differences among countries may alter bank lending. Aiyar et al. (2012) study banks' response to tighter capital requirements in the UK over the period 1998-2007. They highlight a significant difference between domestic-regulated banks and foreign-regulated ones with a branch in the UK. Following an increase in capital requirements, domestic banks decrease the credit supply while foreign banks located in the UK increase it. They conclude that regulation can efficiently affect lending supply but its effect is limited to domestic banks if there is no coordination with other countries. In another study, Acharya et al. (2006) discuss the "focus versus diversification" debate. They investigate to what extent a bank's strategy in terms of lending may affect its performance. On one side, when providing a loan, a bank may select firms in industries which the bank knows very well, to save monitoring costs. On the other side, for diversification reasons, the bank may decide to provide funds to firms it has never lent before. This lending strategy may

be affected by regulation and may lead to a sectoral bias. In the Basel III agreements, the new definition of core capital requires banks to improve the quality of their balance-sheet. In addition, new liquidity ratios are settled to allow banks to face significant liquidity crises. Hence, banks may have an incentive to focus on less-risky assets to fulfil the regulatory requirements in terms of capital (Demirgüç-Kunt et al. (2006)).

In addition, government interventions which are sometimes implemented after a banking crisis occurs to restore confidence on the markets and to support financial institutions, can also impact the lending supply, providing banks with additional funds and/or guarantees to maintain the credit supply (De Haas and Van Horen (2011); Acharya and Steffen (2013)). Laeven and Valencia (2013) analyse the shock of the financial institutions crisis and its subsequent recapitalization measures on credit supply. They find a significant disruption in credit supply compensated by bank recapitalization measures which helped supporting bank lending.

This paper contributes to this literature on the flight-to-home effect in bank lending during a financial institutions crisis. Based on a different methodology, it aims at reassessing the former results provided by the literature. In addition, it introduces the sectoral bias in the credit supply, taking into account the incentive for banks to lend more to firms in industries they are specialized in. This idea is barely explored in the literature; we thus propose to analyse the significance of the borrower's industry in banks' lending strategies, especially in times of crisis.

The methodology used is introduced by Calomiris and Pornrojnangkool (2009) and allows integrating two major insights that result from previous literature: first, the importance to disentangle between demand and supply effects on bank lending (Panetta et al. (2009); Cetorelli and Goldberg (2011a)) and second, the importance to jointly determine the price and the quantity of loans (Brick and Palia (2007); Jiangli et al. (2008); Chakravarty and Yilmazer (2009)). This methodology is innovative in dealing with the flight-to-home effect. Previous studies focus on the geographical distribution of loans and try to explain it mainly with indicators of banks' financial position and variables describing the economic context (Cetorelli and Goldberg (2011a); Giannetti and Laeven (2012)). In our approach, the analysis of loan's terms, *i.e.* the rate of the loan and the associated amount, allows identifying the differences in the credit supply after the collapse of Lehman Brothers, depending on the industry and the geographical position of the

borrower. The results are in line with the literature, highlighting a significant home bias in the credit supply during the financial institutions crisis which started in 2008.

This paper also contributes to the literature on bank's characteristics and their impact on credit offer. The assessment of pre-crisis banks' balance-sheets is highly important to define relevant regulation aiming at reducing the risk of such crises and their effects on bank lending. More precisely, good capital and liquidity ratios significantly contribute to support credit supply by banks following a financial institutions crisis.
To assess the credit supply shock after 2008, five databases are used to build a rich set of variables for four European countries over the period 2005-2013. The objective is to study the syndicated loan markets of France, Germany, Italy and Spain to investigate the bank lending activity before the crisis, its evolution after the collapse of Lehman Brothers and to identify common and/or unique trends among these four countries. The modelling framework includes many control variables to integrate the results highlighted by the literature. In addition, several different tests are run to assert that the results are robust and do not depend on the selection of variables.

3 Database: sources and construction

This paper aims at studying the evolution of credit supply and its determinants during the financial institutions crisis, more specifically in terms of geographical and sectoral orientation. Hence, a dataset of variables, combining five databases, is built up for four European countries, namely France, Germany, Italy and Spain over the period 2005-2013.

3.1 Loan's characteristics: Dealscan database

First, Dealscan is used to get information on all syndicated loans provided by financial institutions located in the four countries mentioned above, between 2005 and 2013. A syndicated loan is a financial transaction between one company and one bank or a syndicate (group of banks)[2]. In line with Lim et al. (2012), this analysis only considers bank-type institutions, *i.e.* commercial banks, investment banks and thrift institutions[3]. Then, each bank is assigned

[2]In the Dealscan database, the terms used to refer to the loan, the company and the bank are respectively facility, borrower and lender.

[3]In Dealscan, we started by filtering data to keep only the three categories we are interested in and which are clearly defined in the database. Then, we manually checked

to one of the four countries under study, using the following procedure. First, only banks with an ultimate parent belonging to France, Germany, Italy or Spain are selected. Over the period under study, several banks have merged or have been reorganized. As such, identifying and studying the bank holding structure over time becomes challenging. Hence, following the methodology proposed by Calomiris and Pornrojnangkool (2009), one unique ID is created to refer to each ultimate parent bank and this ID is assigned to all the banks and subsidiaries which belong to the same holding structure. In addition, each time the bank holding structure is modified, the ID is updated to reflect this information. Second, for each country, the geographical location of the bank itself (both parents and subsidiaries) is considered and is classified in three categories: national, European and international branches. In the present study, only the first category with national banks and subsidiaries, grouped under the same ID of the ultimate parent is employed and this national group of banks is filtered to keep only banks which lend money on the syndicated loan market between 2005 and 2013. Finally, loans provided by these national banks with information on bank allocation are selected while all the others are removed. Hence, Dealscan provides information on the borrowing company and the name(s) of bank(s) which allocate(s) the loan as well as additional loan's characteristics such as the country where the borrower is located and the industry it belongs to.

3.2 Bank's characteristics: Bankscope database

According to the list of banks established previously, Bankscope is then used to identify and collect their financial characteristics. A manual look for each bank in Bankscope is required to select only lenders with available data and update the list of loans according to the new list of banks. This database also provides the financial history of each bank to identify mergers occurring during the period under study and to adjust the sample over time.

3.3 Borrower's characteristics: Compustat, Orbis and Diane databases

First, from the updated list of loans established thanks to Dealscan, the list of borrowing companies is extracted. To collect the borrower's characteristics, one has to combine three different but complementary databases, namely

for the Standard Industrial Classification (SIC) code of each remaining financial institution and selected only the appropriate one (falling within the 6011-6082, 6211, 6712 and 6719 categories).

Compustat, Orbis and Diane in order to obtain the most complete sample possible. Compustat mainly provides data on listed companies from all over the world with a significant part located in North America. To combine the Dealscan and Compustat databases, one has to start by using the file built by Chava and Roberts (2008). In this file, they match information available in the two databases using the GVKEY which is the unique ID used in Compustat. More precisely, to each company in Dealscan is assigned a unique GVKEY in Compustat. Hence, if a company makes more than one loan, the same GVKEY will be used. However, the link file is established at one point in time at the then current state of the market. In other words, if two companies merge when the file is built, they will have the same GVKEY even if in the past they were two separate entities. As an example, if each of these two companies made a loan before the merger, these two loans would present the same GVKEY despite the fact that they were made by two distinct companies. Therefore, to ensure a correct match between Dealscan and Compustat, one has to combine at the same time the loan ID and the borrower ID from Dealscan with the unique GVKEY. Then, we controlled for the loan's date to get the relevant information about the borrower at the time the loan was made. Regarding companies which cannot be matched automatically following this process, we had to manually look for them in Compustat using their name. For the remaining unmatched companies, two other databases are used, namely Orbis for European companies and Diane that mainly focuses on the French market. One advantage of combining these three databases is that selection bias is limited as focusing on Compustat only would have led to a focus mainly on North American companies[4].

3.4 Additional characteristics

According to the literature review, the relationship between the company and the bank(s) may impact the credit terms (De Haas and Van Horen (2011) among others). In line with Calomiris and Pornrojnangkool (2009), when a bank provides more than one loan to the same company over a certain period of time, a relationship can be established. The variable $PL1$ (Previous Lending) is introduced in the model as a dummy which takes the value one if within a year before the loan under consideration, another loan has been contracted with the same bank. Moreover, a second dummy variable, MCS (Multiple Credit Sources), is introduced to consider the opportunity for the borrower to have more than one available credit sources. In their study,

[4]An additional robustness test has been run to control for the potential influence of a selection bias by removing the US borrowers from the sample. The regression results are available in Appendix E and remain unchanged.

Chakravarty and Yilmazer (2009) show that such a variable has an impact on loan's spread for small businesses.

In addition, previous literature underlines the role of government intervention and its impact on bank lending (Laeven and Valencia (2013)). To integrate this information in the model, the database developed by Ureche-Rangau and Burietz (2013) and described in the following paper is used. In this database, we use capital injections and guarantees provided by European governments to explain the increase in spreads of sovereign debt using a monthly database on government interventions. Hence, according to this dataset, a dummy variable is built and is equal to one when the government of each of the four countries under study intervenes after the collapse of Lehman Brothers.

Table 1 presents a description of the sample for the four countries under study. Specifically, loans are grouped according to different criteria, namely the bank which grants the loan, the type of loan and its objective, the currency and the maturity of the loan in addition to the country of the borrower and its industry, over the period 2005-2013. For each category, the number of loans as a percentage of all the loans provided by the banks in the sample is provided. In this table, only the number of loans for which data is available in Compustat, Orbis or Diane is reported.

We can observe that each market is mainly dominated by two banks, namely BNP Paribas and Crédit Agricole in France, Deutsche Bank AG and Commerzbank AG in Germany, Intesa Sanpaolo SpA and Unicredit SpA in Italy and Banco BVA and Banco Santander in Spain.

Regarding the loan's characteristics, the revolver and term loans are the most frequent, mostly dedicated to corporate purposes and debt repayment. Respectively, the market share for the last category significantly decreases after the collapse of Lehman Brothers, while the share of loans for corporate purposes increases to more than half of the sample, up to 80% for Italy and Spain.

When one looks at the loans' currency, the US dollar denomination is significantly dominant for all countries except for Spain, with an increase during the financial institutions crisis to the detriment of loans in other currencies in Germany and Italy. The Spanish market highlights a specific trend with banks providing more loans denominated in Euro, especially after the collapse of Lehman Brothers, when the market share reaches 90%.

Table 1: *Sample description*

France										
Number of loans (% of Total)	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**Total**
Loans classified by bank										
Société GÃ©nÃ©rale	20	24	20	24	31	27	19	22	33	**23**
Dexia	2	3	2	7	1	1	1	0	0	**2**
BNP Paribas	71	67	63	68	57	70	70	63	64	**67**
Natixis	26	22	19	24	26	28	20	23	33	**24**
Crédit Agricole	47	36	39	28	37	45	40	39	40	**40**
Loans classified by loan type										
Revolver >=1 year (YR)	59	44	44	35	48	58	64	61	55	**52**
Term	23	36	39	43	35	32	25	22	22	**31**
364-day	5	9	6	9	6	3	2	4	3	**5**
Term>B	6	5	3	0	3	3	5	8	9	**5**
Bridge[a]	1	1	3	6	2	1	2	2	4	**2**
Loans classified by loan objective										
Corp. purpose	31	28	32	39	42	56	54	65	58	**41**
Debt repayment	30	26	17	9	24	9	16	9	8	**19**
Working Capital	14	17	20	16	15	12	7	4	5	**13**
Takeover	6	5	7	5	2	4	6	6	9	**6**
Acquisition line	3	4	5	7	3	4	4	3	7	**4**
CapEx[b]	3	4	6	6	4	4	3	2	5	**4**
Project Finance[c]	4	3	3	10	3	5	3	1	6	**4**
Loans classified by loan currency										
Euro	29	21	13	13	14	15	14	27	32	**20**
US Dollar	59	61	73	75	63	77	74	68	60	**67**
Others	12	18	13	12	23	8	12	5	8	**13**
Loans classified by loan maturity										
ST (<=1YR)	9	14	14	20	12	8	7	11	8	**11**
MT (1YR<>5YR)	21	27	25	43	72	64	37	29	30	**35**
LT (>=5YR)	70	59	61	36	15	28	57	60	62	**53**
Loans classified by borrower's country										
France	12	8	5	5	2	3	2	6	17	**7**
Germany	2	2	0	0	2	3	2	8	2	**2**
Italy	1	1	1	0	2	1	0	1	3	**1**
Spain	6	6	4	5	4	4	6	10	8	**6**
Europe	15	8	4	5	8	9	6	8	9	**9**
North America	39	33	39	38	45	51	51	50	44	**42**
Asia	19	36	37	32	31	19	27	13	13	**26**
Share of loans in specialized industries										
Average	94	92	87	88	90	80	90	84	86	**89**
Société Générale	88	93	88	89	85	75	88	86	85	**87**
Dexia	92	75	50	93	100	100	100	0	0	**83**
BNP Paribas	97	93	92	92	91	82	93	84	91	**92**
Natixis	93	94	85	76	88	86	89	87	94	**89**
Crédit Agricole	94	95	87	94	93	84	87	82	90	**90**
Total number of loans	**541**	**366**	**327**	**221**	**155**	**253**	**270**	**171**	**102**	**2406**

[a] *A bridge loan is a short-term (up to one year) loan used by individuals and companies to meet current obligations by providing immediate cash flow.*

[b] *Loans to finance Capital Expenditures.*

[c] *Loans to finance company's projects.*

Germany										
Number of loans (% of Total)	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**Total**
Loans classified by bank										
Commerzbank AG	48	40	23	31	25	17	27	19	16	**30**
Deutsche Bank AG	57	40	37	36	62	80	72	82	91	**60**
LB Hessen-Thuringen	5	5	0	3	5	7	3	5	2	**4**
NordLB Group	0	5	3	6	3	2	1	2	0	**2**
LB Baden-Wurttemberg	6	12	14	12	5	3	5	9	5	**8**
BayernLB	20	30	25	16	6	11	6	8	5	**16**
DZ Bank AG	4	9	9	13	6	5	7	9	9	**7**
HSH Nordbank AG	6	9	0	12	2	0	1	1	0	**4**
Portigon AG	29	22	16	19	24	11	7	6	0	**17**
Loans classified by loan type										
Revolver >=1YR	66	49	43	29	46	63	68	62	61	**56**
Term	16	33	40	50	30	24	22	20	15	**27**
364-day	7	11	9	8	7	3	2	3	4	**6**
Term>B	6	2	4	3	4	7	5	9	12	**6**
Bridge	1	1	2	5	2	2	2	2	3	**2**
Loans classified by loan objective										
Corp. purpose	39	38	31	34	58	63	60	70	71	**49**
Debt repayment	27	21	16	11	8	3	10	7	9	**14**
Working Capital	12	16	20	11	7	12	12	7	9	**13**
Takeover	5	9	11	6	2	7	6	6	6	**7**
Acquisition line	4	3	6	7	3	2	2	2	1	**3**
Ship Finance[d]	1	3	3	2	2	0	1	1	2	**1**
Project Finance	3	1	2	8	3	4	2	2	1	**3**
Loans classified by loan currency										
Euro	28	20	15	11	14	20	12	21	22	**19**
US Dollar	63	69	70	80	68	75	80	74	75	**72**
Others	9	11	15	9	17	5	8	5	3	**9**
Loans classified by loan maturity										
ST (<=1YR)	10	19	17	19	19	7	9	10	9	**13**
MT (1YR<>5YR)	23	25	25	40	59	66	38	33	26	**34**
LT (>=5YR)	68	57	59	40	22	27	53	57	65	**53**
Loans classified by borrower's country										
France	8	2	0	1	3	1	3	2	5	**3**
Germany	4	4	3	2	4	4	4	4	3	**4**
Italy	1	0	3	1	0	1	0	1	1	**1**
Spain	6	5	3	4	7	6	3	10	10	**6**
Europe	17	15	13	13	12	9	5	6	3	**11**
North America	48	38	42	39	56	64	68	63	67	**52**
Asia	9	26	27	31	17	5	15	10	3	**16**
Share of loans in specialized industries										
Average	95	90	92	81	77	88	90	93	89	**90**
Commerzbank AG	98	91	98	83	61	88	92	97	89	**92**
Deutsche Bank AG	99	93	94	98	81	88	93	99	89	**93**
LB Hessen-Thuringen	95	100	0	75	80	100	100	90	100	**95**
NordLB Group	0	79	100	25	33	100	100	67	0	**71**
LB Baden-Wurttemberg	100	100	92	69	100	100	91	56	100	**89**
BayernLB	92	96	85	90	100	100	85	93	100	**92**
DZ Bank AG	100	96	100	82	86	67	71	71	100	**87**
HSH Nordbank AG	92	78	0	81	50	0	67	100	0	**83**
Portigon AG	96	96	84	92	100	86	94	42	0	**91**
Total number of loans	**389**	**259**	**264**	**129**	**111**	**194**	**234**	**195**	**116**	**1891**

[d] *Loans to finance industrial ship owners.*

Italy										
Number of loans (% of Total)	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**Total**
Loans classified by bank										
Banca MPS	8	100	13	11	12	13	5	9	0	**11**
Intesa Sanpaolo SpA	69	0	0	78	97	75	71	37	71	**65**
Unicredit SpA	43	0	87	39	21	33	42	68	54	**44**
Loans classified by loan type										
Revolver >=1YR	59	27	53	24	44	54	75	47	71	**53**
Term	22	55	40	67	29	33	16	37	8	**31**
364-day	8	0	7	7	9	6	7	4	0	**6**
Loans classified by loan objective										
Corp. purpose	30	45	40	52	50	68	71	63	83	**52**
Debt repayment	38	36	27	6	12	4	5	4	0	**17**
Working Capital	9	0	7	7	9	9	7	2	0	**7**
Takeover	4	0	0	2	9	6	11	7	13	**6**
Project Finance	4	0	0	6	6	4	0	0	4	**3**
Loans classified by loan currency										
Euro	48	73	27	20	44	25	25	46	29	**37**
US Dollar	44	27	60	74	32	70	69	47	71	**55**
Others	8	0	13	6	24	6	5	7	0	**8**
Loans classified by loan maturity										
ST (<=1YR)	10	0	20	15	24	14	15	12	4	**13**
MT (1YR<>5YR)	15	45	27	44	59	45	25	39	25	**32**
LT (>=5YR)	76	55	53	41	18	41	60	49	71	**55**
Loans classified by borrower's country										
France	13	9	13	0	9	3	9	4	13	**8**
Germany	5	0	7	0	9	1	5	14	8	**5**
Italy	5	36	0	15	9	3	2	4	4	**6**
Spain	14	27	0	7	15	7	5	23	0	**11**
Europe	13	0	7	15	3	14	18	5	0	**11**
North America	29	9	7	9	32	45	44	35	67	**32**
Asia	12	27	33	30	24	9	7	9	0	**14**
Share of loans in specialized industries										
Average	85	27	67	83	74	71	84	54	67	**75**
Banca MPS	83	27	100	83	100	100	67	0	0	**67**
Intesa Sanpaolo SpA	87	0	0	90	76	73	87	67	65	**81**
Unicredit SpA	89	0	62	81	71	65	87	56	46	**74**
Total number of loans	**143**	**11**	**15**	**54**	**34**	**69**	**55**	**57**	**24**	**462**

Spain										
Number of loans (% of Total)	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**Total**
Loans classified by bank										
CA del Mediterraneo	0	17	6	0	22	12	0	0	0	**6**
Bankinter SA	0	8	13	2	15	13	9	35	18	**12**
La Caixa	11	14	38	19	27	42	53	64	73	**36**
Banco de Sabadell SA	0	31	23	13	18	39	33	52	45	**28**
Caixa Catalunya	2	22	21	4	5	14	0	7	0	**9**
Banco BVA	95	92	68	46	67	61	46	28	35	**63**
Banco Santander SA	25	43	62	71	95	84	61	68	84	**62**
Grupo Banco Popular	2	12	19	13	33	43	21	38	41	**23**
Loans classified by loan type										
Revolver >=1YR	63	37	34	21	25	39	42	25	35	**38**
Term	13	40	45	63	49	49	31	56	53	**42**
364-day	9	7	9	2	2	0	2	1	2	**4**
Term>B	11	7	0	4	7	5	17	1	4	**7**
Bridge	0	2	2	8	7	4	0	2	0	**3**
Loans classified by loan objective										
Corp. purpose	32	32	21	33	47	57	54	73	80	**47**
Debt repayment	38	25	6	2	0	1	2	1	0	**11**
Takeover	8	8	30	27	5	5	2	4	0	**9**
Leveraged Buy-Out (LBO)	0	14	0	0	5	0	6	0	0	**3**
Project Finance	7	11	19	27	22	13	15	0	0	**12**
Loans classified by loan currency										
Euro	49	61	64	69	75	70	78	91	90	**71**
US Dollar	40	29	28	25	15	29	22	7	6	**24**
Others	11	10	9	6	11	1	0	1	4	**6**
Loans classified by loan maturity										
ST (<=1YR)	12	12	15	13	9	7	6	10	6	**10**
MT (1YR<>5YR)	11	20	40	31	44	46	34	52	43	**34**
LT (>=5YR)	78	68	45	56	47	47	61	38	51	**57**
Loans classified by borrower's country										
France	25	3	0	13	5	4	6	5	8	**8**
Germany	3	9	0	0	9	3	3	5	0	**4**
Italy	4	1	6	0	5	1	1	1	2	**2**
Spain	9	52	55	46	60	50	67	79	78	**53**
Europe	20	3	13	17	11	18	8	2	4	**10**
North America	23	18	11	6	7	13	11	2	2	**12**
Asia	4	14	6	4	2	1	1	1	4	**5**
Share of loans in specialized industries										
Average	79	96	89	52	93	84	79	84	80	**83**
CA del Mediterraneo	0	100	100	0	100	78	0	0	0	**95**
Bankinter SA	0	100	100	100	100	100	63	89	100	**92**
La Caixa	90	100	89	78	100	94	74	88	78	**86**
Banco de Sabadell SA	0	100	100	67	100	97	72	74	73	**85**
Caixa Catalunya	100	100	100	100	100	100	0	67	0	**96**
Banco BVA	81	98	91	77	100	91	93	100	88	**91**
Banco Santander SA	83	95	100	50	92	86	93	84	76	**85**
Grupo Banco Popular	100	100	100	67	100	88	79	87	90	**89**
Total number of loans	**95**	**100**	**47**	**48**	**55**	**76**	**89**	**81**	**49**	**640**

Regarding loan's maturity, we observe on average a shift to medium-term (MT) loans during the crisis, while the share of long-term (LT) loans is significantly larger at the beginning and at the end of the period under study. This may be a sign of banks' difficulties to evaluate risks during the crisis period. Short-term (ST) loans remain relatively stable over time.

Regarding the geographical repartition, and due to data availability, loans to US companies represent almost half of the sample, a figure that remains stable over time for France and Germany while it increases for Italy. However, despite this observation, we can already observe that during the financial institutions crisis, the market share of loans attributed to domestic companies increases in France while it remains stable in Germany and decreases in Italy. The conclusion does not hold when one has a look at the Spanish market where the most significant share of loans is provided to Spanish companies.

Finally, the share of loans provided by banks to companies in the industries they are specialized in decreases on average over the period except for Spanish banks, for which the trend is less obvious.

4 Methodology

The methodology introduced by Calomiris and Pornrojnangkool (2009) is developed here to measure the lending supply shock during the banking crisis by isolating the supply effect from the demand effect on bank lending activity. The following system of two equations is jointly estimated with the loan spread for the supply equation (Eq. 1) and the loan amount for the demand equation (Eq. 2) as dependent variables. The three-Stage-Least-Squares (3SLS) approach is applied to estimate the system over the period 2005-2013[5]. In addition, two tests are run to distinguish two sub-periods, *i.e.* the period before the banking crisis and the period after the collapse of Lehman Brothers which is our breaking point (Laeven and Valencia (2010)).

$$LNSPRD_i = \alpha^S + \beta_1^S FAC_i + \beta_2^S BOR_i + \beta_3^S LEN_i + \beta_4^S REL_i + \theta^S GEO_i + \gamma^S SUP_i + \delta^S LNAMT_i + \varepsilon_{1i} \quad (1)$$

$$LNAMT_i = \alpha^D + \beta_1^D FAC_i + \beta_2^D BOR_i + \beta_3^D LEN_i + \beta_4^D REL_i + \theta^D GEO_i + \gamma^D DEM_i + \delta^D LNSPRD_i + \varepsilon_{2i} \quad (2)$$

[5]The same two equations were also estimated separately, using two-Stage-Least-Squares (2SLS) and the Generalised Method of Moments (GMM). The results are highly similar and are available in Appendices C and D.

where, for each loan i:

- $LNSPRD$ is the natural logarithm of the loan all-in-spread, a Dealscan measure which includes all the interest payments and fees of a loan;
- $LNAMT$ is the natural logarithm of the loan amount;
- FAC, BOR, LEN are vectors of respectively loan's, company's and bank's characteristics that may affect both credit supply and demand;
- REL is a vector of two variables describing the relationship that may exist between the bank and the company and which may affect both credit supply and demand;
- GEO is a vector of variables indicating the country of the borrower and affecting both credit supply and demand;
- SUP is a vector of two determinants of loan supply, unrelated to loan demand, and;
- DEM is a vector of two determinants of loan demand, unrelated to loan supply.

In this modelling framework, the two dependent variables, *i.e.* $LNSPRD$ and $LNAMT$, are endogenous due to a simultaneity causality bias (Calomiris and Pornrojnangkool (2009)). Hence, an appropriate identification of the two equations is required in order to be able to estimate the system. In other words, one has to define two sets of instruments, SUP and DEM, for $LNSPRD$ and $LNAMT$ respectively, that are relevant and exogenous[6], *i.e.* uncorrelated respectively with ε_{2i} and ε_{1i}[7]. In the supply equation (1), the vector of instruments for $LNAMT$, namely DEM, contains two variables. First, the sales growth of the borrower, SG, which may affect its demand for credit (Calomiris and Pornrojnangkool (2009)). Second, a dummy variable, $F20$, which is equal to one if the borrower contracts different types of loans at the same time (Calomiris and Pornrojnangkool (2009)). These two variables are expected to be unrelated to the credit supply. Regarding the set of instruments SUP for $LNSPRD$ in the demand equation (2), two variables

[6]Several specification tests are run to ensure that the instruments are relevant and exogenous. These tests are displayed at the end of each table of results.

[7]Delis and Kouretas (2011) explain that a good instrument is strongly correlated with the endogenous regressor but weakly correlated with the dependent variable. Hence, a correlation table of both $LNSPRD$ and $LNAMT$ with all the variables in the system is used to determine the most relevant instruments for the two endogenous regressors. The correlation table is available in the Appendix A.

are also defined, namely GI and CLS. GI is a dummy variable and equals one during the period after the collapse of Lehman Brothers, when the national governments intervene to support the credit supply of their banking systems. CLS, standing for lender's speciality after the collapse of Lehman Brothers, is defined as the natural logarithm of the total amount lent by the bank during the previous year to companies that belong to the same industry as the borrower of the loan under study (Calomiris and Pornrojnangkool (2009)). The objective is to focus only on the period after the collapse of Lehman Brothers to control for a potential sectoral bias in credit supply. These two variables are supposed to be unrelated to credit demand.

The estimated model also includes the vector GEO containing dummies that account for the country of the borrower after the collapse of Lehman Brothers. Hence, one is able to observe if there is a home bias in the credit supply. The four countries under study, *i.e.* France (CFR), Germany (CGE), Italy (CIT) and Spain (CSP) are studied separately. In addition, three additional dummy variables are introduced to take into account Europe ($CEUR$) (excluding the four previous countries), North America ($CNOAM$) and Asia ($CASIA$).

Regarding the bank's characteristics, the objective is to identify those categories of banks that are the most affected by the banking crisis. Hence, a vector of seven explanatory variables that are in line with both the CAMEL model and the Basel regulation is used. First, to account for bank's capital, we use the Tier 1 ratio of common equity and retained earnings to risky weighted assets, $T1$, in line with a large strand of literature (Gambacorta (2008); Acharya and Steffen (2013); Drechsler et al. (2013); Kapan and Minoiu (2013)). For the asset quality, the ratio of loan loss reserve to gross loans, LLR, as provided by Bankscope is employed. To measure the management aspects of the bank, the variable TL, standing for Total Lending, is built as the natural logarithm of the total amount lent by the lead lender[8], the previous year (Calomiris and Pornrojnangkool (2009)). It proxies the lender's reputation and a potential size effect. Two variables, namely the interest income as a percentage of total interest income, II, and the Return-On-Assets, (ROA) of the bank, proxy the level of bank's earnings.

[8]To determine if the bank is a lead lender, the methodology developed in Calomiris and Pornrojnangkool (2009) is applied. In the Dealscan database, each bank is classified with respect to its role in the loan syndication. Hence, a bank is considered as a lead lender if it belongs to one of the following categories: lender, arranger, or if it has the agent title in the loan syndication documentation of Dealscan.

Finally, two measures, IB and LA, account for bank's liquidity. IB is the interbank ratio of the lender, of what is due from banks to what is due to banks. LA is a proxy of the liquid assets ratio and equals the liquid assets as a percentage of deposits and short-term funding. As mentioned previously, the model is run on the syndicated loan market. Hence, several banks may be involved in the same loan. Therefore, for each loan with more than one lender, the average of each financial characteristic of all lenders involved in the loan is computed and used[9]. Moreover, this vector is built on a yearly basis. As such, when a loan is signed at time t, one has to take into account the data at time t-1. All coefficients are expected to be negatively correlated with the loan spread in the first equation of the model except for the asset's variable, LLR (Hubbard et al. (2002); Gambacorta (2008)).

In line with previous literature, the model also controls for borrower's and loan's characteristics in addition to the relationship that may exist between the bank and the borrower. First, in the vector BOR, four yearly determinants are included to assess the financial position of the borrower: the natural logarithm of total assets (TA), the natural logarithm of its long-term debt (LTD), its Return-On-Equity (ROE) and the ratio of its fixed assets as a percentage of total assets (PPE). Similar to the procedure used for the lender's characteristics, one has to consider data for the year preceding the loan. These variables are expected to have a negative impact on loan's spread, except for the long-term debt (Hubbard et al. (2002); Brick and Palia (2007); Chakravarty and Yilmazer (2009)). A borrower with a better financial position should be able to get a lower spread on its loan. Second, six variables are used to describe the loan's characteristics in the vector FAC: the natural logarithm of its maturity (MAT), a dummy equal to one if the loan is denominated in Euro ($CRCY$), a dummy equal to one if the loan is secured (SEC), a dummy equal to one if the loan is indexed to prime rate ($PRIME$), its type ($F8$ to $F12$)[10] and its objective ($F13$ to $F19$)[11]. The last two categories are in line with the literature (Calomiris and Pornrojnangkool

[9]To control for this decision of using the average of lenders' characteristics, several robustness tests are also run, considering each bank separately. The results are available in Appendix F. Some banks are excluded due to the low number of loans over the period. The conclusions are similar and may sometimes be influenced by the lack of observations for a standalone bank.

[10]Types of loans ($F8$ to $F12$): respectively revolver loan with a maturity higher than one year; term loan; 364-day loan; term loan (>B); bridge loan.

[11]Loans' objective ($F13$ to $F19$): respectively Corporate purpose; Debt repayment; Working Capital; Takeover; Acquisition line; Capital Expenditure; Finance. One exception is to be noticed, *i.e.* F18 which aims at financing ship owners in Germany and LBO in Spain.

(2009)) and describe the characteristics of the syndicated loan market of each of the four countries between 2005 and 2013. Based on previous literature, SEC and $PRIME$ are expected to be positively correlated with the loan spread. Finally, two dummy variables are included in vector REL, *i.e.* $PL1$ and MCS, (as described above) to account for the potential influence of a relationship developed between the bank and its customers. Table 2 provides the descriptive statistics for all the variables used in the estimations[12].

[12]The definitions of all the variables are available in Appendix B.

Table 2: *Summary statistics of variables*

France								
Variable	25th pct	Median	75th pct	Mean	Std	Count	Min	Max
Endogenous regressors								
LNSPRD	3.81	4.61	5.30	4.51	0.95	2406	1.39	6.80
LNAMT	19.04	19.97	20.72	19.85	1.32	2406	15.37	23.84
Loan's characteristics (vector FAC)								
MAT	3.58	4.09	4.09	3.79	0.63	2406	1.10	5.80
SEC				0.24				
CRCY				0.20				
PRIME				0.32				
F8				0.52				
F9				0.31				
F10				0.05				
F11				0.05				
F12				0.02				
F13				0.41				
F14				0.19				
F15				0.13				
F16				0.06				
F17				0.04				
F18				0.04				
F19				0.04				
Borrower's characteristics (vector BOR)								
TA	14.76	16.22	17.53	16.31	2.41	2406	6.64	25.36
LTD	12.98	14.51	16.13	14.08	3.88	2406	0	24.05
ROE	7.09	12.87	19.87	13.81	26.67	2406	-216.24	336.37
PPE	13.46	35.92	63.88	39.79	29.01	2406	0	99.63
Lender's characteristics (vector LEN)								
LLR	2.65	3.22	3.74	3.21	0.92	2406	0.19	7.22
T1	8.10	8.50	10.30	9.15	1.62	2406	6.62	14.90
ROA	0.22	0.38	0.50	0.35	0.21	2406	-0.58	0.64
IB	52.00	63.35	70.43	61.44	14.73	2406	20.03	106.29
LA	56.70	88.99	125.51	92.70	35.80	2406	19.48	177.43
II	24.03	34.63	51.53	34.97	25.00	2406	-64.36	232.09
TL	0	0	0	5.52	10.02		0	24.24
Relationship's characteristics (vector REL)								
PL1				0.15				
MCS				0.50				
Borrower's country (vector GEO)								
CFR				0.02				
CGE				0.01				
CIT				0.00				
CSP				0.02				
CEUR				0.03				
CNOAM				0.20				
CASIA				0.09				
LNSPRD Instruments (vector SUP)								
GI				0.07				
CLS	0	0	18.75	6.86	9.45		0	22.72
LNAMT Instruments (vector DEM)								
SG	0.90	10.55	26.17	23.56	84.25	2406	-221.74	1348.92
F20				0.41				

Germany								
Variable	25th pct	Median	75th pct	Mean	Std	Count	Min	Max
Endogenous regressors								
LNSPRD	3.81	4.70	5.30	4.53	0.97	1891	1.39	6.91
LNAMT	19.11	20.03	20.93	20.01	1.34	1891	13.50	23.90
Loan's characteristics (vector FAC)								
MAT	3.58	4.09	4.09	3.77	0.62	1891	1.10	5.80
SEC				0.24				
CRCY				0.20				
PRIME				0.39				
F8				0.56				
F9				0.27				
F10				0.06				
F11				0.06				
F12				0.02				
F13				0.49				
F14				0.14				
F15				0.13				
F16				0.07				
F17				0.03				
F18				0.01				
F19				0.03				
Borrower's characteristics (vector BOR)								
TA	14.91	16.27	17.37	16.27	2.06	1891	7.58	25.15
LTD	13.25	14.60	15.96	14.15	3.55	1891	0	23.55
ROE	7.14	13.04	19.39	13.71	26.45	1891	-431.89	238.30
PPE	6.38	28.32	59.25	34.31	28.98	1891	0	99.63
Lender's characteristics (vector LEN)								
LLR	1.14	1.66	2.48	1.81	0.85	1891	0.72	4.35
T1	7.75	8.60	12.30	9.73	2.50	1891	5.60	15.20
ROA	0.07	0.21	0.29	0.15	0.21	1891	-1.55	0.50
IB	75.13	96.08	199.83	121.66	72.55	1891	11.48	274.32
LA	59.86	81.56	92.50	77.06	22.59	1891	17.08	139.58
II	44.25	51.04	59.67	39.33	115.12	1891	-1944.07	197.95
TL	0	0	0	5.30	9.82		0	23.97
Relationship's characteristics (vector REL)								
PL1				0.10				
MCS				0.41				
Borrower's country (vector GEO)								
CFR				0.01				
CGE				0.02				
CIT				0.00				
CSP				0.03				
CEUR				0.03				
CNOAM				0.29				
CASIA				0.05				
LNSPRD Instruments (vector SUP)								
GI				0.06				
CLS	0	0	19.44	7.91	9.70		0	22.26
LNAMT Instruments (vector DEM)								
SG	0	8.38	22.89	18.28	74.27	1891	-140.43	1246.56
F20				0.41				

Italy								
Variable	25th pct	Median	75th pct	Mean	Std	Count	Min	Max
Endogenous regressors								
LNSPRD	3.81	4.50	5.16	4.46	0.94	462	1.61	6.63
LNAMT	19.42	20.39	21.42	20.29	1.42	462	16.06	23.84
Loan's characteristics (vector FAC)								
MAT	3.58	4.09	4.09	3.79	0.62	462	2.08	5.70
SEC				0.19				
CRCY				0.37				
PRIME				0.18				
F8				0.53				
F9				0.31				
F10				0.06				
F13				0.52				
F14				0.17				
F15				0.07				
F16				0.06				
F19				0.03				
Borrower's characteristics (vector BOR)								
TA	15.37	16.69	17.93	16.62	2.05	462	8.04	23.69
LTD	13.49	14.91	16.30	14.32	3.85	462	0	22.54
ROE	8.04	13.95	20.72	14.19	20.43	462	-68.88	141.62
PPE	12.39	26.04	48.84	31.39	23.56	462	0	94.17
Lender's characteristics (vector LEN)								
LLR	3.87	4.66	6.06	4.83	1.17	462	2.94	6.83
T1	7.10	8.40	9.32	8.42	1.41	462	6.10	12.10
ROA	0.31	0.47	0.75	0.41	0.65	462	-1.94	1.28
IB	50.75	83.97	90.42	71.82	24.75	462	20.07	104.86
LA	30.82	36.12	40.57	36.16	7.97	462	20.07	61.38
II	57.98	65.25	68.54	64.19	6.64	462	53.70	80.92
TL	0	0	0	1.10	4.81		0	23.60
Relationship's characteristics (vector REL)								
PL1				0.06				
MCS				0.30				
Borrower's country (vector GEO)								
CFR				0.03				
CGE				0.04				
CIT				0.02				
CSP				0.06				
CEUR				0.05				
CNOAM				0.22				
CASIA				0.05				
LNSPRD Instruments (vector SUP)								
GI				0.07				
CLS	0	0	18.20	6.87	9.17		0	21.53
LNAMT Instruments (vector DEM)								
SG	-0.37	7.32	20.62	12.73	33.37	462	-100.00	307.96
F20				0.41				

Spain								
Variable	25th pct	Median	75th pct	Mean	Std	Count	Min	Max
Endogenous regressors								
LNSPRD	3.87	4.94	5.62	4.71	1.09	640	1.39	6.51
LNAMT	17.83	19.56	20.92	19.29	2.13	640	13.72	23.84
Loan's characteristics (vector FAC)								
MAT	3.58	4.09	4.28	3.92	0.76	640	0.69	5.98
SEC				0.29				
CRCY				0.71				
PRIME				0.08				
F8				0.38				
F9				0.42				
F10				0.04				
F11				0.07				
F12				0.03				
F13				0.47				
F14				0.11				
F16				0.09				
F18				0.03				
F19				0.12				
Borrower's characteristics (vector BOR)								
TA	13.01	15.76	17.41	15.25	2.91	640	6.64	23.13
LTD	10.88	14.22	16.20	13.40	3.80	640	0	21.94
ROE	4.59	13.34	20.83	12.94	23.09	640	-69.20	179.05
PPE	18.38	41.42	63.31	42.65	27.25	640	0.02	99.12
Lender's characteristics (vector LEN)								
LLR	2.00	2.32	2.67	2.52	0.97	640	1.48	7.90
T1	7.72	8.75	9.97	8.89	1.32	640	6.80	12.80
ROA	0.58	0.87	0.99	0.77	0.37	640	-0.75	1.61
IB	35.30	48.54	69.09	58.45	38.58	640	22.82	386.11
LA	16.95	25.17	29.02	23.08	7.36	640	5.64	34.28
II	56.41	61.26	66.35	61.53	4.98	640	53.50	72.75
TL	0	0	0	0.61	3.68		0	23.73
Relationship's characteristics (vector REL)								
PL1				0.07				
MCS				0.65				
Borrower's country (vector GEO)								
CFR				0.03				
CGE				0.02				
CIT				0.01				
CSP				0.37				
CEUR				0.05				
CNOAM				0.04				
CASIA				0.01				
LNSPRD Instruments (vector SUP)								
GI				0.09				
CLS	0	0	18.85	8.65	9.47		0	21.79
LNAMT Instruments (vector DEM)								
SG	-5.93	5.09	18.12	6.57	24.03	640	-100.00	86.92
F20				0.58				

5 Results and interpretation

5.1 Results for the whole time period, 2005-2013

Table 3[13] presents the results of the 3SLS estimation over the whole period, *i.e.* 2005-2013. This technique provides consistent estimates for the COVAR matrix of equations disturbances, based on the residuals of the 2SLS estimation of each equation. Moreover, it allows a jointly estimation of a system of two equations, one for the price of the loan ($LNSPRD$) and one for its amount ($LNAMT$). Specification tests are reported at the end of the table and assess the relevance and exogeneity of the instruments. Both equations are over-identified. This allows running the over-identification test to assess the validity of the instruments. As mentioned previously, the instruments for the loan supply equation are SG and $F20$. As shown in Table 3, we cannot reject the null hypothesis that the instruments are exogenous. In addition, a second specification test is run on the significance of the instruments and shows that they are relevant[14]. The same conclusions can be reached for the loan demand equation. The two instruments used for $LNSPRD$, *i.e.* GI and CLS, are exogenous and relevant[15].

In the system, and more specifically in the loan supply equation (1), the coefficient of $LNAMT$ is negative but not significant for all countries, thus questioning a potential simultaneity bias. However, in the credit demand equation (2), the coefficient for $LNSPRD$ is as expected, *i.e.* negative and significant[16]. When the spread of the loan increases, the amount borrowed by the company decreases.

The credit supply equation

Controlling for credit demand effects enables to set forth a significant impact of the banking crisis on the credit supply. First, despite the intervention of national governments, the loan price significantly increases after the collapse of Lehman Brothers highlighting a confidence issue. This result holds regardless of the nationality of the borrower or of the bank. However, the

[13] In this table, */**/*** indicates when a coefficient is significant at the 10/5/1% conventional level.

[14] The same conclusions are reached with the 2SLS and the GMM estimations of each equation, as shown in Appendices C and D respectively.

[15] One exception has to be noticed, namely the demand equation for Italy where the instruments do not seem to be relevant.

[16] The coefficient is not significant for Germany and Italy.

Table 3: *3SLS results for the period 2005-2013*

France					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	6.4571	0.9019***	**CONSTANT**	19.2154	1.6838***
LNAMT	-0.0110	0.0562	**LNSPRD**	-0.5581	0.2500**
MAT	0.0182	0.0323	**MAT**	0.3351	0.0457***
SEC	0.4553	0.0349***	**SEC**	0.0449	0.1301
CRCY	-0.1970	0.0415***	**CRCY**	0.0755	0.0855
PRIME	0.0731	0.0423*	**PRIME**	0.3843	0.0633***
F8	-0.2180	0.0792***	**F8**	0.6474	0.1240***
F9	-0.0438	0.0636	**F9**	0.0985	0.1081
F10	-0.5217	0.1039***	**F10**	0.6890	0.2037***
F11	0.1676	0.0842**	**F11**	0.3802	0.1480***
F12	0.0503	0.1473	**F12**	1.6579	0.1914***
F13	-0.1889	0.0521***	**F13**	0.1685	0.0969*
F14	-0.1922	0.0537***	**F14**	0.0169	0.1033
F15	-0.0898	0.0579	**F15**	0.0117	0.1008
F16	0.0685	0.0882	**F16**	1.1051	0.1183***
F17	-0.0745	0.0780	**F17**	0.3448	0.1302***
F18	0.0252	0.0777	**F18**	-0.3108	0.1308**
F19	-0.1351	0.0790*	**F19**	-0.2432	0.1387*
TA	-0.0896	0.0119***	**TA**	0.0930	0.0265***
LTD	0.0150	0.0049***	**LTD**	0.0280	0.0089***
ROE	-0.0005	0.0005	**ROE**	0.0004	0.0008
PPE	0.0039	0.0005***	**PPE**	0.0006	0.0012
LLR	-0.0016	0.0172	**LLR**	-0.0817	0.0283***
T1	-0.0001	0.0170	**T1**	0.0358	0.0229
ROA	-0.8023	0.0823***	**ROA**	-0.2131	0.2656
IB	-0.0013	0.0011	**IB**	-0.0085	0.0018***
LA	-0.0040	0.0006***	**LA**	-0.0059	0.0014***
II	-0.0002	0.0007	**II**	0.0003	0.0012
TL	0.0023	0.0016	**TL**	0.0100	0.0026***
PL1	-0.2926	0.0371***	**PL1**	-0.1094	0.0959
MCS	-0.0763	0.0354**	**MCS**	0.4121	0.0493***
CFR	0.3156	0.1144***	**CFR**	0.1504	0.2303
CGE	0.4747	0.1271***	**CGE**	0.7942	0.2622***
CIT	0.3663	0.1901*	**CIT**	0.5287	0.3513
CSP	0.9512	0.1042***	**CSP**	0.9537	0.3360***
CEUR	0.5586	0.0981***	**CEUR**	1.0037	0.2366***
CNOAM	0.4605	0.0691***	**CNOAM**	0.6295	0.1947***
CASIA	0.5920	0.0725***	**CASIA**	0.4596	0.2317**
GI	0.1945	0.0707***	**F20**	-0.4715	0.0459***
CLS	0.0132	0.0025***	**SG**	-0.0004	0.0003
R^2	0.6061		R^2	0.4033	
N	2406		**N**	2406	
Specification tests					
Test for significance of instruments in first-stage regression					
Jointly	F(2, 2365)	52.78***		F(2, 2365)	22.61***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
Jointly	Chi-sq(1)	0.5990		Chi-sq(1)	0.0001

Germany					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	5.6041	1.1240***	**CONSTANT**	14.5277	1.7243***
LNAMT	-0.0081	0.0819	**LNSPRD**	-0.2175	0.2839
MAT	0.0284	0.0492	**MAT**	0.4862	0.0556***
SEC	0.5366	0.0445***	**SEC**	-0.1771	0.1700
CRCY	-0.1655	0.0512***	**CRCY**	0.2390	0.0929***
PRIME	0.0502	0.0436	**PRIME**	0.2824	0.0644***
F8	-0.3664	0.0899***	**F8**	0.4594	0.1725***
F9	-0.1257	0.0771	**F9**	-0.0907	0.1391
F10	-0.6630	0.1367***	**F10**	1.0111	0.2658***
F11	-0.0667	0.0965	**F11**	0.3420	0.1640**
F12	-0.2755	0.1837	**F12**	1.4129	0.2477***
F13	-0.2939	0.0535***	**F13**	0.1189	0.1211
F14	-0.2904	0.0612***	**F14**	-0.0982	0.1348
F15	-0.1916	0.0617***	**F15**	-0.0363	0.1192
F16	-0.0338	0.1141	**F16**	1.1991	0.1251***
F17	-0.1718	0.1005*	**F17**	0.5501	0.1649***
F18	-0.4124	0.1374***	**F18**	-0.6225	0.2401***
F19	-0.1348	0.1084	**F19**	-0.4170	0.1816**
TA	-0.0907	0.0177***	**TA**	0.1549	0.0315***
LTD	0.0123	0.0061**	**LTD**	0.0363	0.0100***
ROE	0.0007	0.0006	**ROE**	0.0022	0.0009**
PPE	0.0029	0.0005***	**PPE**	0.0022	0.0012*
LLR	-0.0764	0.0257***	**LLR**	0.0026	0.0541
T1	0.0624	0.0155***	**T1**	0.0910	0.0253***
ROA	-0.3732	0.0896***	**ROA**	-0.0456	0.2197
IB	-0.0005	0.0004	**IB**	-0.0026	0.0006***
LA	-0.0007	0.0009	**LA**	0.0030	0.0014**
II	-0.0004	0.0001***	**II**	-0.0002	0.0002
TL	-0.0001	0.0016	**TL**	0.0035	0.0027
PL1	-0.5535	0.0480***	**PL1**	-0.1081	0.1795
MCS	0.0103	0.0420	**MCS**	0.3621	0.0549***
CFR	0.1104	0.1560	**CFR**	0.6671	0.2618**
CGE	0.4372	0.1290***	**CGE**	0.1939	0.2736
CIT	0.9650	0.2611***	**CIT**	0.9683	0.5376*
CSP	0.9508	0.1307***	**CSP**	-0.4455	0.3740
CEUR	0.4400	0.1083***	**CEUR**	0.6016	0.2500**
CNOAM	0.6257	0.0752***	**CNOAM**	0.3911	0.2664
CASIA	0.6787	0.0954***	**CASIA**	-0.0377	0.2977
GI	0.4551	0.0845***	**F20**	-0.3724	0.0516***
CLS	0.0064	0.0031**	**SG**	0.0001	0.0003
R^2	0.6216		R^2	0.4195	
N	1891		**N**	1891	
Specification tests					
Test for significance of instruments in first-stage regression					
Jointly	F(2, 1850)	24.13***		F(2, 1850)	17.80***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
Jointly	Chi-sq(1)	0.0028		Chi-sq(1)	0.8338

Italy					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	6.8563	1.3896***	**CONSTANT**	6.3805	10.6002
LNAMT	-0.0244	0.1124	**LNSPRD**	0.6371	1.6163
MAT	-0.1035	0.0647	**MAT**	0.0888	0.2093
SEC	0.4933	0.0817***	**SEC**	-0.4430	0.8439
CRCY	-0.1370	0.0974	**CRCY**	0.5787	0.2963*
PRIME	0.2054	0.1075*	**PRIME**	0.2979	0.3341
F8	-0.3782	0.1136***	**F8**	0.4286	0.6601
F9	-0.0113	0.1126	**F9**	-0.2499	0.2139
F10	-0.8258	0.1666***	**F10**	0.5944	1.3870
F13	-0.1586	0.0964*	**F13**	0.3865	0.3229
F14	-0.2288	0.1125**	**F14**	0.3424	0.4180
F15	-0.2468	0.1384*	**F15**	-0.1848	0.4533
F16	-0.1315	0.1793	**F16**	1.1240	0.3587***
F19	0.0548	0.1758	**F19**	-0.3062	0.3516
TA	-0.1380	0.0419***	**TA**	0.3796	0.2392
LTD	0.0254	0.0130*	**LTD**	-0.0424	0.0493
ROE	0.0001	0.0015	**ROE**	0.0038	0.0027
PPE	0.0018	0.0013	**PPE**	0.0006	0.0035
LLR	-0.0763	0.0461*	**LLR**	0.2102	0.1516
T1	-0.0062	0.0472	**T1**	0.2354	0.0777***
ROA	-0.0882	0.0867	**ROA**	0.3341	0.2082
IB	-0.0002	0.0021	**IB**	0.0129	0.0031***
LA	-0.0160	0.0048***	**LA**	0.0138	0.0304
II	0.0240	0.0075***	**II**	-0.0041	0.0462
TL	-0.0009	0.0069	**TL**	0.0293	0.0112***
PL1	-0.7809	0.1226***	**PL1**	0.7948	1.2896
MCS	-0.2236	0.0678***	**MCS**	0.2203	0.3952
CFR	0.2996	0.1904	**CFR**	0.5919	0.5911
CGE	0.5742	0.1904***	**CGE**	0.5535	0.9989
CIT	0.8164	0.2231***	**CIT**	-0.5415	1.4736
CSP	0.9142	0.1599***	**CSP**	-0.2452	1.5609
CEUR	0.5289	0.1562***	**CEUR**	0.3456	0.8686
CNOAM	0.5628	0.1200***	**CNOAM**	0.0318	0.9450
CASIA	0.5251	0.1634***	**CASIA**	-0.4487	0.9455
GI	0.1290	0.1576	**F20**	-0.5149	0.1125***
CLS	0.0037	0.0044	**SG**	0.0029	0.0021
R^2	0.6317		R^2	0.4100	
N	462		**N**	462	
Specification tests					
Test for significance of instruments in first-stage regression					
Jointly	F(2, 425)	12.40***		F(2, 425)	0.60
Over-identification test for validity of instruments (H0: instruments are exogenous)					
Jointly	Chi-sq(1)	1.4202		Chi-sq(1)	1.7704

Spain					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	2.9998	1.2034**	**CONSTANT**	15.9912	1.9163***
LNAMT	-0.0847	0.0748	**LNSPRD**	-1.1948	0.5123**
MAT	0.1503	0.0475***	**MAT**	0.4050	0.1181***
SEC	0.3006	0.0714***	**SEC**	0.0609	0.2337
CRCY	0.0619	0.0846	**CRCY**	0.4614	0.1758***
PRIME	0.2611	0.1354*	**PRIME**	1.1965	0.2711***
F8	-0.1658	0.1043	**F8**	0.0125	0.2608
F9	-0.0127	0.0989	**F9**	0.1035	0.2266
F10	-0.3931	0.1661**	**F10**	0.1643	0.4421
F11	0.0893	0.1336	**F11**	0.4560	0.3051
F12	0.3809	0.1912**	**F12**	0.6654	0.4805
F13	-0.2971	0.0707***	**F13**	-0.1169	0.2238
F14	-0.4233	0.0991***	**F14**	-0.4055	0.3096
F16	0.1661	0.1399	**F16**	1.4729	0.2462***
F18	0.3103	0.1747*	**F18**	-0.4734	0.4214
F19	-0.4280	0.1241***	**F19**	-1.0844	0.3261***
TA	-0.0504	0.0315	**TA**	0.2161	0.0612***
LTD	0.0261	0.0130**	**LTD**	0.0356	0.0335
ROE	-0.0004	0.0011	**ROE**	0.0017	0.0026
PPE	0.0002	0.0011	**PPE**	0.0047	0.0022**
LLR	0.0303	0.0417	**LLR**	-0.0822	0.0942
T1	0.2243	0.0417***	**T1**	0.2164	0.1157*
ROA	-0.0877	0.1470	**ROA**	0.1791	0.3342
IB	-0.0004	0.0008	**IB**	-0.0010	0.0017
LA	-0.0102	0.0063	**LA**	0.0290	0.0138**
II	0.0203	0.0076***	**II**	0.0038	0.0188
TL	-0.0094	0.0072	**TL**	-0.0392	0.0161**
PL1	-0.4506	0.0977***	**PL1**	-0.3525	0.3163
MCS	0.0955	0.0666	**MCS**	0.3393	0.1554**
CFR	0.1130	0.2062	**CFR**	1.4819	0.3984***
CGE	0.1639	0.2142	**CGE**	0.9997	0.4859**
CIT	0.6269	0.2665**	**CIT**	1.3880	0.7452*
CSP	0.5162	0.1375***	**CSP**	0.4552	0.5123
CEUR	0.4666	0.1666***	**CEUR**	1.3890	0.4762***
CNOAM	0.4701	0.1796***	**CNOAM**	1.6323	0.4663***
CASIA	0.3646	0.2736	**CASIA**	1.6438	0.6354***
GI	0.4599	0.1237***	**F20**	-0.6258	0.1225***
CLS	-0.0010	0.0039	**SG**	-0.0010	0.0022
R^2	0.7102		R^2	0.6005	
N	640		**N**	640	
Specification tests					
Test for significance of instruments in first-stage regression					
Jointly	F(2, 601)	19.04***		F(2, 601)	9.45***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
Jointly	Chi-sq(1)	2.0118		Chi-sq(1)	0.2047

hypothesis of a flight-to-home effect can only be confirmed for French and German banks because the increase of the spread for domestic companies is the lowest one, albeit statistically significant. For example, when one considers the loans provided by French banks, the increase of the spread for the French firms is lower than 32%, while the spread increase for foreign companies goes from 36% to almost 100%. In Germany, the spread is higher by less than 44% after the collapse of Lehman Brothers while it is above this threshold for all the other foreign companies. This may signal banks' willingness to ease the access to credit for domestic companies, in order to facilitate the credit risk assessment of the borrowers (Epstein (2001)). More broadly, the currency of the loan may also give an indication about banks' preference. The results show that, between 2005 and 2013, loans expressed in Euro benefit from a decrease in the spread. While this goes in line with the idea of a home bias, a deeper analysis is nevertheless required to distinguish between the two periods, *i.e.* before and after the collapse of Lehman Brothers.

The results are different for Italy and Spain. We observe an increase in the spread by more than 50% for all the borrowers, regardless of their home country, following the financial institutions crisis. This may be explained either by a reduced number of observations or by the consequences of the sovereign debt crisis occurring in Europe, following the financial institutions crisis. At that time, the two countries were considered as high risk sovereign borrowers. In this context of sovereign debt crisis, banks may have been reluctant to lend money even to domestic companies. These results are coherent with the conclusion that may be drawn regarding the currency of the loan. The coefficient is insignificant for both Italy and Spain compared to France and Germany, emphasizing the lack of home-bias effect after the collapse of Lehman Brothers for these two countries, especially for Spain, where the market share of loans to domestic companies is the largest one over the period.

Regarding the role of the bank's speciality on credit terms, we observe a positive and significant coefficient for France and Germany while the same coefficient is not significant for the two other countries. This result indicates that after the collapse of Lehman Brothers, banks apply a higher spread for companies which belong to industries they are specialized in. Combining this result with the observation that the share of loans in specialized industries decreases after the collapse of Lehman Brothers, we may conclude that banks are willing to diversify their portfolios.

Regarding banks' characteristics and their influence on loan pricing, all the significant variables have the expected sign[17]. Hence, a bank which is capitalized appropriately, with a strong liquidity position and high quality assets is able to offer better credit terms and to maintain bank lending. This result supports the implementation of the Basel regulatory framework aiming at increasing the requirements for banks in terms of capital and liquidity. The distinction between the period before and after the collapse of Lehman Brothers will enable us to assess if this result still holds.

When one considers the financial characteristics of the borrower, the results are in line with the literature. A company with a high level of assets is able to get better credit terms while a higher level of long-term debt makes the spread increase. Surprisingly, the share of fixed assets as a percentage of the net total assets is significant for France and Germany but positively correlated to loan's spread. This may be related to the liquidity fear of the bank regarding the borrower's capacity to meet short-term deadlines. With respect to the characteristics of the loan, the results confirm the hypotheses previously developed in the literature. More specifically, a secured loan or indexed to prime rate is associated to an increase in the loan spread in the four countries. Finally, the relationship that may exist between the bank and its borrowers seems to impact the credit offer and contributes to a decrease of the loan spread regardless of the country under consideration. Thanks to this relation, a company with a good credit history may enjoy a lower loan price.

The credit demand equation

The variable $F20$[18], used as demand shifter, is significant and with the expected sign. The demand of a company that is engaged in several loans at the same time tends to be lower per bank. Looking at the different types of loans, the demand is significantly higher for the four countries for loans aiming at financing takeovers. Regarding the borrower's characteristics, companies with large amounts of assets or highly levered, express a higher demand for

[17]This conclusion does not hold for the variables related to capital and assets in Germany, the variables related to assets and earnings in Italy and the variables related to capital and earnings in Spain. As for the "currency" variable, a deeper analysis is required to distinguish between the two periods, *i.e.* before and after the collapse of Lehman Brothers.

[18]As a reminder, $F20$ is a dummy variable which equals one when several types of loan are contracted at the same time, by the same company.

credit[19]. Finally, the demand for loans after the collapse of Lehman Brothers seems to be higher, disregarding the country of the borrower.

5.2 Comparison of the results on two sub-periods: before and after the collapse of Lehman Brothers

Table 4[20] provides the results when the model is estimated over the two sub-periods. The two equations are jointly determined and specification tests are also reported at the end of the table. Several variables are adapted in order to perform these new estimations. First, regarding the list of instruments, as GI is irrelevant before the crisis, it was replaced by SEC for both periods[21]. In addition, the lender's speciality is considered according to the period under study, not only after the collapse of Lehman Brothers. Second, regarding the vector GEO, the same considerations than the ones for LS for each country have been taken into account. Hence, one can only make a comparison between the entire period and the period after the collapse of Lehman Brothers for the LS variable and the vector GEO.

The credit supply equation

The comparison between the two sub-periods allows us to confirm the hypothesis of a flight-to-home effect for both France and Germany[22]. Before the crisis, in these two countries, the spread for all the European borrowers is decreasing while it increases for North American and Asian ones. This result is consistent with the insights previously suggested by the variable "currency" which highlights a significant decrease in the spread when the loan is expressed in Euro.

After the collapse of Lehman Brothers, better credit terms are offered by French and German banks to their domestic companies, and the conclusion is statistically significant, while the spread increases for the foreign borrowers. Moreover, the coefficient associated to the currency is still negative but not significant for France. This may be related to the European sovereign debt

[19]These results do not hold for Italy which does not highlight any significant coefficient for this category.

[20]In this table, */**/*** indicates when a coefficient is significant at the 10/5/1% conventional level.

[21]The correlation table is used to determine the most relevant instrument for $LNSPRD$ (Delis and Kouretas (2011)).

[22]One should be aware that, when considering the sub-periods, the number of loans per country, per period is significantly lower.

Table 4: *3SLS results for the two sub-periods*

France									
	Loan supply regression (LNSPRD)					**Loan demand regression (LNAMT)**			
	Before crisis		**After crisis**			**Before crisis**		**After crisis**	
	Coef	**Std Err**	**Coef**	**Std Err**		**Coef**	**Std Err**	**Coef**	**Std Err**
CONST	8.2667	1.2543***	8.5293	1.2046***	**CONST**	18.8687	1.2591***	25.4590	2.9901***
LNAMT	0.0357	0.0692	-0.1277	0.0787	**LNSPRD**	-0.2384	0.1180**	-1.5961	0.4232***
MAT	0.0449	0.0393	0.0691	0.0462	**MAT**	0.2928	0.0523***	0.3212	0.0959***
CRCY	-0.1137	0.0737	-0.0446	0.0831	**CRCY**	-0.1025	0.1124	-0.3997	0.1734**
PRIME	-0.1332	0.0711*	0.1557	0.0462***	**PRIME**	0.0865	0.1074	0.2216	0.1272*
F8	-0.4113	0.0881***	0.0715	0.1253	**F8**	0.2184	0.1389	0.9533	0.2021***
F9	-0.1795	0.0817**	0.1128	0.1031	**F9**	-0.1167	0.1258	0.6333	0.2047***
F10	-0.6997	0.1157***	-0.0845	0.1666	**F10**	0.2822	0.1919	0.8621	0.3094***
F11	0.0529	0.1163	0.3438	0.1291***	**F11**	-0.2196	0.1715	1.1918	0.2771***
F12	-0.1340	0.1639	0.4591	0.2319**	**F12**	0.9685	0.2251***	2.3880	0.3635***
F13	-0.2474	0.0661***	-0.2135	0.0739***	**F13**	0.1478	0.1054	-0.1525	0.2001
F14	-0.1492	0.0680**	-0.1243	0.0908	**F14**	0.2134	0.1034**	0.0702	0.2148
F15	-0.0716	0.0726	-0.1636	0.0892*	**F15**	0.0542	0.1109	-0.1660	0.2158
F16	0.1637	0.1037	-0.1050	0.1283	**F16**	0.9574	0.1339***	0.5829	0.2620**
F17	-0.1454	0.1030	-0.0622	0.1120	**F17**	0.4457	0.1490***	0.2324	0.2510
F18	0.0493	0.0976	0.0140	0.1157	**F18**	0.0732	0.1479	-0.1570	0.2593
F19	-0.0087	0.1064	-0.1614	0.1139	**F19**	-0.2960	0.1578*	-0.3797	0.2592
TA	-0.1212	0.0158***	-0.0499	0.0178***	**TA**	0.1180	0.0240***	0.0661	0.0428
LTD	0.0207	0.0073***	0.0074	0.0059	**LTD**	0.0297	0.0112***	0.0181	0.0133
ROE	-0.0011	0.0007*	-0.0001	0.0006	**ROE**	-0.0004	0.0010	0.0012	0.0013
PPE	0.0041	0.0007***	0.0027	0.0006***	**PPE**	-0.0022	0.0011*	0.0042	0.0019**
LLR	0.0388	0.0193**	0.0361	0.0481	**LLR**	-0.0443	0.0287	-0.0762	0.1063
T1	-0.3253	0.0463***	-0.0467	0.0197**	**T1**	-0.0929	0.0780	-0.0376	0.0499
ROA	-1.3540	0.1795***	-0.3239	0.1444**	**ROA**	0.1100	0.3206	-0.0196	0.3437
IB	0.0063	0.0016***	-0.0039	0.0020**	**IB**	-0.0074	0.0025***	-0.0081	0.0046*
LA	-0.0021	0.0007***	0.0009	0.0013	**LA**	-0.0031	0.0011***	0.0000	0.0029
II	-0.0019	0.0016	0.0007	0.0012	**II**	-0.0039	0.0024	0.0021	0.0028
TL	0.0046	0.0022**	0.0012	0.0020	**TL**	0.0049	0.0034	0.0036	0.0044
PL1	-0.2694	0.0491***	-0.2326	0.0558***	**PL1**	0.1277	0.0782	-0.3642	0.1556**
MCS	-0.1005	0.0492**	-0.0230	0.0474	**MCS**	0.4942	0.0548***	0.3161	0.0827***
FR	-0.1851	0.1076*	-0.2222	0.1287*	**FR**	-0.4002	0.1614**	-0.0295	0.3157
GE	-0.0912	0.1677	0.0062	0.1440	**GE**	0.3609	0.2516	0.7872	0.2994***
IT	-0.0382	0.1884	0.0401	0.1853	**IT**	0.9378	0.2731***	0.6621	0.3978*
SP	-0.2288	0.1086**	0.4625	0.1246***	**SP**	0.2551	0.1678	1.3658	0.2839***
EUR	-0.2057	0.0901**	0.2231	0.1035**	**EUR**	0.2514	0.1370*	0.9157	0.2040***
NOAM	0.1053	0.0927	0.1010	0.0890	**NOAM**	0.2184	0.1409	0.6258	0.1816***
ASIA	0.0235	0.0994	0.0495	0.0845	**ASIA**	-1.0135	0.1079***	-0.1491	0.1785
SEC	0.5786	0.0462***	0.1667	0.0496***	**F20**	-0.5363	0.0552***	-0.3539	0.0847***
LS	-0.0049	0.0030*	0.0040	0.0019**	**SG**	-0.0003	0.0003	-0.0005	0.0003*
R^2	0.4772		0.3732		R^2	0.4923		0.2642	
N	1430		976		**N**	1430		976	
Specification tests									
Test for significance of instruments in first-stage regression									
Jointly	F(2, 1390)	42.06***	F(2, 936)	19.85***		F(2, 1390)	83.02***	F(2, 936)	12.66***
Over-identification test for validity of instruments (H0: instruments are exogenous)									
Jointly	Chi-sq(1)	0.0004	Chi-sq(1)	0.3035		Chi-sq(1)	3.3914*	Chi-sq(1)	0.1360

Germany									
	Loan supply regression (LNSPRD)					**Loan demand regression (LNAMT)**			
	Before crisis		**After crisis**			**Before crisis**		**After crisis**	
	Coef	**Std Err**	**Coef**	**Std Err**		**Coef**	**Std Err**	**Coef**	**Std Err**
CONST	5.5688	1.8496***	7.1308	0.9161***	**CONST**	18.0390	1.2131***	16.4810	1.7891***
LNAMT	0.0736	0.1195	-0.0346	0.0786	**LNSPRD**	-0.4459	0.1382***	-0.8303	0.2237***
MAT	0.0887	0.0524*	-0.0518	0.0621	**MAT**	0.2351	0.0738***	0.5457	0.0866***
CRCY	-0.0790	0.0844	-0.3229	0.0875***	**CRCY**	-0.1835	0.1213	-0.6548	0.1796***
PRIME	-0.1167	0.0893	0.0988	0.0415**	**PRIME**	0.1670	0.1225	0.0130	0.0878
F8	-0.6275	0.1213***	-0.0873	0.0986	**F8**	-0.0889	0.1946	0.4634	0.1838**
F9	-0.3199	0.1178***	0.1244	0.0943	**F9**	-0.2498	0.1803	0.3809	0.1914**
F10	-0.7891	0.1536***	-0.4893	0.1690***	**F10**	0.0671	0.2378	1.0286	0.2903***
F11	-0.1731	0.1498	0.0605	0.1119	**F11**	-0.0746	0.2175	0.6090	0.2211***
F12	-0.4601	0.2203**	-0.0583	0.2477	**F12**	0.4105	0.2999	2.2062	0.3328***
F13	-0.2849	0.0751***	-0.2025	0.0688***	**F13**	-0.1497	0.1201	0.0322	0.1526
F14	-0.1962	0.0828**	-0.1331	0.0976	**F14**	-0.1201	0.1248	0.1770	0.2034
F15	-0.1672	0.0888*	-0.1581	0.0838*	**F15**	-0.2083	0.1303	0.0254	0.1767
F16	-0.0561	0.1536	-0.1077	0.1065	**F16**	1.0962	0.1525***	0.4757	0.2139**
F17	-0.2254	0.1220*	-0.0941	0.1521	**F17**	0.0982	0.1754	0.7898	0.2874***
F18	-0.2969	0.1840	-0.1487	0.2023	**F18**	-0.6602	0.2495***	0.0164	0.4162
F19	0.0170	0.1524	-0.2113	0.1339	**F19**	-0.3578	0.2112*	-0.4088	0.2729
TA	-0.1280	0.0269***	-0.0660	0.0256***	**TA**	0.1317	0.0291***	0.2205	0.0346***
LTD	0.0136	0.0086	0.0081	0.0070	**LTD**	0.0248	0.0125**	0.0302	0.0136**
ROE	-0.0006	0.0010	0.0009	0.0006*	**ROE**	0.0002	0.0015	0.0025	0.0011**
PPE	0.0024	0.0009***	0.0019	0.0006***	**PPE**	0.0051	0.0013***	0.0007	0.0014
LLR	0.0794	0.0447*	-0.1704	0.0496***	**LLR**	-0.0390	0.0639	-0.1510	0.1097
T1	-0.1471	0.0530***	0.0055	0.0212	**T1**	0.0022	0.0813	0.0893	0.0397**
ROA	0.0590	0.1950	-0.2981	0.1001***	**ROA**	-0.2223	0.2787	-0.0749	0.2044
IB	-0.0027	0.0007***	-0.0012	0.0006**	**IB**	-0.0026	0.0011**	-0.0035	0.0012***
LA	0.0048	0.0016***	0.0041	0.0015***	**LA**	0.0041	0.0025	0.0082	0.0030***
II	-0.0005	0.0002**	-0.0002	0.0002	**II**	-0.0001	0.0003	-0.0002	0.0004
TL	0.0013	0.0026	0.0005	0.0019	**TL**	0.0011	0.0037	0.0016	0.0039
PL1	-0.4628	0.0689***	-0.5260	0.0690***	**PL1**	-0.1870	0.1177	-0.1175	0.1813
MCS	0.0262	0.0553	-0.0131	0.0492	**MCS**	0.2874	0.0675***	0.3510	0.0857***
FR	-0.3641	0.1940*	-0.1251	0.1597	**FR**	0.9994	0.2144***	1.0045	0.2847***
GE	-0.0344	0.1730	0.2420	0.1411*	**GE**	0.8033	0.2178***	0.9756	0.2718***
IT	-0.2350	0.2637	0.7115	0.2416***	**IT**	1.4422	0.3011***	1.9195	0.4556***
SP	-0.0109	0.1469	0.6886	0.1214***	**SP**	0.6076	0.1961***	0.7146	0.2657***
EUR	-0.1857	0.1098*	0.1359	0.1069	**EUR**	0.4086	0.1425***	0.8523	0.1925***
NOAM	0.1885	0.1200	0.1686	0.0846**	**NOAM**	0.6243	0.1555***	0.6180	0.1666***
ASIA	0.0734	0.1234	0.1418	0.1111	**ASIA**	-0.6531	0.1349***	-0.4515	0.2006**
SEC	0.6072	0.0657***	0.3668	0.0501***	**F20**	-0.3911	0.0656***	-0.4447	0.0749***
LS	-0.0062	0.0040	-0.0066	0.0028**	**SG**	0.0000	0.0005	-0.0004	0.0004
R^2	0.4179		0.4769		R^2	0.4571		0.5268	
N	1031		860		**N**	1031		860	
Specification tests									
Test for significance of instruments in first-stage regression									
Jointly	F(2, 991)	15.28***	F(2, 820)	18.79***		F(2, 991)	56.29***	F(2, 820)	39.61***
Over-identification test for validity of instruments (H0: instruments are exogenous)									
Jointly	Chi-sq(1)	0.4231	Chi-sq(1)	3.7469*		Chi-sq(1)	0.0104	Chi-sq(1)	0.8626

Italy

	Loan supply regression (LNSPRD)					Loan demand regression (LNAMT)			
	Before crisis		After crisis			Before crisis		After crisis	
	Coef	Std Err	Coef	Std Err		Coef	Std Err	Coef	Std Err
CONST	11.5316	4.3646***	6.9258	3.7956*	**CONST**	-0.9991	13.3379	31.2778	7.6690***
LNAMT	-0.0559	0.1250	0.0643	0.1316	**LNSPRD**	1.5622	0.7586**	-1.6829	0.5155***
MAT	-0.0354	0.0873	-0.0563	0.0841	**MAT**	-0.0052	0.2149	0.0530	0.1818
CRCY	-0.1257	0.1316	-0.5416	0.1533***	**CRCY**	0.4683	0.3147	-0.5487	0.3794
PRIME	-0.2058	0.1875	0.4402	0.1122***	**PRIME**	0.6886	0.4577	0.8866	0.3422***
F8	-0.4026	0.1563***	-0.0827	0.1448	**F8**	0.8627	0.5185*	-0.7089	0.3094**
F9	-0.1230	0.1581	-0.0052	0.1468	**F9**	0.3831	0.4020	-0.5056	0.3173
F10	-0.8303	0.2262***	-0.3318	0.2209	**F10**	1.2437	0.8752	-0.8650	0.5114*
F13	-0.1789	0.1237	-0.3037	0.1331**	**F13**	0.7757	0.3585**	-0.2461	0.3261
F14	-0.1607	0.1367	-0.0691	0.2431	**F14**	0.8825	0.3732**	0.0701	0.5189
F15	-0.0942	0.1602	-0.3488	0.1916*	**F15**	0.2950	0.4155	-0.8876	0.4525**
F16	0.3839	0.2882	-0.1839	0.1887	**F16**	1.1355	0.5549**	0.0982	0.4308
F19	0.4511	0.2033**	-0.5066	0.2792*	**F19**	-1.1298	0.6209*	-1.1771	0.6150*
TA	-0.2100	0.0571***	-0.1550	0.0511***	**TA**	0.7261	0.1939***	0.0737	0.1068
LTD	0.0700	0.0178***	0.0074	0.0174	**LTD**	-0.1493	0.0646**	-0.0402	0.0352
ROE	0.0024	0.0029	-0.0001	0.0016	**ROE**	0.0018	0.0066	0.0024	0.0034
PPE	-0.0007	0.0017	0.0024	0.0017	**PPE**	0.0076	0.0040*	0.0029	0.0042
LLR	0.1347	0.2406	0.0597	0.3003	**LLR**	0.0678	0.6095	-0.5802	0.6375
T1	-0.4897	0.6189	-0.0514	0.0812	**T1**	0.3500	1.6013	0.2768	0.1590*
ROA	0.2246	0.5006	-0.1085	0.0955	**ROA**	-0.5373	1.2415	-0.0373	0.2022
IB	0.0071	0.0202	0.0090	0.0049*	**IB**	0.0067	0.0501	0.0116	0.0116
LA	0.0002	0.0240	-0.0312	0.0103***	**LA**	-0.0171	0.0596	-0.0223	0.0245
II	-0.0148	0.0365	0.0057	0.0271	**II**	0.0071	0.0923	-0.0335	0.0590
TL	0.0039	0.0105	-0.0059	0.0078	**TL**	0.0189	0.0242	0.0243	0.0140*
PL1	-0.3600	0.1595**	-0.9082	0.1561***	**PL1**	0.3993	0.4697	-1.0512	0.5703*
MCS	-0.3833	0.1036***	0.0662	0.1008	**MCS**	0.8854	0.3881**	0.3302	0.2202
FR	-0.3083	0.2052	-0.1827	0.2123	**FR**	1.4546	0.4984***	0.5544	0.4603
GE	0.3448	0.2985	0.0082	0.2224	**GE**	0.7772	0.6594	1.1398	0.4417***
IT	-0.0132	0.2087	0.5932	0.2411**	**IT**	-0.3005	0.4995	0.9611	0.5407*
SP	-0.0973	0.1632	0.6759	0.2082***	**SP**	0.6366	0.4338	1.2467	0.4616***
EUR	-0.4178	0.1826**	-0.0914	0.1717	**EUR**	1.3979	0.5161***	0.4669	0.3621
NOAM	-0.0372	0.2056	-0.2017	0.1565	**NOAM**	1.0129	0.4321**	0.1110	0.3613
ASIA	-0.1441	0.1758	-0.0176	0.2167	**ASIA**	-1.0448	0.3705***	-0.6110	0.4337
SEC	0.3804	0.1329***	0.4522	0.1506***	**F20**	-0.6879	0.1994***	-0.5539	0.1567***
LS	-0.0034	0.0041	-0.0039	0.0036	**SG**	0.0023	0.0023	0.0059	0.0023**
R^2	0.6342		0.5720		R^2	0.2988		0.2737	
N	223		239		**N**	223		239	
Specification tests									
Test for significance of instruments in first-stage regression									
Jointly	F(2, 187)	8.34***	F(2, 203)	9.82***		F(2, 187)	4.40**	F(2, 203)	7.70***
Over-identification test for validity of instruments (H0: instruments are exogenous)									
Jointly	Chi-sq(1)	1.2884	Chi-sq(1)	0.1317		Chi-sq(1)	0.4031	Chi-sq(1)	0.2303

Spain									
	Loan supply regression (LNSPRD)					**Loan demand regression (LNAMT)**			
	Before crisis		**After crisis**			**Before crisis**		**After crisis**	
	Coef	**Std Err**	**Coef**	**Std Err**		**Coef**	**Std Err**	**Coef**	**Std Err**
CONST	1.2644	4.1082	9.2462	1.4481***	**CONST**	21.3057	5.6698***	70.8065	92.1237
LNAMT	-0.0484	0.1534	-0.0981	0.0830	**LNSPRD**	-1.0427	1.0325	-7.2176	11.3980
MAT	0.3299	0.0989***	0.0129	0.0476	**MAT**	0.7964	0.3609**	0.1018	0.3861
CRCY	0.1162	0.1267	0.1156	0.1318	**CRCY**	0.1894	0.2985	1.0777	0.9599
PRIME	-0.0755	0.2166	0.9687	0.2049***	**PRIME**	0.6569	0.4203	7.0715	11.0298
F8	-0.5450	0.1798***	0.1106	0.1089	**F8**	-0.0321	0.6833	0.7519	1.7171
F9	-0.3997	0.1591**	0.2690	0.0986***	**F9**	-0.1113	0.5264	1.9745	3.1757
F10	-0.1841	0.2757	-0.9757	0.2611***	**F10**	0.9542	0.4839**	-7.0366	11.1894
F11	-0.1939	0.2322	0.2743	0.1415*	**F11**	0.7669	0.4971	1.9200	3.8249
F12	0.1366	0.3767	0.4161	0.2001**	**F12**	1.4693	0.6205**	3.0144	4.8532
F13	-0.3784	0.1112***	-0.2056	0.0769***	**F13**	-0.5955	0.4449	-1.3662	2.9787
F14	-0.0337	0.1304	0.1415	0.2581	**F14**	-0.2761	0.2670	0.8110	3.1460
F16	0.2215	0.1978	-0.1697	0.1953	**F16**	1.3674	0.3274***	-0.8530	3.7174
F18	0.5520	0.4112	0.1040	0.1961	**F18**	-1.3858	0.9521	0.5724	2.1596
F19	-0.2456	0.2683	-0.1286	0.1243	**F19**	-1.5105	0.3382***	-0.9401	1.7286
TA	-0.0797	0.0466*	-0.0317	0.0363	**TA**	0.1134	0.1309	-0.1214	0.8819
LTD	0.0290	0.0220	0.0199	0.0128	**LTD**	0.0386	0.0589	0.1404	0.2952
ROE	-0.0048	0.0022**	-0.0016	0.0012	**ROE**	-0.0057	0.0072	-0.0094	0.0262
PPE	-0.0013	0.0018	0.0003	0.0012	**PPE**	0.0059	0.0036	0.0028	0.0089
LLR	-1.0301	0.2375***	0.0486	0.0411	**LLR**	-1.1983	1.1698	0.3190	0.7833
T1	-0.3853	0.1208***	0.0324	0.0398	**T1**	-0.1877	0.5066	0.2196	0.4839
ROA	0.8316	0.2783***	-0.2073	0.1641	**ROA**	1.7155	1.0431*	-1.4021	2.7548
IB	-0.0037	0.0009***	0.0021	0.0020	**IB**	-0.0022	0.0042	0.0128	0.0375
LA	0.0247	0.0180	-0.0023	0.0073	**LA**	-0.0119	0.0512	-0.0015	0.1139
II	0.1334	0.0386***	-0.0361	0.0086***	**II**	-0.0041	0.1669	-0.2659	0.3961
TL	-0.0043	0.0077	-0.0336	0.0129***	**TL**	0.0004	0.0175	-0.2680	0.2996
PL1	-0.3681	0.1629**	-0.5043	0.0981***	**PL1**	0.0990	0.5097	-3.6439	5.9834
MCS	-0.0808	0.1402	0.0606	0.0863	**MCS**	0.5125	0.2586**	0.4616	0.9596
FR	-0.3877	0.1983*	-0.4124	0.1984**	**FR**	0.2086	0.5997	-2.6386	6.2605
GE	-0.0848	0.2928	-0.3614	0.1998**	**GE**	1.1693	0.5282**	-2.5251	4.6876
IT	-0.4888	0.2818*	0.0248	0.2367	**IT**	0.3449	0.7414	0.3029	1.9961
SP	-0.2994	0.1932	-0.0163	0.1755	**SP**	-0.7359	0.4977	-0.2468	1.3264
EUR	-0.3262	0.1600**	0.0063	0.1600	**EUR**	-0.3512	0.5262	0.2419	1.4850
NOAM	0.3294	0.1913*	-0.1503	0.2190	**NOAM**	0.5623	0.5057	-0.6029	4.0170
ASIA	-0.3601	0.2240	-0.4702	0.2602*	**ASIA**	-1.1303	0.5875*	-3.0554	7.1339
SEC	0.2094	0.1069**	0.0180	0.0825	**F20**	-0.4336	0.1628***	-0.2068	0.9893
LS	-0.0027	0.0042	0.0000	0.0017	**SG**	0.0011	0.0035	-0.0026	0.0291
R^2	0.6594		0.5744		R^2	0.5791		-1.2249	
N	285		355		**N**	285		355	
Specification tests									
Test for significance of instruments in first-stage regression									
Jointly	F(2, 247)	4.28**	F(2, 317)	9.19***		F(2, 247)	2.01	F(2, 317)	0.22
Over-identification test for validity of instruments (H0: instruments are exogenous)									
Jointly	Chi-sq(1)	0.6236	Chi-sq(1)	3.4547*		Chi-sq(1)	0.0475	Chi-sq(1)	0.2507

crisis and the emergence of differences in terms of credit risk among the Euro-zone members. After the banking crisis, banks may estimate that lending money to companies located in peripheral countries represents a higher risk, even if these countries belong to the Euro-zone and the loan is in Euro.

In Italy and Spain, the results show that banks offer better credit terms to all companies before the crisis, providing easy access to credit. The only exception is for loans allocated by Spanish banks to companies located in North America, for which the coefficient is positive and significant. This conclusion is in line with the previous result regarding the variable "currency" which is not significant when one considers the entire period and which is also insignificant before 2008.

However, during the financial institutions crisis, the two countries experience specific trends. The distinction between the two sub-periods enables to confirm the hypothesis of a home-bias in Italy. In this country, the spread on loans provided to Italian and Spanish companies significantly goes up but the increase is lower for Italian companies. On the other side, in Spain, better credit terms are offered to French and German companies while the two markets represent less than 10% of the volume of loans provided by Spanish banks after the collapse of Lehman Brothers[23]. During this period, banks may attempt to reduce their exposure to credit risk by lending money to companies located in the core countries of the Euro-zone, highlighting first signs of flight-to-quality effect.

When one has a look at the lender's speciality, the coefficient is negative but only significant for France before the crisis. However, the coefficient becomes positive and significant after the collapse of Lehman Brothers, in line with the first estimation of the model over the entire period, highlighting the preference of French banks for portfolio diversification in times of crisis[24]. In Italy and Spain, the coefficient remains insignificant for the two periods.

Regarding the bank's characteristics, they are strongly significant before the crisis with a larger number of variables significant compared to the entire period for all countries, except for Italy. They all have the expected sign indicating that a bank with a strong financial position is able to offer better

[23]The highest decrease in spread is granted to domestic companies but the coefficient is not significant.

[24]In Germany, the coefficient becomes negative and significant after the collapse of Lehman Brothers while it was positive and significant when considering the entire period.

credit terms[25]. These conclusions hold when considering the period after the collapse of Lehman Brothers despite a lower number of significant variables. This result confirms that banks with better financial positions can support credit supply by decreasing the spread during a crisis time. The results for the other control variables, *i.e.* loan's, borrower's and relationship's characteristics, remain robust for all countries.

The credit demand equation

Before the crisis, most of the results regarding the instruments, the loan's objective and the characteristics of the borrower are similar. When one has a specific look at the demand per country, it fluctuates according to the nationality of the bank and the nationality of the borrower without any specific trend. However, after the collapse of Lehman Brothers, the demand for loans increases for all the borrowers and the coefficient becomes significant[26]. Moreover, loans in Euro are associated to lower amounts. These conclusions hold with a higher demand for all types of loans in times of crisis in France and Germany while the demand decreases in Italy.

6 Conclusion

The aim of this paper is to measure the lending supply shock after the collapse of Lehman Brothers and the banking crisis of 2008. We analyse the credit supply of four European banking systems, France, Germany, Italy and Spain, in terms of geographical and industry repartition. Moreover, we investigate how banks' characteristics affect their capacity to support the credit supply, especially during a banking crisis. The approach to these questions is innovative and confirms previous results provided by the literature while also expand on a potential sectoral bias.

Combining five databases enables us to develop a rich dataset on the syndicated loans provided by banks located in the four European countries for the period 2005-2013. Information about the different stakeholders of these financial transactions, *i.e.* the bank, the borrowing company, their relationship, the loan itself and the macroeconomic context are collected. The modelling set-up consists in a system of two equations describing the credit terms of the

[25]The only exception concerns one of the two liquidity measures in France and Germany and the assets and earnings measures in Spain.

[26]The only exception concerns the loans provided by German banks to Asian companies. The coefficient is significantly negative.

loan, namely its spread and its amount. Including supply shifters in the first equation and demand shifters in the second enables us to distinguish between supply and demand effects on the evolution of bank lending. Moreover, the model is completed with information about the country where the borrowing company is located as well as its industry.

The results may be synthesized as follows.

First, the presence of a credit crunch phenomenon is highly significant. Following the banking crisis, banks increase spreads on loans, thus increasing companies' cost of capital (for the loans provided by French banks the spread goes from 81 basis points on average in 2005 to 125 basis points in 2008 and 288 basis points in 2009). Moreover, the number of loans provided by the banks from the four European countries in the sample significantly decreases over the period under study (from 541 in 2005 to 221 in 2008 for loans provided by French banks). Finally, at the end of the period, we observe that the loan's spread has been reduced to 198 basis points but the number of loans still decreased (from 221 in 2008 to 102 in 2013, for the loans provided by French banks). This result highlights a significant impact of the banking crisis on credit supply. All these conclusions hold for the four countries under study. The only exception is Spain, with a volume of loans relatively stable when comparing 2008 and 2013.

Second, the findings suggest that French and German banks prefer to lend to domestic companies after the collapse of Lehman Brothers, exhibiting a significant flight-to-home effect. Indeed, if we look at the estimations over the entire period, the increase in the spread after the collapse of Lehman Brothers is significant for all the companies but smaller for companies located in the same country as the bank. The conclusion does not hold when one has a look at Italy and Spain. However, the home bias is even more significant when one considers the second sub-period, *i.e.* after the collapse of Lehman Brothers. A home bias is identified for all countries except for Spain. Interestingly, Spanish banks tend to offer better credit terms to companies located in the core countries of the Euro-zone, highlighting thus a potential flight-to-quality effect.

Regarding the sectoral orientation of loans, we set forth banks' preference for diversification during the crisis. After the collapse of Lehman Brothers, the spread on loans to companies which belong to industries banks are specialized in increases. By increasing the loan's rate, banks may discourage these

companies to borrow funds and, then, decrease the share of these specific loans in their own portfolio.

The analysis also supports evidence of bank's characteristics effects on credit supply. A bank is able to support its lending, even during distressed times, if it has a strong financial position. Variables related to its capital adequacy, its earnings and its liquidity are the most significant ones. They confirm the importance of implementing bank regulations, such as the Basel framework to limit the impact of a banking crisis on a country's economy. Access to more detailed information on the stakeholders involved in the financial transaction would enable to increase the size of the sample, to run the model bank-by-bank and get even more clear-cut results regarding the impact of bank's characteristics on its capacity to lend during crisis times.

Further other developments of this analysis are required to get even more detailed conclusions. As an example, the inclusion in the sample of foreign branches of the lenders, located within and outside Europe, may provide additional evidence of the flight-to-home effect.

We can thus conclude that following the collapse of Lehman Brothers in 2008, banks with a weaker financial position tend to significantly decrease their credit offer mainly to foreign companies and to companies that belong to industries they usually lend to. The objective is two-fold: first, a better credit risk management (home bias) and second, the diversification of their portfolio (sectoral bias). Hence, the results confirm the hypothesis of a credit crunch associated to a flight-to-home effect and a sectoral bias in some countries. This credit crunch may also have an impact on the real economy of countries where the credit supply is lower because companies which cannot borrow money have to limit their investments. In specific situations, and to respond to these financial difficulties, the government may intervene to support financial institutions and reduce credit rationing. This will be the subject of the following paper of this dissertation.

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Appendices

A Correlation table

Table 5: *Correlations*

	LNSPRD	LNAMT		LNSPRD	LNAMT
			France		
MAT	0.1001	-0.0270	**TA**	-0.2767	0.2347
SEC	0.3671	-0.1180	**LTD**	-0.1605	0.2428
CRCY	-0.0442	-0.0550	**ROE**	-0.1310	-0.0252
PRIME	0.0981	0.2294	**PPE**	0.2555	-0.0034
GI	0.2784	-0.0259	**SG**	0.0132	-0.0381
F8	0.0200	0.2991	**LLR**	0.0241	0.0948
F9	-0.0112	-0.2888	**T1**	0.3765	0.0880
F10	-0.2055	0.0652	**ROA**	-0.4173	0.0474
F11	0.1432	-0.0888	**IB**	0.0806	-0.0302
F12	0.0176	0.1309	**LA**	-0.3537	-0.1979
F13	0.0190	0.2012	**II**	0.3953	0.1461
F14	-0.1740	-0.1063	**TL**	0.1294	0.1876
F15	0.0172	-0.0128	**LS**	-0.0662	-0.0296
F16	0.0457	0.1364	**FR**	-0.0677	-0.1118
F17	0.0465	-0.0162	**GE**	0.0359	0.0146
F18	0.0107	-0.1151	**IT**	-0.0089	0.0245
F19	0.0726	-0.1167	**SP**	0.0364	-0.0112
F20	0.0017	-0.2078	**EUR**	-0.0464	0.0917
PL1	-0.2303	0.0768	**NOAM**	0.1602	0.2973
MCS	-0.1032	0.1845	**ASIA**	-0.1455	-0.3270
			Germany		
MAT	0.1248	0.0157	**TA**	-0.2920	0.3457
SEC	0.3679	-0.1846	**LTD**	-0.1684	0.3113
CRCY	-0.0527	-0.0615	**ROE**	-0.1027	0.0819
PRIME	0.0872	0.1692	**PPE**	0.1935	0.0125
GI	0.2971	-0.0744	**SG**	-0.0215	0.0012
F8	-0.0127	0.2408	**LLR**	-0.2979	-0.1021
F9	0.0032	-0.2905	**T1**	0.4521	0.1213
F10	-0.2189	0.0800	**ROA**	-0.2788	0.0743
F11	0.1564	-0.0361	**IB**	0.3092	0.0934
F12	0.0081	0.1397	**LA**	-0.0006	0.1427
F13	0.0209	0.1248	**II**	-0.0447	0.0025
F14	-0.1658	-0.191	**TL**	0.0546	0.1113
F15	-0.0067	-0.0413	**LS**	-0.1304	0.0824
F16	0.0168	0.1955	**FR**	-0.1366	0.1206
F17	0.0159	0.0209	**GE**	0.0162	-0.0184
F18	0.0090	-0.0971	**IT**	-0.0228	0.0699
F19	0.0894	-0.1050	**SP**	0.1262	-0.1399
F20	0.0731	-0.1573	**EUR**	-0.1138	0.0416
PL1	-0.2721	0.0319	**NOAM**	0.1767	0.2479
MCS	-0.1863	0.1110	**ASIA**	-0.1527	-0.3011

	LNSPRD	LNAMT		LNSPRD	LNAMT
			Italy		
MAT	0.0245	-0.1247	**PL1**	-0.2378	0.1225
SEC	0.3125	-0.2115	**MCS**	-0.0490	0.1194
CRCY	-0.0548	0.0378	**SG**	-0.0732	-0.0537
PRIME	0.0535	0.1894	**LLR**	-0.0563	0.1810
GI	0.2872	0.0755	**T1**	0.1304	0.2763
F8	-0.1750	0.2341	**ROA**	-0.3740	-0.0212
F9	0.1979	-0.3069	**IB**	-0.2103	0.1033
F10	-0.2076	0.0810	**LA**	-0.3056	-0.1200
F13	0.0394	0.1790	**II**	0.4622	0.1206
F14	-0.2450	-0.0773	**TL**	0.0802	0.1372
F15	0.0064	-0.1163	**LS**	-0.2317	0.1506
F16	0.0325	0.2380	**FR**	-0.2086	0.1761
F19	0.0916	-0.0572	**GE**	0.0822	0.0796
F20	0.0639	-0.1461	**IT**	0.0197	-0.1897
TA	-0.2199	0.4322	**SP**	0.1466	-0.1072
LTD	-0.1428	0.3605	**EUR**	-0.1199	0.1320
ROE	-0.1374	0.1638	**NOAM**	0.0254	0.2502
PPE	0.0592	-0.0415	**ASIA**	0.0139	-0.3399
			Spain		
MAT	0.1218	-0.1207	**LTD**	-0.4080	0.5662
SEC	0.1827	-0.2107	**ROE**	-0.1358	0.1654
CRCY	0.3669	-0.3483	**PPE**	0.1997	-0.1920
PRIME	-0.1823	0.2721	**SG**	-0.1790	0.1811
GI	0.1793	-0.0396	**LLR**	0.4391	-0.3372
F8	-0.2403	0.2355	**T1**	0.5938	-0.2789
F9	0.1934	-0.1792	**ROA**	-0.5429	0.4026
F10	-0.2476	0.1744	**IB**	-0.2111	0.1553
F11	0.1301	-0.1353	**LA**	-0.5971	0.5513
F12	0.0261	0.1090	**II**	0.5593	-0.2613
F13	0.0773	-0.0180	**TL**	-0.0736	0.0618
F14	-0.3218	0.1223	**LS**	-0.0814	0.0328
F16	-0.1037	0.3008	**FR**	-0.2246	0.2638
F18	0.1402	-0.2170	**GE**	-0.0327	0.1036
F19	0.0144	-0.1100	**IT**	-0.0557	0.1517
F20	0.2117	-0.3397	**SP**	0.4732	-0.5881
PL1	-0.1000	0.0794	**EUR**	-0.1014	0.1742
MCS	0.3272	-0.2894	**NOAM**	-0.2309	0.3205
TA	-0.5054	0.6771	**ASIA**	-0.2365	0.0096

B Definitions of Variables

Table 6: *Definitions of variables*

Variable	Description
Endogenous regressors	
LNSPRD	Log of all-in-spread
LNAMT	Log of loan's amount
Loan's characteristics (vector FAC)	
MAT	Log of loan's maturity
SEC	=1 if loan is secured
CRCY	=1 if loan in Euro
PRIME	=1 if loan is indexed to prime rate
F8	=1 for revolver loan >= 1 year
F9	=1 for term loan
F10	=1 for 364-day loan
F11	=1 for term loan with tranche higher than B[a]
F12	=1 for bridge loan
F13	=1 if loan is for corporate purposes
F14	=1 if loan is for debt repayment
F15	=1 if loan is for working capital
F16	=1 if loan is for takeover
F17	=1 if loan is for acquisition line
F18	=1 if loan is for capital expenditure (FR), ship finance (GE) and LBO (SP)
F19	=1 if loan is for finance
Borrower's characteristics (vector BOR)	
TA	Log of total assets
LTD	Log of long-term debt
ROE	Return-On-Equity
PPE	Ratio of plant, property equipment to total assets
Lender's characteristics (vector LEN)	
LLR	Ratio of loan loss reserve to gross loans
T1	Tier 1 ratio
ROA	Return-On-Assets
IB	Interbank ratio of due from banks to due to banks
LA	Ratio of liquid assets to deposits and short-term funding
II	Ratio of interest income to total income
TL	Last year log total lending
Relationship's characteristics (vector REL)	
PL1	=1 if event is preceded by another loan within a year
MCS	=1 if the borrower has access to several credit sources
Borrower's country (vector GEO)	
CFR	=1 if the borrower is French after crisis
CGE	=1 if the borrower is German after crisis
CIT	=1 if the borrower is Italian after crisis
CSP	=1 if the borrower is Spanish after crisis
CEUR	=1 if the borrower is European after crisis
CNOAM	=1 if the borrower is North American after crisis
CASIA	=1 if the borrower is Asian after crisis
LNSPRD instruments (vector SUP)	
GI	=1 for the period of government interventions
CLS	Lender market share in 2-digit SIC sector after crisis
LNAMT instruments (vector DEM)	
SG	Past year sales growth
F20	=1 if multiple types of loans are offered at the same time

[a] *A term loan is made by institutional investors with a floating rate. This rate is generally lower for term A and B lenders than for term C lenders and following.*

C 2SLS estimations

Table 7: *2SLS results for the period 2005-2013*

France					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	6.4574	0.9148***	**CONSTANT**	19.2199	1.5359***
LNAMT	-0.0111	0.0583	**LNSPRD**	-0.5588	0.2262**
MAT	0.0182	0.0373	**MAT**	0.3352	0.0536***
SEC	0.4553	0.0334***	**SEC**	0.0449	0.1231
CRCY	-0.1970	0.0435***	**CRCY**	0.0755	0.0870
PRIME	0.0731	0.0396*	**PRIME**	0.3844	0.0584***
F8	-0.2180	0.0844***	**F8**	0.6474	0.1348***
F9	-0.0438	0.0717	**F9**	0.0987	0.1202
F10	-0.5217	0.1146***	**F10**	0.6888	0.2067***
F11	0.1676	0.0872*	**F11**	0.3802	0.1691**
F12	0.0503	0.1481	**F12**	1.6583	0.2305***
F13	-0.1889	0.0543***	**F13**	0.1677	0.1033
F14	-0.1922	0.0576***	**F14**	0.0164	0.1122
F15	-0.0898	0.0592	**F15**	0.0108	0.1074
F16	0.0685	0.0860	**F16**	1.1041	0.1484***
F17	-0.0745	0.0780	**F17**	0.3442	0.1270***
F18	0.0252	0.0805	**F18**	-0.3115	0.1293**
F19	-0.1351	0.0889	**F19**	-0.2440	0.1718
TA	-0.0896	0.0140***	**TA**	0.0929	0.0259***
LTD	0.0150	0.0055***	**LTD**	0.0280	0.0095***
ROE	-0.0005	0.0005	**ROE**	0.0004	0.0011
PPE	0.0039	0.0005***	**PPE**	0.0006	0.0012
LLR	-0.0016	0.0190	**LLR**	-0.0817	0.0280***
T1	-0.0001	0.0165	**T1**	0.0360	0.0236
ROA	-0.8023	0.0853***	**ROA**	-0.2142	0.2433
IB	-0.0013	0.0012	**IB**	-0.0085	0.0018***
LA	-0.0040	0.0006***	**LA**	-0.0059	0.0013***
II	-0.0002	0.0008	**II**	0.0003	0.0012
TL	0.0023	0.0015	**TL**	0.0100	0.0022***
PL1	-0.2926	0.0404***	**PL1**	-0.1095	0.0888
MCS	-0.0763	0.0354**	**MCS**	0.4119	0.0473***
CFR	0.3156	0.1213***	**CFR**	0.1511	0.2967
CGE	0.4747	0.1200***	**CGE**	0.7949	0.2854***
CIT	0.3664	0.2601	**CIT**	0.5289	0.4478
CSP	0.9513	0.1051***	**CSP**	0.9546	0.3179***
CEUR	0.5586	0.0994***	**CEUR**	1.0040	0.2191***
CNOAM	0.4605	0.0730***	**CNOAM**	0.6296	0.1770***
CASIA	0.5920	0.0764***	**CASIA**	0.4598	0.2123**
GI	0.1943	0.0699***	**F20**	-0.4725	0.0479***
CLS	0.0132	0.0022***	**SG**	-0.0003	0.0002*
R^2	0.6061		R^2	0.4032	
N	2406		**N**	2406	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 2365)	52.78***		F(2, 2365)	22.61***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.5991		Chi-sq(1)	0.0002

Germany					
Each equation is estimated separately using the 2SLS estimator.					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	5.5994	1.1386***	**CONSTANT**	14.5276	1.7636***
LNAMT	-0.0078	0.0844	**LNSPRD**	-0.2175	0.2861
MAT	0.0281	0.0528	**MAT**	0.4862	0.0634***
SEC	0.5367	0.0437***	**SEC**	-0.1771	0.1755
CRCY	-0.1655	0.0534***	**CRCY**	0.2390	0.0968**
PRIME	0.0501	0.0418	**PRIME**	0.2824	0.0618***
F8	-0.3665	0.0911***	**F8**	0.4594	0.1941**
F9	-0.1255	0.0798	**F9**	-0.0907	0.1632
F10	-0.6634	0.1466***	**F10**	1.0111	0.2814***
F11	-0.0668	0.0913	**F11**	0.3420	0.1771*
F12	-0.2760	0.1905	**F12**	1.4129	0.2707***
F13	-0.2939	0.0579***	**F13**	0.1189	0.1302
F14	-0.2905	0.0709***	**F14**	-0.0982	0.1478
F15	-0.1916	0.0659***	**F15**	-0.0363	0.1242
F16	-0.0340	0.1151	**F16**	1.1991	0.1459***
F17	-0.1721	0.1035*	**F17**	0.5501	0.1988***
F18	-0.4123	0.1440***	**F18**	-0.6225	0.2695**
F19	-0.1343	0.1152	**F19**	-0.4170	0.2172*
TA	-0.0908	0.0194***	**TA**	0.1549	0.0335***
LTD	0.0124	0.0063*	**LTD**	0.0363	0.0117***
ROE	0.0007	0.0005	**ROE**	0.0022	0.0008***
PPE	0.0029	0.0005***	**PPE**	0.0022	0.0012*
LLR	-0.0764	0.0276***	**LLR**	0.0026	0.0553
T1	0.0626	0.0155***	**T1**	0.0910	0.0258***
ROA	-0.3730	0.0952***	**ROA**	-0.0456	0.2009
IB	-0.0005	0.0004	**IB**	-0.0026	0.0007***
LA	-0.0007	0.0010	**LA**	0.0030	0.0016*
II	-0.0004	0.0001***	**II**	-0.0002	0.0002
TL	-0.0001	0.0015	**TL**	0.0035	0.0028
PL1	-0.5534	0.0579***	**PL1**	-0.1081	0.1835
MCS	0.0103	0.0427	**MCS**	0.3621	0.0553***
CFR	0.1106	0.1372	**CFR**	0.6671	0.2148***
CGE	0.4387	0.1198***	**CGE**	0.1939	0.2873
CIT	0.9658	0.2645***	**CIT**	0.9683	0.5342*
CSP	0.9515	0.1294***	**CSP**	-0.4455	0.4087
CEUR	0.4405	0.0957***	**CEUR**	0.6016	0.2649**
CNOAM	0.6265	0.0753***	**CNOAM**	0.3911	0.2750
CASIA	0.6797	0.0914***	**CASIA**	-0.0378	0.2990
GI	0.4569	0.0783***	**F20**	-0.3724	0.0545***
CLS	0.0063	0.0030**	**SG**	0.0001	0.0003
R^2	0.6216		R^2	0.4195	
N	1891		**N**	1891	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 1850)	24.13***		F(2, 1850)	17.80***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.0031		Chi-sq(1)	0.8339

Italy					
Each equation is estimated separately using the 2SLS estimator.					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	6.7043	1.4369***	**CONSTANT**	7.3491	10.7696
LNAMT	-0.0176	0.1172	**LNSPRD**	0.4817	1.6728
MAT	-0.1072	0.0714	**MAT**	0.0692	0.2118
SEC	0.4962	0.0848***	**SEC**	-0.3712	0.8716
CRCY	-0.1425	0.0958	**CRCY**	0.5624	0.3112*
PRIME	0.1932	0.1031*	**PRIME**	0.3313	0.3490
F8	-0.3766	0.0955***	**F8**	0.3736	0.6712
F9	-0.0061	0.1031	**F9**	-0.2472	0.2042
F10	-0.8257	0.1617***	**F10**	0.4670	1.4175
F13	-0.1604	0.0879*	**F13**	0.3571	0.3496
F14	-0.2308	0.1052**	**F14**	0.2997	0.4390
F15	-0.2404	0.1232*	**F15**	-0.2250	0.4818
F16	-0.1300	0.1582	**F16**	1.0933	0.3459***
F19	0.0591	0.2296	**F19**	-0.3058	0.4530
TA	-0.1401	0.0428***	**TA**	0.3567	0.2464
LTD	0.0260	0.0133**	**LTD**	-0.0382	0.0500
ROE	0.0002	0.0017	**ROE**	0.0037	0.0024
PPE	0.0017	0.0013	**PPE**	0.0009	0.0036
LLR	-0.0791	0.0461*	**LLR**	0.1970	0.1566
T1	-0.0015	0.0423	**T1**	0.2355	0.0694***
ROA	-0.0856	0.0874	**ROA**	0.3213	0.2018
IB	-0.0003	0.0024	**IB**	0.0130	0.0029***
LA	-0.0161	0.0057***	**LA**	0.0112	0.0322
II	0.0248	0.0073***	**II**	0.0002	0.0504
TL	-0.0013	0.0059	**TL**	0.0292	0.0087***
PL1	-0.7785	0.1861***	**PL1**	0.6726	1.3562
MCS	-0.2244	0.0745***	**MCS**	0.1872	0.4153
CFR	0.3014	0.1666*	**CFR**	0.6384	0.6287
CGE	0.5893	0.2023***	**CGE**	0.6507	1.0058
CIT	0.8481	0.2070***	**CIT**	-0.4094	1.5102
CSP	0.9346	0.1595***	**CSP**	-0.0996	1.5661
CEUR	0.5406	0.1431***	**CEUR**	0.4377	0.8593
CNOAM	0.5821	0.1389***	**CNOAM**	0.1322	0.9462
CASIA	0.5324	0.1693***	**CASIA**	-0.3623	0.9253
GI	0.1412	0.1688	**F20**	-0.4989	0.1065***
CLS	0.0008	0.0046	**SG**	0.0034	0.0021*
R^2	0.6312		R^2	0.4504	
N	462		**N**	462	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 425)	12.40***		F(2, 425)	0.60
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	1.4049		Chi-sq(1)	1.8925

Spain

Each equation is estimated separately using the 2SLS estimator.

	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	3.1248	1.2269**	**CONSTANT**	16.0607	1.9661***
LNAMT	-0.0862	0.0761	**LNSPRD**	-1.1871	0.5680**
MAT	0.1512	0.0558***	**MAT**	0.3937	0.1361***
SEC	0.2988	0.0704***	**SEC**	0.0522	0.2471
CRCY	0.0621	0.0942	**CRCY**	0.4618	0.1871**
PRIME	0.2633	0.1423*	**PRIME**	1.1887	0.2403***
F8	-0.1682	0.1052	**F8**	0.0251	0.2891
F9	-0.0148	0.1045	**F9**	0.1207	0.2482
F10	-0.3947	0.1980**	**F10**	0.1660	0.4645
F11	0.0879	0.1294	**F11**	0.4802	0.3297
F12	0.3835	0.1779**	**F12**	0.6485	0.4682
F13	-0.2967	0.0704***	**F13**	-0.1176	0.2282
F14	-0.4204	0.0948***	**F14**	-0.3975	0.3084
F16	0.1703	0.1425	**F16**	1.4737	0.2287***
F18	0.3072	0.1658*	**F18**	-0.4777	0.5018
F19	-0.4312	0.1199***	**F19**	-1.0949	0.3550***
TA	-0.0505	0.0314	**TA**	0.2087	0.0647***
LTD	0.0260	0.0118**	**LTD**	0.0390	0.0314
ROE	-0.0003	0.0010	**ROE**	0.0016	0.0022
PPE	0.0003	0.0010	**PPE**	0.0048	0.0023**
LLR	0.0316	0.0334	**LLR**	-0.0787	0.0898
T1	0.2186	0.0424***	**T1**	0.2172	0.1268*
ROA	-0.0922	0.1393	**ROA**	0.1954	0.3167
IB	-0.0004	0.0008	**IB**	-0.0011	0.0016
LA	-0.0104	0.0059*	**LA**	0.0288	0.0151*
II	0.0194	0.0074***	**II**	0.0031	0.0204
TL	-0.0093	0.0078	**TL**	-0.0388	0.0184**
PL1	-0.4529	0.1148***	**PL1**	-0.3553	0.3332
MCS	0.0922	0.0754	**MCS**	0.3473	0.1657**
CFR	0.1008	0.2241	**CFR**	1.4942	0.3987***
CGE	0.1454	0.2548	**CGE**	1.0212	0.5373*
CIT	0.6117	0.1923***	**CIT**	1.3677	0.6951**
CSP	0.4968	0.1425***	**CSP**	0.4581	0.5590
CEUR	0.4568	0.1710***	**CEUR**	1.4050	0.4907***
CNOAM	0.4582	0.2278**	**CNOAM**	1.6646	0.4494***
CASIA	0.3483	0.2109*	**CASIA**	1.6761	0.4953***
GI	0.4465	0.1385***	**F20**	-0.6256	0.1209***
CLS	0.0012	0.0042	**SG**	0.0012	0.0024
R^2	0.7102		R^2	0.6021	
N	640		**N**	640	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 601)	19.04***		F(2, 601)	9.45***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	2.0209		Chi-sq(1)	0.2090

D GMM estimations

Table 8: *GMM results for the period 2005-2013*

France					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	6.4273	0.9142***	**CONSTANT**	19.2171	1.5298***
LNAMT	-0.0096	0.0583	**LNSPRD**	-0.5584	0.2254**
MAT	0.0175	0.0374	**MAT**	0.3352	0.0536***
SEC	0.4552	0.0334***	**SEC**	0.0447	0.1225
CRCY	-0.1972	0.0435***	**CRCY**	0.0755	0.0870
PRIME	0.0726	0.0396*	**PRIME**	0.3844	0.0583***
F8	-0.2191	0.0844***	**F8**	0.6476	0.1345***
F9	-0.0436	0.0718	**F9**	0.0987	0.1202
F10	-0.5245	0.1146***	**F10**	0.6892	0.2061***
F11	0.1709	0.0872**	**F11**	0.3803	0.1691**
F12	0.0467	0.1481	**F12**	1.6582	0.2305***
F13	-0.1901	0.0543***	**F13**	0.1678	0.1032
F14	-0.1932	0.0576***	**F14**	0.0165	0.1121
F15	-0.0899	0.0592	**F15**	0.0109	0.1073
F16	0.0676	0.0861	**F16**	1.1043	0.1482***
F17	-0.0750	0.0780	**F17**	0.3443	0.1269***
F18	0.0260	0.0806	**F18**	-0.3114	0.1293**
F19	-0.1344	0.0890	**F19**	-0.2440	0.1718
TA	-0.0901	0.0140***	**TA**	0.0929	0.0259***
LTD	0.0150	0.0055***	**LTD**	0.0280	0.0095***
ROE	-0.0005	0.0005	**ROE**	0.0004	0.0011
PPE	0.0039	0.0005***	**PPE**	0.0006	0.0012
LLR	-0.0015	0.0190	**LLR**	-0.0817	0.0279***
T1	0.0005	0.0165	**T1**	0.0360	0.0234
ROA	-0.7979	0.0852***	**ROA**	-0.2139	0.2427
IB	-0.0013	0.0012	**IB**	-0.0085	0.0018***
LA	-0.0040	0.0006***	**LA**	-0.0059	0.0013***
II	-0.0002	0.0008	**II**	0.0003	0.0012
TL	0.0023	0.0015	**TL**	0.0100	0.0022***
PL1	-0.2920	0.0404***	**PL1**	-0.1094	0.0887
MCS	-0.0765	0.0354**	**MCS**	0.4119	0.0472***
CFR	0.3151	0.1212***	**CFR**	0.1504	0.2952
CGE	0.4755	0.1200***	**CGE**	0.7948	0.2853***
CIT	0.3667	0.2605	**CIT**	0.5287	0.4477
CSP	0.9513	0.1052***	**CSP**	0.9541	0.3169***
CEUR	0.5592	0.0995***	**CEUR**	1.0035	0.2175***
CNOAM	0.4588	0.0730***	**CNOAM**	0.6292	0.1761***
CASIA	0.5935	0.0764***	**CASIA**	0.4593	0.2108**
GI	0.1995	0.0696***	**F20**	-0.4725	0.0479***
CLS	0.0132	0.0022***	**SG**	-0.0003	0.0002*
R^2	0.6057		R^2	0.4033	
N	2406		**N**	2406	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 2365)	52.78***		F(2, 2365)	22.61***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.5745		Chi-sq(1)	0.0001

Germany

Each equation is estimated separately using the GMM estimator.

	Loan supply regression (LNSPRD)			Loan demand regression (LNAMT)	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	5.5954	1.1363***	**CONSTANT**	14.4398	1.7628***
LNAMT	-0.0076	0.0843	**LNSPRD**	-0.1908	0.2857
MAT	0.0279	0.0527	**MAT**	0.4751	0.0629***
SEC	0.5368	0.0436***	**SEC**	-0.2006	0.1750
CRCY	-0.1654	0.0534***	**CRCY**	0.2399	0.0970**
PRIME	0.0500	0.0418	**PRIME**	0.2771	0.0617***
F8	-0.3667	0.0910***	**F8**	0.4632	0.1938**
F9	-0.1256	0.0798	**F9**	-0.0852	0.1628
F10	-0.6639	0.1463***	**F10**	1.0113	0.2809***
F11	-0.0668	0.0912	**F11**	0.3495	0.1767**
F12	-0.2767	0.1900	**F12**	1.4128	0.2696***
F13	-0.2938	0.0579***	**F13**	0.1373	0.1300
F14	-0.2903	0.0709***	**F14**	-0.0795	0.1477
F15	-0.1915	0.0659***	**F15**	-0.0212	0.1241
F16	-0.0341	0.1151	**F16**	1.2119	0.1458***
F17	-0.1722	0.1035*	**F17**	0.5466	0.1989***
F18	-0.4119	0.1439***	**F18**	-0.6026	0.2693**
F19	-0.1340	0.1151	**F19**	-0.4035	0.2170*
TA	-0.0908	0.0194***	**TA**	0.1527	0.0335***
LTD	0.0123	0.0063*	**LTD**	0.0388	0.0116***
ROE	0.0007	0.0005	**ROE**	0.0022	0.0008***
PPE	0.0029	0.0005***	**PPE**	0.0022	0.0012*
LLR	-0.0764	0.0275***	**LLR**	0.0085	0.0553
T1	0.0626	0.0155***	**T1**	0.0908	0.0258***
ROA	-0.3729	0.0952***	**ROA**	-0.0231	0.2010
IB	-0.0005	0.0004	**IB**	-0.0026	0.0007***
LA	-0.0007	0.0010	**LA**	0.0030	0.0016*
II	-0.0004	0.0001***	**II**	-0.0003	0.0002
TL	-0.0001	0.0015	**TL**	0.0038	0.0028
PL1	-0.5534	0.0579***	**PL1**	-0.0906	0.1832
MCS	0.0101	0.0424	**MCS**	0.3540	0.0553***
CFR	0.1105	0.1372	**CFR**	0.6506	0.2156***
CGE	0.4387	0.1198***	**CGE**	0.1956	0.2869
CIT	0.9654	0.2644***	**CIT**	0.9737	0.5402*
CSP	0.9518	0.1292***	**CSP**	-0.4194	0.4073
CEUR	0.4405	0.0957***	**CEUR**	0.5442	0.2626**
CNOAM	0.6268	0.0751***	**CNOAM**	0.3644	0.2747
CASIA	0.6797	0.0914***	**CASIA**	-0.0785	0.2981
GI	0.4569	0.0783***	**F20**	-0.3873	0.0539***
CLS	0.0063	0.0029**	**SG**	0.0001	0.0003
R^2	0.6215		R^2	0.4183	
N	1891		**N**	1891	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 1850)	24.13***		F(2, 1850)	17.80***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.0031		Chi-sq(1)	0.8351

Italy					
Each equation is estimated separately using the GMM estimator.					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	6.4004	1.4188***	**CONSTANT**	12.0054	9.7479
LNAMT	-0.0001	0.1169	**LNSPRD**	-0.2543	1.5308
MAT	-0.1153	0.0710	**MAT**	-0.0354	0.1846
SEC	0.4937	0.0855***	**SEC**	-0.0072	0.7920
CRCY	-0.1299	0.0956	**CRCY**	0.4667	0.2903
PRIME	0.1912	0.1035*	**PRIME**	0.5044	0.3091
F8	-0.3884	0.0941***	**F8**	0.0786	0.6194
F9	0.0037	0.1020	**F9**	-0.2523	0.1984
F10	-0.8452	0.1605***	**F10**	-0.2086	1.2623
F13	-0.1535	0.0884*	**F13**	0.2058	0.3122
F14	-0.2411	0.1056**	**F14**	0.1210	0.4096
F15	-0.2280	0.1222*	**F15**	-0.3806	0.4319
F16	-0.1472	0.1583	**F16**	1.0133	0.3097***
F19	0.0412	0.2298	**F19**	-0.1800	0.4221
TA	-0.1414	0.0429***	**TA**	0.2558	0.2253
LTD	0.0258	0.0131**	**LTD**	-0.0216	0.0467
ROE	-0.0003	0.0016	**ROE**	0.0038	0.0021*
PPE	0.0016	0.0013	**PPE**	0.0022	0.0032
LLR	-0.0868	0.0458*	**LLR**	0.1368	0.1400
T1	0.0011	0.0425	**T1**	0.2240	0.0630***
ROA	-0.0908	0.0878	**ROA**	0.2817	0.1873
IB	-0.0007	0.0024	**IB**	0.0129	0.0028***
LA	-0.0147	0.0056***	**LA**	-0.0020	0.0293
II	0.0253	0.0073***	**II**	0.0235	0.0464
TL	-0.0022	0.0059	**TL**	0.0264	0.0082***
PL1	-0.7970	0.1881***	**PL1**	0.0851	1.2308
MCS	-0.2333	0.0743***	**MCS**	0.0196	0.3792
CFR	0.2723	0.1669	**CFR**	0.9072	0.5428*
CGE	0.5600	0.2019***	**CGE**	1.0749	0.8904
CIT	0.8331	0.2041***	**CIT**	0.1260	1.4104
CSP	0.9158	0.1582***	**CSP**	0.5898	1.4343
CEUR	0.5144	0.1421***	**CEUR**	0.7888	0.7790
CNOAM	0.5732	0.1385***	**CNOAM**	0.5349	0.8551
CASIA	0.5145	0.1699***	**CASIA**	0.0110	0.8600
GI	0.1384	0.1689	**F20**	-0.5348	0.0995***
CLS	0.0002	0.0046	**SG**	0.0027	0.0021
R^2	0.6280		R^2	0.5330	
N	462		**N**	462	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 425)	12.40***		F(2, 425)	0.60
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	1.1923		Chi-sq(1)	2.4070

Spain

Each equation is estimated separately using the GMM estimator.

	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	2.9021	1.2142**	**CONSTANT**	16.0339	1.9487***
LNAMT	-0.0699	0.0754	**LNSPRD**	-1.1559	0.5610**
MAT	0.1442	0.0553***	**MAT**	0.3852	0.1346***
SEC	0.3076	0.0702***	**SEC**	0.0356	0.2444
CRCY	0.0473	0.0934	**CRCY**	0.4534	0.1855**
PRIME	0.2601	0.1421*	**PRIME**	1.1902	0.2376***
F8	-0.1678	0.1056	**F8**	0.0409	0.2872
F9	-0.0211	0.1048	**F9**	0.1297	0.2468
F10	-0.3896	0.1987**	**F10**	0.1835	0.4605
F11	0.0915	0.1296	**F11**	0.5051	0.3268
F12	0.3697	0.1767**	**F12**	0.6304	0.4641
F13	-0.3021	0.0703***	**F13**	-0.1126	0.2257
F14	-0.4075	0.0947***	**F14**	-0.3915	0.3060
F16	0.1565	0.1424	**F16**	1.4748	0.2278***
F18	0.3176	0.1651*	**F18**	-0.4935	0.4985
F19	-0.4066	0.1190***	**F19**	-1.0713	0.3516***
TA	-0.0584	0.0310*	**TA**	0.2130	0.0642***
LTD	0.0260	0.0119**	**LTD**	0.0356	0.0311
ROE	-0.0001	0.0010	**ROE**	0.0015	0.0022
PPE	0.0002	0.0010	**PPE**	0.0049	0.0023**
LLR	0.0301	0.0335	**LLR**	-0.0831	0.0894
T1	0.2211	0.0419***	**T1**	0.2091	0.1254*
ROA	-0.1124	0.1380	**ROA**	0.1887	0.3147
IB	-0.0004	0.0008	**IB**	-0.0011	0.0016
LA	-0.0108	0.0059*	**LA**	0.0292	0.0149**
II	0.0207	0.0073***	**II**	0.0027	0.0202
TL	-0.0097	0.0078	**TL**	-0.0399	0.0181**
PL1	-0.4472	0.1153***	**PL1**	-0.3285	0.3281
MCS	0.0865	0.0750	**MCS**	0.3375	0.1640**
CFR	0.0544	0.2206	**CFR**	1.5411	0.3920***
CGE	0.1054	0.2516	**CGE**	1.0100	0.5312*
CIT	0.5808	0.1908***	**CIT**	1.3315	0.6900*
CSP	0.4852	0.1413***	**CSP**	0.4357	0.5532
CEUR	0.4223	0.1683**	**CEUR**	1.3761	0.4847***
CNOAM	0.4356	0.2282*	**CNOAM**	1.6324	0.4432***
CASIA	0.3075	0.2084	**CASIA**	1.6681	0.4931***
GI	0.4721	0.1365***	**F20**	-0.6405	0.1190***
CLS	0.0020	0.0041	**SG**	0.0013	0.0024
R^2	0.7112		R^2	0.6065	
N	640		**N**	640	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 601)	19.04***		F(2, 601)	9.45***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	2.1301		Chi-sq(1)	0.2538

E 3SLS estimations without US companies

Table 9: *3SLS results for the period 2005-2013 (without US companies)*

France					
The system is jointly estimated using the 3SLS estimator. US companies have been removed from the sample.					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	7.3619	1.0098***	**CONSTANT**	17.1301	1.7510***
LNAMT	-0.1105	0.0598*	**LNSPRD**	-0.0895	0.2972
MAT	0.1101	0.0360***	**MAT**	0.2742	0.0598***
SEC	0.3350	0.0514***	**SEC**	0.0283	0.1376
CRCY	-0.1809	0.0508***	**CRCY**	0.3430	0.1079***
PRIME	-0.0734	0.1730	**PRIME**	0.6093	0.3006**
F8	-0.1083	0.0893	**F8**	0.7196	0.1454***
F9	-0.0291	0.0737	**F9**	0.1994	0.1287
F10	-0.4238	0.1296***	**F10**	0.6918	0.2634***
F11	0.1729	0.1127	**F11**	-0.0749	0.2036
F12	0.1981	0.1674	**F12**	1.3819	0.2497***
F13	-0.2818	0.0728***	**F13**	0.4429	0.1563***
F14	-0.3023	0.0703***	**F14**	0.3820	0.1601**
F15	-0.3155	0.0895***	**F15**	0.0921	0.1864
F16	0.1216	0.1165	**F16**	1.3242	0.1636***
F17	-0.2537	0.1107**	**F17**	0.6565	0.2131***
F18	-0.1261	0.0870	**F18**	-0.1318	0.1596
F19	-0.2302	0.0874***	**F19**	-0.1577	0.1700
TA	-0.0585	0.0123***	**TA**	0.0936	0.0268***
LTD	0.0154	0.0061**	**LTD**	0.0266	0.0109**
ROE	-0.0004	0.0007	**ROE**	0.0006	0.0012
PPE	0.0037	0.0007***	**PPE**	0.0024	0.0016
LLR	0.0202	0.0242	**LLR**	-0.1113	0.0415***
T1	0.0187	0.0228	**T1**	0.0200	0.0332
ROA	-0.8204	0.1072***	**ROA**	0.1235	0.3415
IB	-0.0007	0.0014	**IB**	-0.0086	0.0024***
LA	-0.0046	0.0007***	**LA**	-0.0052	0.0018***
II	-0.0003	0.0009	**II**	-0.0026	0.0015*
TL	0.0078	0.0065	**TL**	0.0141	0.0117
PL1	-0.3040	0.0539***	**PL1**	0.1075	0.1334
MCS	-0.0614	0.0440	**MCS**	0.4528	0.0734***
CFR	0.1608	0.1270	**CFR**	0.0542	0.2401
CGE	0.3988	0.1382***	**CGE**	0.6880	0.2745**
CIT	0.2347	0.2043	**CIT**	0.3784	0.3729
CSP	0.8529	0.1148***	**CSP**	0.4399	0.3626
CEUR	0.5282	0.1081***	**CEUR**	0.7529	0.2515***
CASIA	0.4920	0.0838***	**CASIA**	0.2556	0.2432
GI	0.1285	0.0990	**F20**	-0.5937	0.0651***
CLS	0.0190	0.0037***	**SG**	-0.0005	0.0005
R^2	0.5892		R^2	0.3650	
N	1395		**N**	1395	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 1355)	43.01***		F(2, 1355)	16.56***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.3567		Chi-sq(1)	0.3049

Germany

The system is jointly estimated using the 3SLS estimator. US companies have been removed from the sample.

	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	8.3740	1.6342***	**CONSTANT**	9.1790	2.4242***
LNAMT	-0.2439	0.1169**	**LNSPRD**	0.8680	0.4535*
MAT	0.2802	0.0714***	**MAT**	0.3658	0.1067***
SEC	0.4006	0.0672***	**SEC**	-0.5297	0.2480**
CRCY	-0.0443	0.0699	**CRCY**	0.4792	0.1300***
PRIME	0.3674	0.1739**	**PRIME**	0.2634	0.3494
F8	-0.3325	0.1315**	**F8**	1.0823	0.3123***
F9	-0.2022	0.1034*	**F9**	0.3591	0.2364
F10	-0.3603	0.1877*	**F10**	1.4733	0.4159***
F11	0.1128	0.1640	**F11**	0.5926	0.3157*
F12	-0.1727	0.2294	**F12**	1.0773	0.4612**
F13	-0.3609	0.0825***	**F13**	0.6911	0.2465***
F14	-0.3130	0.0843***	**F14**	0.6327	0.2412***
F15	-0.4335	0.1081***	**F15**	0.2961	0.2832
F16	0.3142	0.2214	**F16**	2.0016	0.2328***
F17	0.0451	0.2213	**F17**	1.7528	0.3542***
F18	-0.6565	0.1585***	**F18**	0.0471	0.3747
F19	-0.4103	0.1368***	**F19**	-0.1958	0.2794
TA	-0.0364	0.0226	**TA**	0.2062	0.0445***
LTD	0.0152	0.0095	**LTD**	0.0294	0.0177*
ROE	0.0030	0.0010***	**ROE**	-0.0012	0.0025
PPE	0.0032	0.0009***	**PPE**	0.0006	0.0022
LLR	-0.1935	0.0390***	**LLR**	0.1361	0.1280
T1	0.1008	0.0218***	**T1**	-0.0534	0.0666
ROA	-0.3226	0.1324**	**ROA**	0.3626	0.3476
IB	-0.0020	0.0006***	**IB**	0.0007	0.0015
LA	-0.0014	0.0012	**LA**	0.0026	0.0026
II	-0.0004	0.0002**	**II**	0.0004	0.0004
TL	-0.0072	0.0069	**TL**	-0.0066	0.0139
PL1	-0.6580	0.0777***	**PL1**	0.3323	0.3154
MCS	0.1006	0.0780	**MCS**	0.5527	0.0997***
CFR	0.0095	0.1909	**CFR**	0.7719	0.3566**
CGE	0.1301	0.1521	**CGE**	-0.2715	0.3361
CIT	0.8348	0.2878***	**CIT**	0.0439	0.6795
CSP	0.5468	0.1795***	**CSP**	-1.4888	0.4879***
CEUR	0.3074	0.1281**	**CEUR**	0.2509	0.2916
CASIA	0.3992	0.1180***	**CASIA**	-0.6841	0.3778*
GI	0.3288	0.1241***	**F20**	-0.4796	0.1047***
CLS	0.0228	0.0056***	**SG**	0.0008	0.0008
R^2	0.6018		R^2	0.2000	
N	899		**N**	899	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 859)	12.18***		F(2, 859)	9.83***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.1523		Chi-sq(1)	0.5278

Italy					
The system is jointly estimated using the 3SLS estimator. US companies have been removed from the sample.					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	10.4960	2.1321***	**CONSTANT**	3.5345	9.5104
LNAMT	-0.3749	0.1587**	**LNSPRD**	1.4903	1.6672
MAT	-0.0235	0.0821	**MAT**	0.1529	0.1973
SEC	0.4773	0.1051***	**SEC**	-0.4132	0.7338
CRCY	-0.0384	0.1431	**CRCY**	1.0240	0.4928**
PRIME	0.1679	0.5049	**PRIME**	0.1159	1.0344
F8	-0.1346	0.1685	**F8**	0.6266	0.5068
F9	0.0172	0.1475	**F9**	-0.2180	0.3244
F10	-0.6502	0.2883**	**F10**	0.3887	1.1031
F13	-0.0145	0.1365	**F13**	0.7491	0.4207*
F14	-0.2134	0.1443	**F14**	0.8935	0.6519
F15	-0.5456	0.1862***	**F15**	0.3792	0.8163
F16	-0.1831	0.2747	**F16**	2.2436	1.1195**
F19	-0.1799	0.2219	**F19**	-0.3710	0.4484
TA	-0.0792	0.0558	**TA**	0.5228	0.3039*
LTD	0.0376	0.0162**	**LTD**	-0.0792	0.0825
ROE	0.0033	0.0023	**ROE**	0.0008	0.0062
PPE	0.0030	0.0018	**PPE**	0.0011	0.0044
LLR	-0.0089	0.0681	**LLR**	0.2735	0.1850
T1	0.1047	0.0649	**T1**	-0.0126	0.1836
ROA	-0.0235	0.1232	**ROA**	0.1332	0.2441
IB	0.0021	0.0035	**IB**	0.0187	0.0072***
LA	-0.0177	0.0061***	**LA**	0.0207	0.0329
II	0.0282	0.0092***	**II**	-0.0455	0.0599
TL	0.0123	0.0153	**TL**	0.0267	0.0296
PL1	-0.4412	0.1838**	**PL1**	0.5414	0.7972
MCS	-0.2652	0.0935***	**MCS**	0.7996	0.6208
CFR	0.4491	0.2614*	**CFR**	0.8235	0.5053
CGE	0.5623	0.2236**	**CGE**	0.2405	0.7691
CIT	0.5924	0.2652**	**CIT**	-1.3668	1.4393
CSP	0.7788	0.1977***	**CSP**	-0.9609	1.4168
CEUR	0.5949	0.2029***	**CEUR**	0.3897	0.6461
CASIA	0.3654	0.1927*	**CASIA**	-0.5123	0.7917
GI	0.1997	0.2105	**F20**	-0.8208	0.3481**
CLS	0.0122	0.0073*	**SG**	0.0036	0.0028
R^2	0.5362		R^2	0.2276	
N	312		**N**	312	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 276)	7.16***		F(2, 276)	0.95
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.3520		Chi-sq(1)	1.1501

Spain

The system is jointly estimated using the 3SLS estimator. US companies have been removed from the sample.

	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	3.9121	1.2530***	**CONSTANT**	16.2566	2.0260***
LNAMT	-0.1703	0.0779**	**LNSPRD**	-1.4407	0.6041**
MAT	0.1928	0.0479***	**MAT**	0.4432	0.1408***
SEC	0.2853	0.0743***	**SEC**	0.1805	0.2744
CRCY	0.1343	0.0915	**CRCY**	0.5650	0.1951***
PRIME	-0.5059	0.6603	**PRIME**	0.9486	1.6465
F8	-0.1878	0.1078*	**F8**	-0.0948	0.2993
F9	-0.0304	0.1016	**F9**	0.0951	0.2466
F10	-0.3368	0.2051*	**F10**	0.0117	0.5708
F11	0.0781	0.1381	**F11**	0.4022	0.3315
F12	0.3904	0.2143*	**F12**	0.4526	0.5837
F13	-0.2183	0.0748***	**F13**	-0.1522	0.2337
F14	-0.4194	0.1044***	**F14**	-0.4150	0.3676
F16	0.2872	0.1558*	**F16**	1.5832	0.2822***
F18	0.2194	0.1742	**F18**	-0.3073	0.4560
F19	-0.5046	0.1252***	**F19**	-1.1743	0.3765***
TA	-0.0297	0.0317	**TA**	0.1806	0.0702***
LTD	0.0300	0.0132**	**LTD**	0.0526	0.0374
ROE	0.0003	0.0012	**ROE**	0.0023	0.0029
PPE	0.0008	0.0011	**PPE**	0.0044	0.0025*
LLR	0.0110	0.0431	**LLR**	-0.0695	0.1027
T1	0.2304	0.0420***	**T1**	0.3091	0.1389**
ROA	-0.0800	0.1576	**ROA**	0.1822	0.3800
IB	-0.0005	0.0008	**IB**	-0.0007	0.0019
LA	-0.0026	0.0073	**LA**	0.0410	0.0155***
II	0.0191	0.0083**	**II**	-0.0019	0.0229
TL	-0.0441	0.0138***	**TL**	-0.1079	0.0362***
PL1	-0.2545	0.1073**	**PL1**	-0.2571	0.3029
MCS	0.0638	0.0710	**MCS**	0.3286	0.1722*
CFR	0.1009	0.2408	**CFR**	1.6212	0.4353***
CGE	0.1673	0.2272	**CGE**	1.1286	0.5037**
CIT	0.6147	0.2753**	**CIT**	1.6261	0.7881**
CSP	0.4629	0.1461***	**CSP**	0.8194	0.5526
CEUR	0.4942	0.1836***	**CEUR**	1.6497	0.4957***
CASIA	0.4771	0.2845*	**CASIA**	1.8841	0.6812***
GI	0.3483	0.1265***	**F20**	-0.5490	0.1537***
CLS	0.0016	0.0033	**SG**	-0.0018	0.0021
R^2	0.6992		R^2	0.5421	
N	565		**N**	565	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 527)	16.74***		F(2, 527)	8.26***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	1.6617		Chi-sq(1)	0.1483

F 3SLS estimations, bank by bank

Table 10: *3SLS results for the period 2005-2013 (bank by bank)*

Société Générale					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	4.4384	2.9486	**CONSTANT**	18.5282	9.4450**
LNAMT	0.2762	0.1684	**LNSPRD**	-0.5872	0.9036
MAT	0.0150	0.0686	**MAT**	-0.0635	0.0913
SEC	0.4923	0.0767***	**SEC**	0.1425	0.4366
CRCY	-0.3052	0.1280**	**CRCY**	-0.2275	0.3351
PRIME	0.1463	0.0935	**PRIME**	0.3645	0.2151*
F8	-0.4498	0.2567*	**F8**	0.7505	0.3265**
F9	0.0275	0.2129	**F9**	0.3103	0.2944
F10	-0.6428	0.2581**	**F10**	0.2771	0.5353
F11	0.0177	0.2571	**F11**	0.8797	0.3793**
F12	0.2454	0.3433	**F12**	0.9559	0.5711*
F13	-0.1862	0.1352	**F13**	0.3803	0.1684**
F14	0.2812	0.1530*	**F14**	-0.0600	0.2769
F15	0.1421	0.1418	**F15**	0.2215	0.2420
F16	-0.1587	0.2105	**F16**	0.8803	0.2483***
F17	0.2017	0.1925	**F17**	0.2088	0.3241
F18	0.6322	0.2181***	**F18**	-0.2866	0.5022
F19	-0.3661	0.2859	**F19**	1.1102	0.2845***
TA	-0.1420	0.0412***	**TA**	0.1581	0.0794**
LTD	-0.0043	0.0123	**LTD**	-0.0051	0.0170
ROE	-0.0036	0.0017**	**ROE**	0.0039	0.0029
PPE	0.0054	0.0013***	**PPE**	-0.0020	0.0041
LLR	-0.0068	0.0597	**LLR**	-0.1824	0.0819**
T1	0.1716	0.0811**	**T1**	0.0745	0.1997
ROA	-0.8434	0.4795*	**ROA**	-0.2882	0.4944
IB	-0.0483	0.0285*	**IB**	0.0143	0.0602
LA	-0.0228	0.0141	**LA**	-0.0028	0.0311
II	0.0013	0.0118	**II**	0.0076	0.0125
TL	0.0013	0.0037	**TL**	0.0095	0.0056*
PL1	-0.2475	0.0771***	**PL1**	-0.1090	0.2460
MCS	-0.2086	0.1182*	**MCS**	0.5409	0.1091***
CFR	-0.2966	0.2614	**CFR**	-0.0603	0.3921
CGE	0.1932	0.2453	**CGE**	0.6552	0.4663
CIT	0.4679	0.3652	**CIT**	0.2482	0.6586
CSP	0.7669	0.2595***	**CSP**	0.4579	0.8070
CEUR	0.0382	0.2420	**CEUR**	0.7275	0.3659**
CNOAM	-0.1491	0.1767	**CNOAM**	0.2312	0.2090
CASIA	0.0514	0.2397	**CASIA**	0.6673	0.3994*
GI	0.4709	0.3450	**F20**	-0.4467	0.1317***
CLS	-0.0062	0.0047	**SG**	-0.0004	0.0005
R^2	0.5278		R^2	0.4721	
N	553		**N**	553	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 512)	8.49***		F(2, 512)	1.49
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.4639		Chi-sq(1)	0.0185

BNP Paribas

The system is jointly estimated using the 3SLS estimator.

	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	7.7069	1.0286***	**CONSTANT**	18.3122	4.4392***
LNAMT	0.0142	0.0689	**LNSPRD**	-0.7872	0.6053
MAT	0.0832	0.0375**	**MAT**	0.3260	0.0794***
SEC	0.4755	0.0427***	**SEC**	0.0840	0.2959
CRCY	-0.2580	0.0494***	**CRCY**	-0.0166	0.1761
PRIME	0.0740	0.0493	**PRIME**	0.4607	0.0829***
F8	-0.3959	0.0983***	**F8**	0.4777	0.2755*
F9	-0.2260	0.0815***	**F9**	-0.0925	0.2024
F10	-0.5601	0.1230***	**F10**	0.5161	0.3804
F11	0.0642	0.1065	**F11**	0.2471	0.1958
F12	-0.1205	0.1827	**F12**	1.6529	0.2583***
F13	-0.1602	0.0608***	**F13**	0.0765	0.1397
F14	-0.0731	0.0649	**F14**	0.0141	0.1240
F15	-0.0470	0.0689	**F15**	0.0508	0.1256
F16	0.0767	0.0970	**F16**	0.9950	0.1549***
F17	-0.0633	0.0916	**F17**	0.3140	0.1643*
F18	0.1750	0.1010*	**F18**	-0.3293	0.2079
F19	-0.1444	0.1179	**F19**	-0.0282	0.2270
TA	-0.1063	0.0155***	**TA**	0.0821	0.0649
LTD	0.0088	0.0060	**LTD**	0.0344	0.0115***
ROE	-0.0003	0.0005	**ROE**	0.0007	0.0009
PPE	0.0042	0.0005***	**PPE**	0.0007	0.0027
LLR	-0.8120	0.1056***	**LLR**	-1.0371	0.5535*
T1	0.2680	0.0431***	**T1**	0.4407	0.2017**
ROA	-3.5757	0.4055***	**ROA**	-4.1336	2.3717*
IB	0.0065	0.0056	**IB**	0.0357	0.0115***
LA	0.0028	0.0025	**LA**	0.0162	0.0049***
II	-0.0146	0.0050***	**II**	-0.0111	0.0108
TL	0.0003	0.0018	**TL**	0.0109	0.0029***
PL1	-0.2958	0.0414***	**PL1**	-0.1759	0.1917
MCS	-0.0678	0.0442	**MCS**	0.4395	0.0677***
CFR	0.0492	0.1366	**CFR**	-0.3455	0.2375
CGE	0.2196	0.1827	**CGE**	0.9453	0.3372***
CIT	0.3913	0.2725	**CIT**	0.1266	0.5154
CSP	0.5207	0.1573***	**CSP**	0.6489	0.4080
CEUR	0.2882	0.1131**	**CEUR**	0.6690	0.2534***
CNOAM	0.1594	0.0868*	**CNOAM**	0.2095	0.1739
CASIA	0.3753	0.0959***	**CASIA**	0.1281	0.2740
GI	-0.1479	0.1022	**F20**	-0.4322	0.0555***
CLS	0.0092	0.0031***	**SG**	-0.0005	0.0003**
R^2	0.6521		R^2	0.3975	
N	1615		**N**	1615	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 1574)	31.25***		F(2, 1574)	4.40**
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.0001		Chi-sq(1)	0.3357

Natixis

The system is jointly estimated using the 3SLS estimator.

	Loan supply regression (LNSPRD)			Loan demand regression (LNAMT)	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	17.4178	2.0934***	**CONSTANT**	3.6661	8.3869
LNAMT	-0.0945	0.0797	**LNSPRD**	0.7058	0.6831
MAT	0.0994	0.0633	**MAT**	0.4242	0.1166***
SEC	0.4405	0.0615***	**SEC**	-0.3402	0.3351
CRCY	-0.2477	0.0703***	**CRCY**	0.2953	0.2391
PRIME	0.2245	0.0830***	**PRIME**	0.2161	0.1998
F8	-0.1652	0.1619	**F8**	1.3718	0.3069***
F9	-0.0893	0.1370	**F9**	0.7674	0.2695***
F10	-0.4650	0.2015**	**F10**	1.7174	0.5015***
F11	-0.0920	0.1625	**F11**	0.9183	0.3395***
F12	-0.3038	0.3178	**F12**	2.7486	0.5897***
F13	-0.3383	0.1013***	**F13**	0.7607	0.3180**
F14	-0.2981	0.1070***	**F14**	0.6997	0.3217**
F15	-0.2844	0.1096***	**F15**	0.4489	0.3065
F16	0.1409	0.1407	**F16**	1.1545	0.2592***
F17	-0.2227	0.1458	**F17**	0.9485	0.3396***
F18	0.1063	0.1776	**F18**	-0.8535	0.3730**
F19	-0.5393	0.1596***	**F19**	0.8372	0.5049*
TA	-0.0476	0.0223**	**TA**	0.2377	0.0555***
LTD	0.0071	0.0091	**LTD**	0.0239	0.0188
ROE	0.0010	0.0008	**ROE**	-0.0030	0.0019
PPE	0.0040	0.0009***	**PPE**	-0.0039	0.0036
LLR	-0.6074	0.1079***	**LLR**	0.5077	0.3163
T1	-0.0294	0.0498	**T1**	-0.1234	0.0904
ROA	1.4041	0.3770***	**ROA**	-1.0342	0.9479
IB	-0.0805	0.0119***	**IB**	0.0496	0.0414
LA	-0.0282	0.0043***	**LA**	0.0181	0.0148
II	0.0124	0.0032***	**II**	-0.0124	0.0096
TL	0.0004	0.0046	**TL**	-0.0148	0.0095
PL1	-0.3499	0.0735***	**PL1**	0.4549	0.2957
MCS	-0.0296	0.0669	**MCS**	0.4672	0.1327***
CFR	0.1407	0.1634	**CFR**	0.5871	0.3094*
CGE			**CGE**		
CIT	0.5135	0.2544**	**CIT**	0.5374	0.5284
CSP	0.7396	0.1668***	**CSP**	0.1652	0.5146
CEUR	0.5517	0.1627***	**CEUR**	0.2960	0.4090
CNOAM	0.1666	0.1396	**CNOAM**	0.5609	0.2510**
CASIA	0.3722	0.1395***	**CASIA**	-0.3476	0.3365
GI	-0.5658	0.1753***	**F20**	-0.6689	0.1224***
CLS	0.0045	0.0043	**SG**	-0.0007	0.0005
R^2	0.6841		R^2	0.3305	
N	575		**N**	575	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 535)	21.51***		F(2, 535)	4.24**
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	3.6192*		Chi-sq(1)	0.4911

Crédit Agricole

The system is jointly estimated using the 3SLS estimator.

	Loan supply regression (LNSPRD)			Loan demand regression (LNAMT)	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	7.4058	1.3237***	**CONSTANT**	19.3529	7.6143**
LNAMT	-0.0514	0.0833	**LNSPRD**	-0.5705	1.1312
MAT	0.1608	0.0456***	**MAT**	0.3717	0.1808**
SEC	0.3381	0.0563***	**SEC**	0.1149	0.4029
CRCY	-0.1222	0.0585**	**CRCY**	0.1161	0.1815
PRIME	0.1331	0.0933	**PRIME**	0.3436	0.2186
F8	-0.1568	0.1094	**F8**	0.6033	0.2739**
F9	-0.0801	0.0850	**F9**	0.0360	0.1851
F10	-0.3401	0.1486**	**F10**	0.5013	0.4932
F11	0.1538	0.1149	**F11**	0.1395	0.2710
F12	0.2690	0.2094	**F12**	1.6117	0.3824***
F13	-0.3281	0.0950***	**F13**	0.3950	0.4321
F14	-0.2674	0.0928***	**F14**	0.3664	0.3704
F15	-0.1279	0.1044	**F15**	0.2556	0.2467
F16	0.0181	0.1507	**F16**	1.2652	0.2177***
F17	-0.2373	0.1274*	**F17**	0.4514	0.3895
F18	-0.1370	0.1104	**F18**	-0.0074	0.2642
F19	-0.1822	0.1005*	**F19**	-0.1500	0.2810
TA	-0.0817	0.0173***	**TA**	0.0889	0.1038
LTD	0.0197	0.0074***	**LTD**	0.0316	0.0252
ROE	0.0000	0.0008	**ROE**	-0.0005	0.0015
PPE	0.0033	0.0008***	**PPE**	0.0025	0.0040
LLR	0.0474	0.0476	**LLR**	-0.0319	0.1011
T1	-0.0875	0.0413**	**T1**	0.0133	0.1070
ROA	-1.0554	0.3214***	**ROA**	-0.2810	1.1213
IB	0.0083	0.0027***	**IB**	-0.0048	0.0104
LA	-0.0087	0.0021***	**LA**	-0.0096	0.0116
II	0.0011	0.0014	**II**	0.0001	0.0027
TL	0.0041	0.0040	**TL**	0.0219	0.0076***
PL1	-0.2395	0.0606***	**PL1**	-0.0321	0.2961
MCS	-0.0737	0.0579	**MCS**	0.4352	0.1402***
CFR	0.0402	0.1484	**CFR**	0.0672	0.2786
CGE	0.2096	0.1765	**CGE**	0.6775	0.3867*
CIT	0.1112	0.2073	**CIT**	0.2598	0.4040
CSP	0.7331	0.1514***	**CSP**	0.7604	0.8562
CEUR	0.3065	0.1426**	**CEUR**	0.7260	0.4074*
CNOAM	0.2425	0.1257*	**CNOAM**	0.4380	0.3429
CASIA	0.3493	0.1197***	**CASIA**	0.0403	0.4669
GI	-0.0828	0.1484	**F20**	-0.4879	0.0868***
CLS	0.0064	0.0040	**SG**	-0.0003	0.0004
R^2	0.6608		R^2	0.3922	
N	961		**N**	961	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 920)	19.12***		F(2, 920)	1.30
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.0288		Chi-sq(1)	0.2792

Commerzbank AG

The system is jointly estimated using the 3SLS estimator.

	Loan supply regression (LNSPRD)			Loan demand regression (LNAMT)	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	0.9083	2.1002	**CONSTANT**	11.2223	3.6024***
LNAMT	-0.1530	0.1269	**LNSPRD**	0.8531	0.9338
MAT	0.2319	0.0775***	**MAT**	0.3581	0.1881*
SEC	0.4361	0.0929***	**SEC**	-0.8999	0.4986*
CRCY	-0.0910	0.0802	**CRCY**	0.4154	0.1852**
PRIME	0.2566	0.0988***	**PRIME**	0.3053	0.2316
F8	-0.4056	0.1377***	**F8**	0.7966	0.4980
F9	-0.2790	0.1259**	**F9**	-0.1352	0.3244
F10	-0.2018	0.2040	**F10**	1.2540	0.4533***
F11	-0.1642	0.1571	**F11**	0.6609	0.3607*
F12	-0.4201	0.3480	**F12**	1.7521	0.8135**
F13	-0.1137	0.0936	**F13**	0.2513	0.2241
F14	-0.1327	0.0985	**F14**	0.2230	0.2393
F15	-0.0181	0.1167	**F15**	0.2613	0.2356
F16	0.5469	0.1786***	**F16**	0.9189	0.3987**
F17	-0.0510	0.1914	**F17**	-0.4662	0.3723
F18	-0.3797	0.2174*	**F18**	0.0597	0.5550
F19	0.0844	0.2179	**F19**	0.3332	0.4251
TA	-0.1272	0.0366***	**TA**	0.3809	0.1571**
LTD	0.0165	0.0098*	**LTD**	-0.0094	0.0253
ROE	-0.0008	0.0013	**ROE**	-0.0007	0.0028
PPE	0.0001	0.0011	**PPE**	0.0038	0.0022*
LLR	-2.7176	0.4347***	**LLR**	1.6044	2.6836
T1	0.0678	0.0488	**T1**	-0.0084	0.0981
ROA	0.1061	0.2877	**ROA**	0.6168	0.5780
IB	0.0201	0.0076***	**IB**	0.0054	0.0156
LA	0.1892	0.0362***	**LA**	-0.1206	0.2020
II	0.1030	0.0242***	**II**	-0.0548	0.1240
TL	0.0048	0.0037	**TL**	-0.0053	0.0089
PL1	-0.6137	0.0802***	**PL1**	0.6643	0.6115
MCS	0.0387	0.0638	**MCS**	0.1773	0.1203
CFR	-0.3066	0.2435	**CFR**	0.1549	0.5051
CGE	-0.0540	0.2079	**CGE**	0.0989	0.4119
CIT	0.8259	0.4322*	**CIT**	-0.4171	1.1982
CSP	0.5152	0.2297**	**CSP**	-0.7867	0.7566
CEUR	-0.4915	0.2007**	**CEUR**	0.3071	0.4962
CNOAM	-0.1310	0.1804	**CNOAM**	0.1051	0.3426
CASIA	0.0427	0.2396	**CASIA**	-1.2383	0.4466***
GI	0.5783	0.2493**	**F20**	-0.4824	0.1315***
CLS	-0.0055	0.0052	**SG**	0.0006	0.0017
R^2	0.6684		R^2	0.2480	
N	572		**N**	572	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 531)	10.19***		F(2, 531)	2.14
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	1.9899		Chi-sq(1)	0.0916

Deutsche Bank

The system is jointly estimated using the 3SLS estimator.

	Loan supply regression (LNSPRD)			Loan demand regression (LNAMT)	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	4.9736	1.1122***	**CONSTANT**	14.6869	3.2009***
LNAMT	-0.0758	0.0743	**LNSPRD**	-0.3372	0.7910
MAT	-0.1534	0.0514***	**MAT**	0.3138	0.1675*
SEC	0.4363	0.0475***	**SEC**	-0.0767	0.3696
CRCY	-0.2420	0.0613***	**CRCY**	-0.0320	0.2257
PRIME	0.0372	0.0389	**PRIME**	0.0688	0.0710
F8	-0.1307	0.1046	**F8**	0.4797	0.2183**
F9	0.0771	0.1029	**F9**	0.2410	0.1853
F10	-0.6232	0.1432***	**F10**	0.7547	0.5972
F11	0.0329	0.1150	**F11**	0.4538	0.2006**
F12	-0.0986	0.1900	**F12**	1.4120	0.3215***
F13	-0.1837	0.0623***	**F13**	0.0620	0.1835
F14	-0.1392	0.0820*	**F14**	-0.0539	0.1788
F15	-0.1356	0.0719*	**F15**	-0.0375	0.1622
F16	0.0520	0.1052	**F16**	0.8526	0.1543***
F17	-0.0007	0.1145	**F17**	0.4601	0.1967**
F18	-0.5644	0.3193*	**F18**	-0.3981	0.7029
F19	0.0748	0.2089	**F19**	0.9352	0.3512***
TA	-0.1226	0.0279***	**TA**	0.2945	0.1184**
LTD	0.0139	0.0069**	**LTD**	0.0259	0.0152*
ROE	0.0007	0.0006	**ROE**	0.0024	0.0010**
PPE	0.0026	0.0006***	**PPE**	0.0013	0.0022
LLR	1.0962	0.1791***	**LLR**	0.5111	0.8835
T1	0.2647	0.0297***	**T1**	0.0582	0.2023
ROA	2.5633	0.3796***	**ROA**	0.4203	1.8774
IB	-0.0038	0.0008***	**IB**	-0.0037	0.0034
LA	-0.0190	0.0044***	**LA**	-0.0105	0.0137
II	0.0280	0.0040***	**II**	0.0022	0.0260
TL	0.0007	0.0016	**TL**	0.0055	0.0028**
PL1	-0.3493	0.0591***	**PL1**	0.0683	0.3036
MCS	0.0333	0.0415	**MCS**	0.3132	0.0654***
CFR	-0.1506	0.1728	**CFR**	0.8260	0.3333**
CGE	0.2470	0.1624	**CGE**	0.9528	0.3035***
CIT	0.5985	0.3010**	**CIT**	1.6092	0.6393**
CSP	0.3515	0.1397**	**CSP**	0.1557	0.3802
CEUR	0.1938	0.1362	**CEUR**	0.8835	0.2482***
CNOAM	0.2339	0.1062**	**CNOAM**	0.6797	0.2302***
CASIA	0.4052	0.1337***	**CASIA**	0.2526	0.3949
GI	0.4595	0.2228**	**F20**	-0.4451	0.0664***
CLS	-0.0033	0.0034	**SG**	0.0001	0.0005
R^2	0.7129		R^2	0.5070	
N	1127		**N**	1127	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 1086)	26.81***		F(2, 1086)	2.36*
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	1.6772		Chi-sq(1)	0.0000

BayernLB

The system is jointly estimated using the 3SLS estimator.

	Loan supply regression (LNSPRD)			Loan demand regression (LNAMT)	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	18.0825	6.1544***	**CONSTANT**	10.9834	25.5589
LNAMT	-0.2743	0.2861	**LNSPRD**	0.3644	2.1748
MAT	0.3529	0.1149***	**MAT**	0.2545	0.5596
SEC	0.4888	0.1117***	**SEC**	0.0003	1.0074
CRCY	-0.1241	0.1115	**CRCY**	0.2368	0.3953
PRIME	0.4212	0.1595***	**PRIME**	0.2872	0.7240
F8	0.1392	0.4116	**F8**	1.3149	0.5140**
F9	0.1698	0.3432	**F9**	1.0439	0.3749***
F10	0.1269	0.5484	**F10**	1.8723	0.8503**
F11	0.3026	0.3506	**F11**	0.9784	0.3987**
F12	0.7041	1.0729	**F12**	3.3726	0.8486***
F13	-0.4086	0.1281***	**F13**	0.2969	1.0065
F14	-0.2832	0.1497*	**F14**	0.4170	0.8281
F15	-0.3266	0.1500**	**F15**	0.0870	0.7414
F16	0.2078	0.3401	**F16**	1.2465	0.4251***
F17	-0.2560	0.4120	**F17**	-1.1001	0.4527**
F18	-0.5493	0.4229	**F18**	-1.2155	0.5975**
F19	-0.0599	0.3033	**F19**	-0.8601	0.4902*
TA	-0.0534	0.0593	**TA**	0.2092	0.2234
LTD	-0.0047	0.0188	**LTD**	-0.0278	0.0288
ROE	0.0016	0.0016	**ROE**	0.0010	0.0041
PPE	0.0038	0.0022*	**PPE**	0.0053	0.0052
LLR	0.0793	0.1356	**LLR**	0.3264	0.1601**
T1	-0.1471	0.1507	**T1**	0.1268	0.2252
ROA	-1.6956	0.5633***	**ROA**	-0.0866	2.6887
IB	-0.0644	0.0197***	**IB**	-0.0055	0.1042
LA	-0.0294	0.0095***	**LA**	0.0055	0.0642
II	-0.0061	0.0154	**II**	-0.0015	0.0077
TL	0.0095	0.0135	**TL**	0.0308	0.0162*
PL1	-0.5231	0.1291***	**PL1**	-0.0757	1.0277
MCS	0.3743	0.1767**	**MCS**	0.4894	0.5093
CFR	-0.1954	0.4493	**CFR**	0.2838	0.8794
CGE	-0.2361	0.2675	**CGE**	0.1708	0.6618
CIT	-1.6835	0.6874**	**CIT**	0.1126	3.5144
CSP	0.1837	0.3501	**CSP**	-0.1042	0.7292
CEUR	-1.0069	0.4414**	**CEUR**	-0.3196	1.9491
CNOAM	0.1297	0.2367	**CNOAM**	0.0588	0.4844
CASIA			**CASIA**		
GI	-4.6936	7.5992	**F20**	-0.2623	0.2161
CLS	-0.0067	0.0093	**SG**	-0.0005	0.0007
R^2	0.6580		R^2	0.4872	
N	306		**N**	306	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 266)	1.90		F(2, 266)	0.32
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.1315		Chi-sq(1)	0.0030

Portigon

The system is jointly estimated using the 3SLS estimator.

	Loan supply regression (LNSPRD)			Loan demand regression (LNAMT)	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	8.1368	2.0814***	**CONSTANT**	3.9309	7.4839
LNAMT	0.0213	0.1085	**LNSPRD**	1.4139	0.9672
MAT	-0.1072	0.1010	**MAT**	0.7827	0.2075***
SEC	0.4813	0.0853***	**SEC**	-0.8252	0.4835*
CRCY	-0.3976	0.1144***	**CRCY**	1.1736	0.4322***
PRIME	0.1739	0.1213	**PRIME**	0.1570	0.3251
F8	-0.0808	0.1630	**F8**	0.1414	0.4115
F9	0.2099	0.1630	**F9**	-0.3670	0.4559
F10	-0.4607	0.2590*	**F10**	1.9134	0.6669***
F11	0.0272	0.2387	**F11**	0.3200	0.6076
F12	-0.5988	0.4454	**F12**	2.6885	1.1011**
F13	-0.2927	0.1204**	**F13**	0.8790	0.4070**
F14	0.0318	0.1284	**F14**	-0.1553	0.3146
F15	0.1746	0.1717	**F15**	-0.4745	0.4488
F16	-0.0537	0.1748	**F16**	1.3054	0.3735***
F17	-0.0086	0.2246	**F17**	0.2884	0.5549
F18			**F18**		
F19	-0.0920	0.2001	**F19**	-0.6725	0.4848
TA	-0.0660	0.0241***	**TA**	0.1907	0.0785**
LTD	-0.0203	0.0142	**LTD**	0.0774	0.0356**
ROE	0.0004	0.0012	**ROE**	-0.0026	0.0031
PPE	0.0007	0.0014	**PPE**	-0.0035	0.0034
LLR	-0.5908	0.1299***	**LLR**	0.3320	0.4838
T1	0.0216	0.0544	**T1**	-0.0327	0.1264
ROA	-1.8026	0.6292***	**ROA**	0.7443	1.9627
IB	-0.0178	0.0064***	**IB**	0.0205	0.0141
LA	-0.0008	0.0061	**LA**	0.0036	0.0117
II	0.0013	0.0004***	**II**	-0.0004	0.0011
TL	0.0054	0.0060	**TL**	-0.0060	0.0155
PL1	-0.4722	0.1265***	**PL1**	0.7227	0.5616
MCS	-0.0319	0.1246	**MCS**	0.8249	0.2028***
CFR	1.7154	0.6070***	**CFR**	-0.8563	1.9102
CGE	0.2065	0.2541	**CGE**	-0.6058	0.6934
CIT	1.2840	0.6762*	**CIT**	-4.3424	2.2891*
CSP	1.3527	0.2977***	**CSP**	-3.2590	1.4982**
CEUR	0.1429	0.2672	**CEUR**	-0.3325	0.6901
CNOAM	0.4680	0.2604*	**CNOAM**	-1.7472	0.8094**
CASIA	0.3772	0.2430	**CASIA**	-0.8474	0.7376
GI	0.4979	0.3408	**F20**	-0.6259	0.1795***
CLS	-0.0292	0.0121**	**SG**	0.0007	0.0006
R^2	0.7016		R^2	0.0834	
N	314		**N**	314	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 274)	12.54***		F(2, 274)	2.95*
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.0575		Chi-sq(1)	0.0044

Intesa Sanpaolo SpA					
The system is jointly estimated using the 3SLS estimator.					
	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT			**CONSTANT**	8.3477	6.6441
LNAMT	0.0817	0.1203	**LNSPRD**	-0.0690	0.8143
MAT	0.0309	0.0785	**MAT**	-0.0513	0.1289
SEC	0.5296	0.1181***	**SEC**	-0.2087	0.4601
CRCY	-0.3043	0.1164***	**CRCY**	0.2872	0.2740
PRIME	0.1854	0.1149	**PRIME**	0.2561	0.2508
F8	-0.4470	0.1369***	**F8**	-0.0323	0.4205
F9	-0.0721	0.1405	**F9**	-0.2180	0.2472
F10	-0.7287	0.1945***	**F10**	-0.0857	0.6734
F13	-0.2209	0.1279*	**F13**	0.4001	0.2262*
F14	-0.1073	0.1468	**F14**	0.3372	0.2331
F15	-0.2205	0.1755	**F15**	0.0866	0.3261
F16	-0.0813	0.2167	**F16**	1.1297	0.2939***
F19	0.0728	0.2027	**F19**	0.1372	0.3398
TA	-0.1890	0.0476***	**TA**	0.2658	0.1408*
LTD	0.0644	0.0174***	**LTD**	0.0012	0.0560
ROE	0.0005	0.0016	**ROE**	0.0005	0.0027
PPE	-0.0023	0.0017	**PPE**	-0.0042	0.0034
LLR	-0.1939	0.1670	**LLR**	0.1835	0.3894
T1	0.2689	0.1333**	**T1**	0.2888	0.3051
ROA	-0.0115	0.1551	**ROA**	0.3574	0.3178
IB	0.0189	0.0059***	**IB**	0.0136	0.0163
LA	-0.0327	0.0274	**LA**	0.0289	0.0362
II	0.0580	0.0250**	**II**	0.0335	0.0610
TL	-0.0043	0.0078	**TL**	0.0238	0.0118**
PL1	-0.7028	0.1395***	**PL1**	0.1982	0.6336
MCS	-0.1362	0.0822*	**MCS**	-0.0040	0.1737
CFR	0.0971	0.2367	**CFR**	0.7457	0.4045*
CGE	0.3934	0.3251	**CGE**	1.4508	0.5976**
CIT	0.5469	0.2767**	**CIT**	-0.0496	0.6111
CSP	0.4794	0.2347**	**CSP**	0.3360	0.5727
CEUR	0.0595	0.2237	**CEUR**	0.5465	0.3763
CNOAM	0.1717	0.1787	**CNOAM**	0.3509	0.3256
CASIA	0.1614	0.2502	**CASIA**	-0.0055	0.4470
GI	-0.3186	0.4382	**F20**	-0.5779	0.1295***
CLS	-0.0117	0.0057**	**SG**	0.0034	0.0018*
R^2	0.6438		R^2	0.5388	
N	302		**N**	302	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 266)	11.54***		F(2, 266)	3.76*
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.7711		Chi-sq(1)	0.0000

Unicredit SpA

The system is jointly estimated using the 3SLS estimator.

	Loan supply regression (LNSPRD)			Loan demand regression (LNAMT)	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	2.5224	3.2151	**CONSTANT**	13.9363	4.9335***
LNAMT	-0.1848	0.1379	**LNSPRD**	-0.3991	0.8673
MAT	-0.3992	0.1030***	**MAT**	-0.0332	0.4215
SEC	0.3607	0.1187***	**SEC**	-0.1582	0.4109
CRCY	0.0025	0.1601	**CRCY**	0.9310	0.2681***
PRIME	0.3583	0.1788**	**PRIME**	0.6755	0.3693*
F8	-0.2922	0.1667*	**F8**	-0.0686	0.4205
F9	0.0664	0.1798	**F9**	-0.4218	0.3744
F10	-1.1256	0.2976***	**F10**	-0.6406	1.0938
F13	0.1859	0.1396	**F13**	0.3537	0.2759
F14	0.0781	0.1714	**F14**	0.1383	0.3279
F15	-0.1978	0.1984	**F15**	-0.2570	0.4236
F16	-0.5780	0.3490*	**F16**	0.4717	0.9331
F19	0.3454	0.3707	**F19**	-0.6631	0.8043
TA	-0.0942	0.0558*	**TA**	0.2256	0.1406
LTD	0.0299	0.0154*	**LTD**	0.0148	0.0389
ROE	-0.0043	0.0029	**ROE**	0.0054	0.0077
PPE	0.0032	0.0021	**PPE**	0.0073	0.0039*
LLR	1.3523	0.6573**	**LLR**	1.3882	0.6204**
T1	-0.2411	0.2166	**T1**	-0.6835	0.3710*
ROA	-0.3463	0.3025	**ROA**	0.8352	0.3752**
IB	0.0157	0.0094*	**IB**	0.0083	0.0077
LA	0.0747	0.0411*	**LA**	-0.0110	0.0276
II	0.0079	0.0360	**II**	0.0356	0.0675
TL	-0.0072	0.0147	**TL**	0.0510	0.0294*
PL1	-0.3519	0.2705	**PL1**	0.1462	0.6439
MCS	-0.2428	0.0929***	**MCS**	0.1388	0.2887
CFR	-0.0941	0.2685	**CFR**	0.1097	0.5462
CGE	-0.0158	0.2545	**CGE**	0.3514	0.5110
CIT	0.2423	0.3174	**CIT**	-0.5483	0.6291
CSP	0.4903	0.2810*	**CSP**	0.1247	0.6063
CEUR	0.2665	0.2458	**CEUR**	0.5037	0.4883
CNOAM	0.0959	0.2289	**CNOAM**	0.2781	0.4623
CASIA	-0.2019	0.4646	**CASIA**	-0.6080	0.8935
GI	2.2348	1.1203**	**F20**	-0.6728	0.2530***
CLS	0.0017	0.0060	**SG**	0.0013	0.0031
R^2	0.7313		R^2	0.5967	
N	201		**N**	201	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 164)	5.89***		F(2, 164)	2.22
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.0854		Chi-sq(1)	0.2717

La Caixa

The system is jointly estimated using the 3SLS estimator.

	Loan supply regression (LNSPRD)			Loan demand regression (LNAMT)	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	-5.7212	4.2908	**CONSTANT**	11.3629	3.9976***
LNAMT	-0.0037	0.1548	**LNSPRD**	-2.2248	1.0366**
MAT	0.1974	0.0728***	**MAT**	0.7830	0.2638***
SEC	0.3640	0.1279***	**SEC**	0.2760	0.5078
CRCY	0.2031	0.2326	**CRCY**	1.5861	0.4812***
PRIME			**PRIME**		
F8	-0.0588	0.1171	**F8**	-0.2232	0.3865
F9	-0.1092	0.1148	**F9**	0.1343	0.3701
F10	0.1206	0.3487	**F10**	1.8497	0.9525*
F11	-0.0623	0.1745	**F11**	-0.4158	0.5497
F12	0.4593	0.2831	**F12**	1.7883	0.9717*
F13	-0.1551	0.0904*	**F13**	-0.0540	0.2948
F14	-0.1572	0.2043	**F14**	0.1173	0.6628
F16	-0.2651	0.3265	**F16**	1.3315	0.5920**
F18	0.5902	0.2776**	**F18**	0.7043	0.9599
F19	-0.2827	0.2102	**F19**	-1.5654	0.5650***
TA	-0.0316	0.0602	**TA**	0.2571	0.1019**
LTD	0.0115	0.0150	**LTD**	0.0456	0.0543
ROE	-0.0025	0.0017	**ROE**	0.0014	0.0048
PPE	-0.0004	0.0016	**PPE**	0.0062	0.0040
LLR	-0.1111	0.0959	**LLR**	-0.2931	0.2316
T1	0.1124	0.0433***	**T1**	0.1066	0.1530
ROA	0.4656	0.2786*	**ROA**	0.1959	0.8320
IB	0.0168	0.0052***	**IB**	0.0173	0.0107
LA	-0.4795	0.1549***	**LA**	-0.4064	0.2542
II	0.2040	0.0700***	**II**	0.1545	0.1095
TL	-0.0324	0.0286	**TL**	-0.1919	0.0785**
PL1	-0.0578	0.1179	**PL1**	-0.2461	0.4019
MCS	0.3090	0.1660*	**MCS**	1.1856	0.6062**
CFR	0.4109	0.6175	**CFR**	4.2385	1.3219***
CGE			**CGE**		
CIT	0.3357	0.6190	**CIT**	3.5915	1.4195**
CSP	0.7150	0.2997**	**CSP**	2.5877	1.3192**
CEUR	0.6649	0.3421*	**CEUR**	2.6042	1.3467*
CNOAM			**CNOAM**		
CASIA			**CASIA**		
GI	0.9513	0.4681**	**F20**	-0.4165	0.2249*
CLS	-0.0102	0.0060*	**SG**	0.0022	0.0040
R^2	0.7571		R^2	0.5050	
N	233		**N**	233	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 198)	2.27		F(2, 198)	4.41**
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	0.4928		Chi-sq(1)	0.0445

Banco BVA

The system is jointly estimated using the 3SLS estimator.

	Loan supply regression (LNSPRD)			Loan demand regression (LNAMT)	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	-0.1927	4.4583	**CONSTANT**	-12.0898	9.5331
LNAMT	-0.0918	0.1024	**LNSPRD**	-1.6080	2.0187
MAT	0.2747	0.0733***	**MAT**	0.8373	0.4510*
SEC	0.2860	0.1040***	**SEC**	0.0186	0.6851
CRCY	0.1384	0.0999	**CRCY**	0.5452	0.2600**
PRIME	0.2136	0.1557	**PRIME**	1.0669	0.3964***
F8	-0.4456	0.1296***	**F8**	-0.6331	0.8757
F9	-0.2709	0.1265**	**F9**	-0.3593	0.5532
F10	-0.2661	0.2099	**F10**	0.3214	0.8073
F11	-0.2383	0.1666	**F11**	-0.1411	0.5764
F12	0.2325	0.2403	**F12**	0.4462	0.6669
F13	-0.2603	0.0920***	**F13**	-0.2165	0.5882
F14	-0.2092	0.1102*	**F14**	-0.3359	0.4284
F16	0.2708	0.1576*	**F16**	1.2982	0.5489**
F18	0.3790	0.1902**	**F18**	-0.1191	1.0538
F19	-0.4919	0.1810***	**F19**	-1.6927	0.8305**
TA	-0.0950	0.0508*	**TA**	0.1881	0.3001
LTD	0.0504	0.0178***	**LTD**	0.0538	0.1191
ROE	0.0006	0.0017	**ROE**	0.0032	0.0045
PPE	-0.0014	0.0012	**PPE**	0.0006	0.0046
LLR	0.3032	0.2842	**LLR**	-0.8510	0.9890
T1	-0.0100	0.2260	**T1**	0.8321	0.5399
ROA	0.2859	0.3891	**ROA**	1.8365	0.7377**
IB	-0.0029	0.0112	**IB**	0.0179	0.0270
LA	-0.0085	0.0744	**LA**	0.3247	0.1716*
II	0.0954	0.0297***	**II**	0.2623	0.2065
TL	0.0066	0.0091	**TL**	0.0047	0.0280
PL1	-0.1660	0.1141	**PL1**	-0.1178	0.4390
MCS	0.0793	0.0836	**MCS**	0.4195	0.2310*
CFR	-0.0760	0.3488	**CFR**	1.3654	0.7380*
CGE	-0.0390	0.3539	**CGE**	0.4586	0.7422
CIT	0.7317	0.5049	**CIT**	2.3710	1.5899
CSP	0.4557	0.2805	**CSP**	0.5637	1.1821
CEUR	0.1816	0.3180	**CEUR**	1.0323	0.6822
CNOAM	0.4949	0.3711	**CNOAM**	1.7190	1.4009
CASIA	0.3017	0.4363	**CASIA**	1.9047	1.0336*
GI	0.1874	0.1904	**F20**	-0.5226	0.2006***
CLS	-0.0024	0.0056	**SG**	0.0009	0.0100
R^2	0.7565		R^2	0.5532	
N	400		**N**	400	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 361)	9.72***		F(2, 361)	0.65
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	9.4861***		Chi-sq(1)	0.1156

Banco Santander SA

The system is jointly estimated using the 3SLS estimator.

	Loan supply regression (LNSPRD)			**Loan demand regression (LNAMT)**	
	Coefficient	**Standard Error**		**Coefficient**	**Standard Error**
CONSTANT	4.0051	2.1941*	**CONSTANT**	17.6671	5.1279***
LNAMT	-0.0203	0.0887	**LNSPRD**	0.0290	0.6630
MAT	0.1274	0.0481***	**MAT**	0.1529	0.1413
SEC	0.2270	0.0814***	**SEC**	-0.3258	0.2517
CRCY	-0.0027	0.1030	**CRCY**	0.4760	0.2350**
PRIME	0.4515	0.2102**	**PRIME**	0.7911	0.5267
F8	-0.1062	0.1188	**F8**	-0.1912	0.2937
F9	-0.0452	0.1100	**F9**	-0.1311	0.2687
F10	-0.4695	0.1961**	**F10**	0.4863	0.5819
F11	0.2748	0.1581*	**F11**	-0.0811	0.4464
F12	0.0806	0.1847	**F12**	-0.0493	0.4585
F13	-0.3324	0.0804***	**F13**	0.4118	0.2818
F14	-0.0708	0.1433	**F14**	0.2732	0.3542
F16	0.0099	0.1631	**F16**	1.6352	0.2806***
F18	-0.0574	0.2474	**F18**	-1.3258	0.5394**
F19	-0.1519	0.1404	**F19**	-0.6580	0.3349**
TA	-0.0752	0.0380**	**TA**	0.3190	0.0855***
LTD	0.0175	0.0140	**LTD**	0.0123	0.0395
ROE	-0.0010	0.0014	**ROE**	0.0054	0.0032*
PPE	0.0004	0.0012	**PPE**	0.0059	0.0028**
LLR	0.3065	0.1671*	**LLR**	0.0226	0.4077
T1	0.6828	0.1667***	**T1**	-1.1183	0.7230
ROA	1.0493	0.2965***	**ROA**	-1.0878	1.2600
IB	-0.0079	0.0032**	**IB**	-0.0037	0.0067
LA	-0.0221	0.0252	**LA**	-0.1000	0.0616
II	-0.0736	0.0312**	**II**	0.1602	0.1103
TL	-0.0108	0.0104	**TL**	-0.0388	0.0243
PL1	-0.4674	0.1027***	**PL1**	0.2008	0.3967
MCS	-0.0095	0.0981	**MCS**	-0.0832	0.2371
CFR	-0.5854	0.2561**	**CFR**	1.6855	0.4418***
CGE	-0.4254	0.2428*	**CGE**	0.8248	0.4723*
CIT	-0.0255	0.2677	**CIT**	0.6652	0.6143
CSP	0.0945	0.1959	**CSP**	-0.5081	0.4966
CEUR	-0.1380	0.1957	**CEUR**	0.8057	0.3941**
CNOAM	-0.3133	0.2159	**CNOAM**	1.0753	0.4432**
CASIA	-0.6799	0.3549*	**CASIA**	0.5197	0.7989
GI	0.7787	0.1934***	**F20**	-0.6812	0.1485***
CLS	-0.0063	0.0044	**SG**	-0.0009	0.0041
R^2	0.7464		R^2	0.6919	
N	396		**N**	396	
Specification tests					
Test for significance of instruments in first-stage regression					
	F(2, 357)	9.61***		F(2, 357)	6.21***
Over-identification test for validity of instruments (H0: instruments are exogenous)					
	Chi-sq(1)	5.4014**		Chi-sq(1)	0.1463