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Cher utilisateur Isabel,

L’un des objectifs fondamentaux de la finance est de trouver pour les entreprises une source de financement suffisante, fiable et avantageuse. En effet, la plupart d’entre elles doivent s’appuyer sur les prêts bancaires. Il est donc essentiel de garantir la disponibilité du crédit à des conditions favorables pour permettre aux entreprises de prospérer.

Plusieurs études ont souligné l’importance croissante de la multibancarité, c’est-à-dire le recours d’une entreprise à plusieurs banques. Il va sans dire que ce sujet est de plus en plus d’actualité suite à la récente crise financière qui a amené de nombreuses banques à revoir leur modèle ou à rompre leurs partenariats afin de « nettoyer » leur bilan. Aujourd’hui, plus que jamais, les entreprises ont besoin de savoir quand emprunter auprès d’une seule banque monopolistique ou quand s’adresser à plusieurs banques et, dans ce dernier cas, à combien.

Nous avons demandé au professeur Mathias Schmit et son équipe de lister et de décrire les principaux critères. Une règle d’or n’existe pas. Chacun devra établir pour son entreprise avec combien et quelles banques il vaut mieux collaborer. Le White Paper en annexe vous donne un aperçu de la recherche académique actuelle à ce sujet

Isabel essaye ainsi d’encore mieux vous aider à tirer le meilleur de vos banques.

Sincères salutations,

L’équipe Isabel
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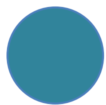
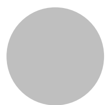
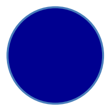
Sagora... beyond bank

Pros and Cons of Multi-Banking Relationships

By
Prof. Mathias Schmit
and
Cedric Warny







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ABOUT SAGORA

SAGORA is a member-driven professional organisation. Its mission is to provide consultancy and research services as well as executive training in different areas of corporate finance, risk management governance and EU financial regulation. Sagora relies on a network of academics in various fields (finance, economics, statistics, strategy, etc.) and professionals at the highest level in the financial industry. The network aims at leveraging the extensive banking experience and strong analytical skills of its members to fulfil SAGORA's missions.

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Executive Summary

One of the fundamental aims of corporate finance is to find businesses *a sufficient, secure and cheap* supply of funds. Most firms have to rely on private debt, i.e. bank loans. Ensuring that credit is available at favourable terms is essential if businesses are to prosper.

Studies on debt financing have emphasised the growing importance of 'multi-banking', i.e. a situation where a firm borrows from more than one bank. Needless to say, this topic has become increasingly relevant in the wake of the recent financial crisis in the course of which many banks scaled down or discontinued relationships in a bid to shore up their balance sheets. Today, more than ever, firms need to be better informed about the benefits of borrowing or not from multiple banks and about factors determining their number of lenders.

Firms' reasons for multi-banking

The main benefits of single banking, which we can use as a benchmark for comparing the pros and cons of multi-banking, stem from the economies of scale that a single bank relationship entails, e.g. lower information and transaction costs. Other advantages derive from the fact that, as a monopolistic, i.e. sole, creditor, a house bank has an incentive to help a client firm through hard times because doing so will enable to share in any future surplus generated by the company in question.

However, the information asymmetry between a firm's house bank and outside banks may give rise to a range of problems. The first major downside to the monopolistic creditor's incentive for intertemporal subsidisation is that its conduct may be prompted merely by self-interest, namely the intention of safeguarding a long-term rent and charging higher-than-competitive rates later on. Consequently, multi-banking is a means of limiting this ex-post hike in interest rates .

Secondly, if a firm's sole bank faces internal problems, prompting it to seek funds elsewhere, uninformed outside banks may doubt the quality of the firm and may therefore either simply refuse to extend credit or add a significant premium to their interest rate. Thus, having multiple, well-informed bankers ex ante helps to avoid an adverse selection problem later on.

Thirdly, multi-banking sends out a signal that a firm's credit is good, which attracts further funds. Indeed, periodic short-term bank loan rollovers by inside bankers constitute credible information about an organisation's ability to meet its repayment obligations. This saves outside banks at least part of the costly task of needlessly evaluating the respective firm's creditworthiness. However, if all third parties become over-confident about these kinds of signals, they risk scaling back their overall monitoring and ending up becoming too complacent.

Other arguments in favour of multi-banking fall into the category of pursuing strategic objectives. For a start, the number of bank interlocutors can influence the security of a firm's information. Some argue that by drawing exclusively limited credit lines from multiple bankers, a firm may reduce the risk of information leakage. Because the presence of the other lenders reassures each individual bank about the quality of the firm, the information they each require is also more limited. This can be very important for companies that are sensitive to information leaks (like highly innovative firms, for example).

Sometimes the rationale behind multi-banking is simply a wish to play competing suppliers of funds off against each other in an attempt to benefit from more favourable loan conditions. Maintaining contact with more than one banker can be useful in itself, if only as a way of acquiring market information on pricing and terms. Although credit market competition may be detrimental for fledgling companies or firms in difficulties, it can nevertheless prove beneficial for mature, more financially solid firms. However, it is possible that the benefits firms enjoy by eliciting credit-market competition are short-term and due entirely to the fact that banks temporarily decide to dramatically cut their quoted interest rates to attract new customers, only to raise them again later on.

The sheer complexity of a firm can also act as a powerful rationale for multiplying bank relationships. Indeed, a large and complex firm needs to borrow amounts that are simply too much for a single bank. A Banque de France survey (2000) found that, on average, large firms borrow ten times as much as smaller firms. Although SMEs comprised 85% of the sampled firms, they accounted for only one third of credit obtained. This higher borrowing requirement translates into a greater number of bank relationships. A 2010 study by Santander found that 53% of companies with an annual turnover in excess of £1 million have more than one banking partner, whereas just over a quarter of firms with an annual turnover below that threshold admit to maintaining relationships with more than one bank. A survey commissioned in 2011 by the Belgian financial intermediary Isabel to the research bureau IVOX finds similar evidence,

In addition, merely due to their size, SMEs are de facto more opaque than large firms and therefore allegedly more bank-dependent. They need a single strong bank lender who will gather and process information over the course of the relationship and offer loan contract terms (interest rate and collateral) that boost the incentive to borrow.

Finally, corporate finance needs can become so specific in large or complex corporations that these companies find themselves struggling to procure the right products or services. Hence the need to establish bank relations with multiple, specialised financial institutions. This state of affairs is exacerbated by the fact that banks themselves tend to become increasingly specialised over time.

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Banks benefit from multi-banking, too

Multi-banking has benefits for banks as well as for firms.

Firstly, a firm involved in a single bank relationship may be tempted to strategically default (an avoidable default), e.g. in a scenario where managers trigger a default to divert cash to themselves. Accordingly, the best way to ensure discipline is to render debt renegotiation inefficient enough to discourage such opportunistic behaviour, but not to make it so inefficient that an unavoidable default becomes too costly. Indeed, by establishing multiple bank relationships, banks induce firms to discipline themselves into avoiding strategic default. By ensuring that debt renegotiation is more complex and inefficient thanks to the multiple players involved, banks make defaulting a far less attractive option for firms.

Secondly, when a firm is funded partly by well-informed banks in a symmetric relationship and partly by clueless arm's-length stakeholders, the better informed creditors have an incentive to continue bad projects because their more detailed knowledge gives them the power to seize resources at the expense of the other stakeholders. To avoid this pitfall, firms should differentiate the quality of information between their multiple lending banks, because their less well-informed lenders, who will dread losing out, will then have an incentive to veto the continuation of bad projects. However, the downside of this is that they may risk hindering the restructuring of projects that are worthy of support.

Multi-banking has become increasingly popular

In conclusion, multi-banking seems to have gained significant momentum, not just because of the financial shake-up following the recent credit crunch, but also because research has been consistently accumulating evidence over the years that multi-banking does indeed make sense. However, it should be borne in mind that there scarcely is an unambiguous rationale for multi-banking and against single banking. The key factor is understanding the trade-offs involved, like balancing the benefits of mitigating rent extraction against the costs of losing a powerful single bank that monitors a firm's activities, or the trade-off between the benefits of preventing opportunistic behaviour by opting for asymmetric multi-banking and the costs of hindering the restructuring of projects worthy of support.

1. Introduction

One of the fundamental aims of corporate finance is to find businesses *a sufficient, secure and cheap* supply of funds. Equity and debt, two key sources of financing for firms, can be either public or private. Public debt (bonds) and public equity (shares), both traded on public stock markets, are relatively rare and their use is mostly dominated by big caps. Most firms have to rely instead on private debt, i.e. bank loans. Ensuring that credit is available at favourable terms is essential if businesses are to prosper. Indeed, were their source of funding to suddenly dry up, assets may have to be sold off, reducing the scope of their activity. Likewise, any rise in the cost of funds would exert a direct, negative impact on their business operations.

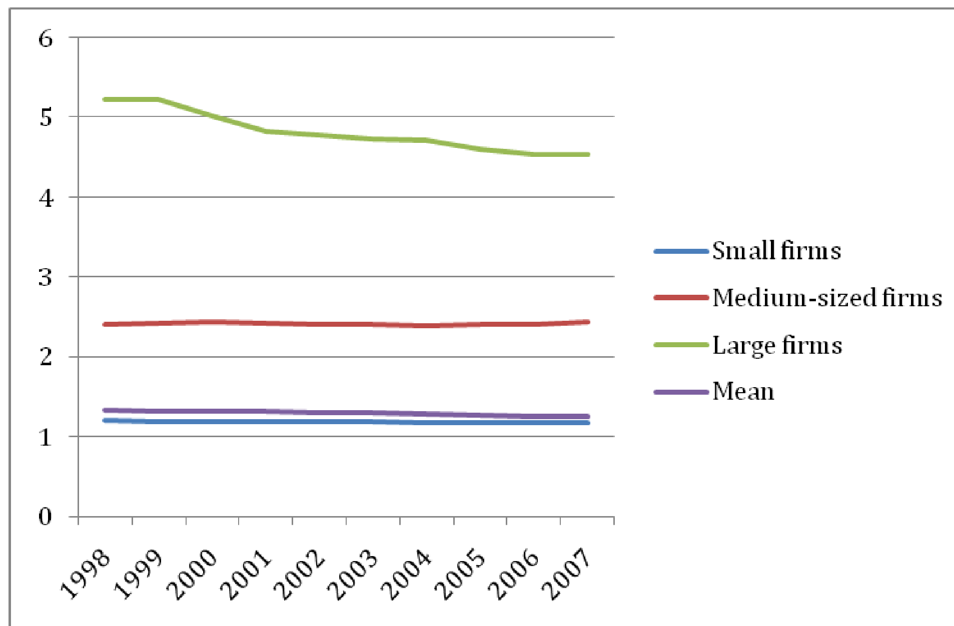
Academic research on corporate financial structures has long focussed on the choice between debt and equity and on the issue of alternative forms of debt (loans versus bonds). Since debt issues account for a vastly greater share of all external financing than equity, it may well be *"more important to understand the structure of debt financing than the choice between debt and equity"* (Bolton and Scharfstein, 1996).

Studies on debt financing have emphasised banks' role in generating information about their clients. Instead of each individually collecting the information necessary for making investment decisions, investors opt to delegate that task to a bank and then channel their funds through it, resulting in greatly improved efficiency. However, such studies nearly always assume relationships with a single bank. Only recently has the subject of the number of bank relationships grown into a topic of its own. This strand of literature sets out to explain, on the one hand, why firms want to lower the significant costs of dealing with more than one bank, and on the other hand, why banks might encourage their clients to establish multiple bank relationships, i.e. to multi-bank. When is a firm better off in terms of the availability and cost of credit? When borrowing from multiple banks or when borrowing from a single bank? The present study attempts to review the pros and cons of multiple bank borrowing.

This topic has become increasingly relevant in the wake of the recent financial crisis. During the crisis, many banks scaled down or discontinued relationships in a bid to shore up their balance sheets. This widespread practice left many firms wondering whether and when their existing bank might terminate their relationship. So do the benefits of borrowing from multiple banks outweigh the well documented advantages of entering into a close relationship with a single bank? Today more than ever, firms need to know more about the benefits of borrowing or not from multiple banks and about factors determining the number of lending relationships.

A 2010 study by Aleksanyan et al. for the French *Observatoire des entreprises* (Companies Observatory)[1] on the determinants of multi-banking argues that relatively few firms rely on multi-banking. The study found that, in 2008, 83% of firms were relying on a single banker. However, this result should be qualified by the fact that a large proportion of the firms sampled were SMEs, which tend to have far fewer bank relationships. The picture becomes clearer when firms are classified by size, as in the figure below.

Figure 1.1 Average number of bank relationships (Aleksanyan et al., 2010)



In another study, based on the 1996 survey of cash managers in 5,800 companies across 20 European countries conducted by *The Bank Relationship Consultancy* and the University of Bath, Ongena and Smith (2000) estimate that only 4.2% of firms in France have relationships with only one bank. This discrepancy illustrates how hard it is to gain reliable information on the overall structure of multi-banking, since all empirical studies' results and statistics closely depend on the nature of the sample used, i.e. what was included and excluded, and the geographical region covered.

These two parameters often define a sample, yet also constitute important explanatory variables. Indeed, in 2008, most firms with fewer than 10 employees (which account for most of the sample but for only a negligible share of the outstanding credit) have only one bank relationship, whereas firms with more than 5,000 employees maintain about 10 bank relationships and account for a disproportionately high share of the outstanding credit. Only 21% of large companies work with a single bank.

[1] The survey encompassed all firms based in France whose bank loans were listed in the Banque de France's Central Credit Risk Register (*Centrale des risques*), with a threshold amount of €76,000. The Central Credit Risk Register listed some 2 million companies borrowing a total €1,492 billion in loans in 2008.

The structure of multiple bank relationships among SMEs has undergone substantial changes since the financial turmoil in 2008. A survey recently commissioned from Continental Research by Santander Corporate Banking[2] found that one in three SMEs relies on two or more banks for financial services, and that the trend towards multi-banking has been rising steadily since the credit crunch, with 14% of "multi-banking" firms increasing their number of bank relationships. Moreover, no fewer than 51% of the surveyed firms said that the recession had prompted them to shop around for more favourable deals and spread their exposure to mitigate the risk of bank failure. This evidence may indicate that SMEs are starting to jump onto the multi-banking bandwagon. A survey commissioned in 2011 by Belgian financial intermediary Isabel to research bureau IVOX finds similar evidence, with more than half of surveyed firms acknowledging that the late financial crisis has shaken their confidence in their banks.

The aim of this paper is to discuss the benefits and drawbacks of establishing relationships with multiple banks, both from the creditor's and the debtor's side of the bank-borrower relationship. The remainder of this paper is structured as follows. Section 2 adopts firms' viewpoint and addresses in detail the main reasons for multi-banking as presented in the literature. We identify three main reasons, namely information asymmetry between insiders and outsiders, strategic considerations and finally business complexity. Section 3 reviews banks' reasons for establishing multiple bank relationships as a way of disciplining firms in an effort to avoid strategic debt defaulting and prevent the opportunistic continuation of bad projects. Section 4 presents our conclusions.

[2] http://www.invoicediscounting.com/blog/detail/smes-adopting-a-multiple-bank-approach-to-finance/

2. Firms' reasons for multi-banking

Before we proceed analyse firms' reasons for multi-banking, it is important to briefly consider the advantages they derive from single banking, as this is the benchmark for comparing the pros and cons of multi-banking.

The main benefits of single banking stem directly from the economies of scale that a single bank relationship entails. By purchasing multiple financial products and services from a single financial institution, a firm can procure them at a lower price than if it obtained them from multiple providers, the main reason being that the bank saves on information and transaction costs (Petersen and Rajan, 1994). Indeed, a number of studies suggest that repeated interaction between a firm and its provider of financial services creates value by reducing the information asymmetry in the firm-bank relationship, for instance by providing the lending bank with access to proprietary information. As a result, the costs of screening, risk assessment and monitoring involved in all new loan provision are considerably reduced.

Unlike with alternative forms of debt (such as commercial papers or bankers' acceptances), certain equity reserve requirements apply to a bank's liabilities, making bank loan financing comparatively costly. So why is bank loan financing so popular? Black (1975) argues that because bank borrowers are usually also depositors, this arrangement gives the bank the competitive advantage of a cheap ongoing financial track record. As this state of affairs allows the bank to better spot the risks of extending credits to depositors and to monitor its loans at a lower cost, this ultimately translates into competitive bank lending. So this phenomenon highlights one of the most powerful advantages of establishing a borrowing relationship with a single bank.

Finally, for a firm with very uncertain prospects, the competitive credit market that multi-banking provides may well be counterproductive, by forcing short-sighted lending, since competitive pressure induces creditors to charge a high interest rate until the uncertainty is resolved, resulting in considerable distortions to a firm's incentives. By contrast, a single bank providing a firm with all the financial services it requires has an incentive to help that company through hard times because it will benefit from any future improvement in the firm's fortunes. Empirical tests conducted by Petersen and Rajan (1995) found that significantly more young firms (with a characteristically uncertain future) obtain external financing in concentrated markets than in competitive markets.

Table 2.1 Credit market concentration and bank loans to credit-constrained firms

Paper	Type of paper	Context	Finding
Petersen and Rajan (1995)	Econometric study	Data comes from the US National Survey of Small Business Finances over the 1988-1989 period, targeting non-financial, non-farm small businesses (<500 employees). The sample encompasses 3,404 firms.	This paper argues that the extent of competition in credit markets is important in determining the value of lending relationships. Creditors are likelier to finance credit-constrained firms when credit markets are concentrated because it is easier for these creditors to internalise the benefits of assisting the firms. The paper offers evidence from small business data in support of this hypothesis.

Box 1. The two main advantages of single banking

1. Single banking entails a dramatic reduction in information and transaction costs, resulting in economies of scale in the provision of financial products and services.
2. While competitive credit markets may result in short-sighted lending, a single financial services provider has an incentive to help its client firms through hard times because it knows it will be able to share in the benefits of any future upturn.

These are powerful advantages of single banking. So why do we see so many multiple bank relationships?

2.1 Insiders and outsiders

In single banking, the information asymmetry between an insider (a 'house' bank in an established relationship with a given firm) and outsiders (prospective banking partners wondering whether to establish a relationship with that firm) creates a number of problems that tip the balance in favour of multi-banking.

a) Multi-banking to prevent a single bank from abusing its information monopoly

In single banking, the asymmetry in information between the single lending bank and all other outside banks sees the inside banker benefit from its monopoly on information about the firm in question. The lending bank can indeed charge its most profitable clients higher interest rates than those they would pay if all banks had the same amount of information. The power of the lending bank derives from the fact that it can arbitrarily ask for repayment at an intermediate stage, irrespective of whether the project for which the loan was awarded turns out to have a negative or a positive net present value (NPV). This practice can leave the firm in question seeking additional funds to finance its development. As such an impediment can prove very costly for the firm, it will tend to be more accommodating to the bank's demands. The power inherent in enjoying a monopolistic position lies precisely in this ability to request repayment if a

project generates a positive NPV, in which case the firm running the project will have to share some of its surplus to persuade the bank to continue lending (Rajan, 1992).

This is the major downside to the advantage of single banking we identified earlier: the incentive to smooth interest rates intertemporally. The problem here is that the single bank accepts lower returns up front only because it knows that it will be able to charge a higher-than-competitive rate later on (Petersen and Rajan, 1995). The single bank offers this temporary subsidy in order to safeguard this long-term rent, which can therefore be seen as the price for that security (Greenbaum, Kanatas and Venezia, 1989, Sharpe, 1990, Wilson, 1993).

Table 2.2 The origin of rents in bank loans

Paper	Type of paper	Context	Finding
Greenbaum, Kanatas and Venezia (1989)	Theoretical modelling	There are positive external factors involved in bank lending which benefit the bank. However, the existing literature provides no formal explanation for the advantage of forming a bank-customer relationship in a competitive environment.	The paper determines the loan interest rate policy of a lender who is better informed about a client than other potential lenders thanks to an extant relationship. It shows that the optimal loan rate will exceed the incumbent lender's cost of funds and will exceed the average offer of competing lenders. Potential lenders accept short-term losses as the price to pay for attracting the client and reaping expected future profits.
Sharpe (1990)	Theoretical modelling	Customer-bank relationships in lending markets provide banks with greater knowledge about a borrower's characteristics, compared to other banks.	The paper shows that the asymmetric evolution of borrower information in the bank loan market yields ex-post monopoly power even though banks are ex ante competitive. The degree to which banks and their customers use information gathered over time to efficiently adjust investment decisions depends in part upon the ability of banks to pre-commit against using their informational advantage to extract rents.
Wilson (1993)	Theoretical modelling	The fact that a bank-borrower relationship may facilitate the acquisition of private information by the bank largely determines the specificity of commercial banking. How does this influence a bank's loan interest policy over the course of a bank-borrower relationship?	The paper predicts increases in loan interest rates over the bank-firm relationship. Under certain conditions, lenders support borrowers early on and are later refunded for 'subsidising' them in this way.
Rajan (1992)		Small-growth and medium-growth firms often diversify away from bank financing to borrow from less well-informed arm's-length sources.	While informed banks make flexible financial decisions which prevent a firm's projects from going awry, the cost of this arrangement is that the banks gain leverage over the firm's profits once projects begin to reap rewards. By borrowing from arm's-length sources, the firm attempts to limit the banks' power as much as it can.

Multi-banking here is justified as a means of limiting ex-post rent extraction. By borrowing from multiple sources, the firm aims to curb banks' subsequent

bargaining power over the firm's profits by inducing banks to compete à la Bertrand in credit provision (Rajan, 1992).

However, the benefits of having a powerful single bank monitoring a firm's activities, and the valuable transfer of proprietary information that this entails, should not be downplayed excessively. If a firm concludes contracts with multiple fund providers, monitoring becomes diffuse and the original single bank sees its control over the project drastically reduced. At the same time, the firm in question will lose some incentive to make an effort. This trade-off makes it possible for the firm to optimally limit the powers of its bankers by varying the number of lending relationships it establishes.

The existence of this trade-off helps to explain why mixed empirical results are obtained. While Berger and Udell (1995) found that loan rates decrease in relationships over time, Petersen and Rajan (1994) found that loan rates in relationships did not change over time. Other researchers, like Pozzolo (2004) and Degryse and Ongena (2005), found that loan rates in relationships increased over time.

Table 2.3 Loan rates as a function of the duration of a relationship

Loan rates during a relationship	Decrease	No change	Increase
Berger and Udell (1995)	X		
Petersen and Rajan (1994)		X	
Pozzolo (2004)			X
Degryse and Ongena (2005)			X

Berger and Udell (1995) suggested that this discrepancy may well largely depend on whether the data sets included both 'transaction-driven' loans[3] and 'relationship-driven'[4] loans or only 'relationship-driven" loans. Ioannidou and Ongena (2010) provide an additional explanation for these mixed findings. Since, over time, the banks become increasingly able to separate the wheat from the chaff and thus raise the overall quality of their pool of borrowers, and because many of the studies in question run deduced-form regressions on cross-sections of firms, differences in loans' interest rates throughout the course of a relationship may become biased due to such changes in the quality of the pool of borrowers.

Box 2. Single banking versus multi-banking

There is a trade-off between the benefits and risks of single banking and those of multi-banking. A firm that dreads the risk of having a monopolistic banker securing long-term interest by charging higher-than-competitive rates after accepting lower returns up front may opt for multi-banking as an ex-ante means of limiting such ex-post rent extraction. However, by multiplying bank relationships, a firm risks losing the benefits of having a powerful bank monitor the firm's activities and the potentially valuable transfer of information this

[3] Mortgages, equipment loans, motor vehicle loans and other spot loans that small firms typically obtain from multiple banks.

[4] Lines of credit.

entails. Thus, the optimal number of bank relationships can be expected to be neither very low nor very high.

b) Multi-banking as credit continuity insurance

There is a second important problem directly related to the information asymmetry between insiders and outsiders. If a firm's sole bank faces internal problems (e.g. a liquidity shortage) forcing the bank to liquidate its loan, the firm has no choice but to go knocking on another bank's door. Indeed, Detragiache et al. (2000) present evidence suggesting that the more fragile a bank the likelier its clients will be to initiate multi-banking relationships.

Table 2.4 Should banks fear new firms who come knocking on their door?

Paper	Type of paper	Context	Finding
Detragiache et al. (2000)	Theoretical modelling and econometric study.	Multiple banking ensures a more stable supply of credit, and reduces the risk of premature liquidation of the investment project. However if a firm sets out to secure access to non-relationship finance, it is faced with an adverse selection problem.	The more fragile a bank, the more severe the adverse selection problem is likely to be, maybe even altogether preventing access to non-informed finance. This makes it all the likelier that clients will initiate multi-banking relationships from the outset.
Aleksanyan et al. (2010)	Survey	This study's sample includes all companies whose bank loans are listed in the Banque de France's Central Risk Register with a minimum threshold amount of €76,000.	When access to credit deteriorates, a firm will increase its number of bank relationships.
Farinha and Santos (2002)	Econometric study	The data stem from monthly credit reports filed by banks in Portugal between 1980 and 1996.	Firms tend to initiate new bank relationships when their incumbent bank stops extending credit due to poor past performance. Moreover, after making the switch they seem unable to significantly improve their financial performance.

However, the outside banks do not know the quality of a project and are thus faced with an adverse selection problem. The firm in question may well simply be desperate for funds that no lender would normally be willing to supply. Indeed, there are grounds for such scepticism, for studies show that when access to credit (as defined by Musso and Schiavo (2008) for instance) deteriorates, a firm will increase its number of bank relationships (Aleksanyan et al., 2010). Other studies confirm that firms tend to start borrowing from a second bank when their current single bank is reluctant to increase its exposure due to the respective firms' poor past performance and problems in repaying loans (Farinha and Santos, 2002). These same studies also find that, after initiating multiple bank relationships, firms do not generally improve their performance much and increase their reliance on trade credit, suggesting that they are not able to meet their demand for funding.

Faced with such loan applications, an uninformed outside bank, not knowing whether or not a firm is a solid performer, will either simply refuse to extend it any credit or will add a significant premium to the interest rate. In such a

scenario, firms with solid projects may be left to fend for themselves and run the risk of not securing finance. Thus, having multiple bankers ex ante helps to avoid an adverse selection problem ex post, for there are then several well-informed potential lenders. Viewed in this light, multi-banking can be seen as affordable credit continuity insurance or as standard risk diversification on the part of the firm wishing to limit its exposure to bank-specific liquidity or credit risks.

This 'hold-up scenario' can apply not only to the borrowing firm, but also to the lending bank, which may also find itself 'held captive'. Imagine a single bank suddenly being faced with a liquidity shock and left wanting to sell on its loan to an outside, uninformed bank. The potential buyer may then demand a high 'lemon premium' or simply refuse to purchase the loan. And if the cost of keeping the loan on board while riding a liquidity crisis is substantial, the incumbent bank may be better off encouraging its clients to multi-bank, because in such a situation the bank is likelier to be able to sell on its loan at a fair price to another informed bank.

Box 3. Multi-banking as a guarantee of credit continuity

Multi-banking may be a way of curbing an adverse selection problem facing a firm wishing to switch to another bank for whatever reason. If the firm is in a single banking relationship, an uninformed outside bank that doubts the quality of the firm in question may be reluctant to extend it any credit. In this context, ex-ante multi-banking can be seen as affordable credit continuity insurance. This may also hold true for the inside bank, for if this institution happens to be struggling and wishes to shrink its balance sheet and offset some loans, it may not succeed in attracting a buyer if the information asymmetry is too off-putting.

c) Multi-banking as an indication of creditworthiness

Finally, the literature reaches mixed conclusions about information spillovers that a bank-firm relationship can generate. On the one hand, Cole (1998) argued that multiple bank relationships can create a free-riding problem, where diffuse responsibility leads to reduced overall monitoring. On the other hand, multi-banking can be seen as a *quality-signalling* device, helping to bridge the gap between insiders and outsiders.

In the latter scenario, multi-banking sends out the signal that a firm's credit is good (because multiple banks want to lend to it), which attracts further funds. Fama (1985) argued that the positive signals generated by periodic short-term bank loan rollovers constitute credible information about an organisation's ability to meet low-priority fixed pay-off contracts, because *"the bank backs its opinions with resources, or by declining resources."* These positive informational externalities save outsiders at least part of the costly task of redundantly evaluating the respective firm's creditworthiness.

In this case, the establishment or pre-existence of bank relationships facilitates the extension of additional credit lines by other banks. Indeed, Aleksanyan et al. (2010) show that, beyond one or two bank relationships, a bank will have a

greater tendency to extend a loan to a firm if other banks are lending to it simultaneously.

Table 2.5 Multi-banking as a quality-signalling device

Paper	Type of paper	Context	Finding
Cole (1998)	Econometric study	A sample of 5,356 small businesses collected from the US 1993 National Survey of Small Business Finances (NSSBF). A small business is defined as a non-financial, non-farm business employing fewer than 500 full-time equivalent employees.	A potential lender is likelier to extend credit to a firm with which it has a pre-existing relationship as a source of financial services, but is less likely to extend credit if it has dealt with that firm for less than one year. Moreover, it is argued that firms with multiple sources of financial services are less likely to receive credit, suggesting that the private information about a firm generated by a financial institution is less valuable when the firm deals with multiple sources of financial services.
Fama (1985)	Theoretical modelling	Negotiable certificates of deposit (CDs) are traded in the capital market in competition with other securities like commercial papers and bankers' acceptances. Unlike commercial papers and bankers' acceptances, CDs are subject to a reserve requirement. Therefore there must be something special about bank loans that makes some borrowers willing to pay higher interest rates than those charged on other securities of equivalent risk.	Bank loans are valuable because their contracting costs are lower than for outside debt, mainly because bank borrowers are usually also depositors, thereby providing the bank with the competitive advantage of a low-cost ongoing financial track record (Black, 1975). Moreover, signals from short-term bank loans about an organisation's creditworthiness can lower the information costs of other contracts.

2.2 Strategic behaviour

There is a series of important reasons for multi-banking that have nothing to do with the information asymmetry between insiders and outsiders, but instead fall into the category of pursuing strategic objectives. These reasons can be summed up as follows: information leakage management, credit market competition, anti-strategic default discipline, and plain business innovation.

a) Multi-banking to curb the risk of information leaks

For companies sensitive to information leaks (like very innovative firms, for instance), reducing the number of informed banking interlocutors to reduce the possibilities of leaks may a priori seem like the best strategy to follow (Bhattacharya and Chiesa, 1995). Indeed, Yosha (1995) argues that by limiting itself to a single banker, a firm reduces the risk of any breaches of confidentiality.

However, pursuing the same goal could actually lead to a diametrically opposed strategy. For a firm wishing to protect confidential information, one way of disclosing only limited information to banks is to draw exclusively limited credit lines, for which banks are less fussy about X-raying the entire company. Of

course, pursuing such a strategy effectively forces the firm to multiply the number of banks providing it with credit. In short, procuring limited finance from multiple banks dilutes the value of information acquisition by any one bank.

The information externalities generated by the inside banks reassure the additional bank about the value of the company. Therefore, instead of digging up information for itself, the additional bank will take the risk of free-riding if small lending amounts are involved. This then allows the firm to transmit relatively less critical information.

Box 4. Multi-banking may help to curb the risk of information leaks

By drawing only limited credit lines from multiple banks, a firm may reduce the risk of information leakage, because each banker requires less information. Moreover, the presence of other lenders reassures each bank about the quality of the borrowing firm.

b) Multi-banking to benefit from competition in the credit market

Sometimes the rationale behind multi-banking is simply a wish to play competing suppliers of funds off against each other in an attempt to benefit from more favourable loan conditions. Petersen and Rajan (1995) argue that although credit market competition may be detrimental for fledgling companies or firms in difficulties it can nevertheless prove beneficial for mature, more financially solid firms: *"Since uncertainty about a firm's prospects is high when the firm is young or distressed, creditors in a competitive market may be forced to charge a high interest rate until the uncertainty is resolved. This can be extremely distortionary to the firm's incentives and may, in fact, result in the firm not receiving credit at all."* On the other hand, mature and financially solid companies do not share with fledgling companies or firms in difficulties the same uncertainty over their prospects.

The aforementioned survey for Santander Corporate Banking found that a non-negligible proportion - 44%, no less - of surveyed companies were multi-banking in a bid to take advantage of better interest rates and service options resulting from more competitive bidding. Merely maintaining contact with more than one banker can indeed provide a firm with important market information regarding pricing, terms and service.

In principle, having two or three rival banks is sufficient to benefit from the competition between them. Aleksanyan et al. (2010) present evidence that when firms establish relations with two banks, in 87% of cases, the institutions in question belong to different banking groups. This suggests that firms are looking to elicit competition. However, when the number of bank relationships increases, the additional players are less likely to belong to different banking groups. This, in turn, suggests that in such cases the idea of securing competing offers is less relevant and gives way to other considerations.

Table 2.6 Is credit competition beneficial?

Paper	Type of paper	Context	Finding
Petersen and Rajan (1995)	Theoretical modelling + econometric study	A theoretical model is pitched against data from the US Federal Deposit Insurance Corporation (FDIC) Summary of Deposits data from all FDIC-insured institutions.	Although credit competition may be detrimental for fledgling companies or firms in difficulty, it can be beneficial for established ones.
Aleksanyan et al. (2010)	Survey	This study's sample includes all companies whose bank loans are listed in the Banque de France's Central Risk Register with a minimum threshold amount of €76,000.	When firms have two established banks, in 87% of cases, the credit institutions in question belong to different banking groups. This is interpreted as indicating that such multi-banking firms are looking to elicit competition.
Ionnidou and Ongena (2010)	Econometric study	A database of Bolivian banks from Bolivia's public credit registry, containing detailed information on all loans granted by financial institutions between 1999 and 2003.	Outside banks offer dramatically lower interest rates (on average 122 basis points lower), but start raising them again 18 months after the switch and regain normal levels, on average, after 3-4 years.

However, it is possible that the benefits firms enjoy by eliciting credit-market competition are short term and due entirely to the fact that banks temporarily decide to dramatically cut their quoted interest rates, to attract new customers, only to raise them again later on. Ionnidou and Ongena (2010) argue that this is precisely what happens. Based on a sample of Bolivian banks, they show that outside banks on average offer a combined cut of 122 basis points compared to the rates on equivalent new loans offered to existing customers. However, 18 months after the switch, the borrower's new bank starts raising the interest rates on loans, which increase to the rate offered by the borrowing firm's original bank over the following three to four years.

Box 5. Eliciting competition in credit supply may pay off, but is the advantage gained only temporary?

By establishing a multiple bank relationship, a firm often seeks to elicit competition between credit suppliers so that it can benefit from better terms (interest rates, service options) as a result of more competitive bidding. Maintaining contact with more than one bank can be useful for hovering up market information on pricing and terms. However, any firm should be aware that these benefits may be only temporary and that their terms of credit can swiftly return to normal.

c) Multi-banking to foster business innovation

A final reason for multi-banking stemming from strategic considerations may simply be to try and shake things up a bit. Being a defining moment for any firm, turning to a new bank is often a strategic decision taken by its top brass and

considered as a means of exposing the business to fresh pairs of eyes, akin to hiring a consulting firm with an unsullied mindset. New insights into a business can often generate new ideas from which the scrutinised firm can benefit. A new lender, learning about a business for the first time, can potentially come up with innovative business ideas (e.g. cost savings or growth opportunities) that may have been overlooked by previous or current credit suppliers.

2.3 Firm complexity

The sheer complexity of a firm can account for the need to maintain multiple bank relationships, either because its financial needs are highly specific, or simply because it needs more money than any single bank may be willing to supply. In actual fact, the size of a firm is consistently the single most powerful explanatory variable in any statistical linear regression on the number of its bank relationships. A firm's size and the specificity of its needs thus constitute the two proxies of firm complexity we will be using in this section. We will examine their impact on the number of a firm's bank relationships in that order.

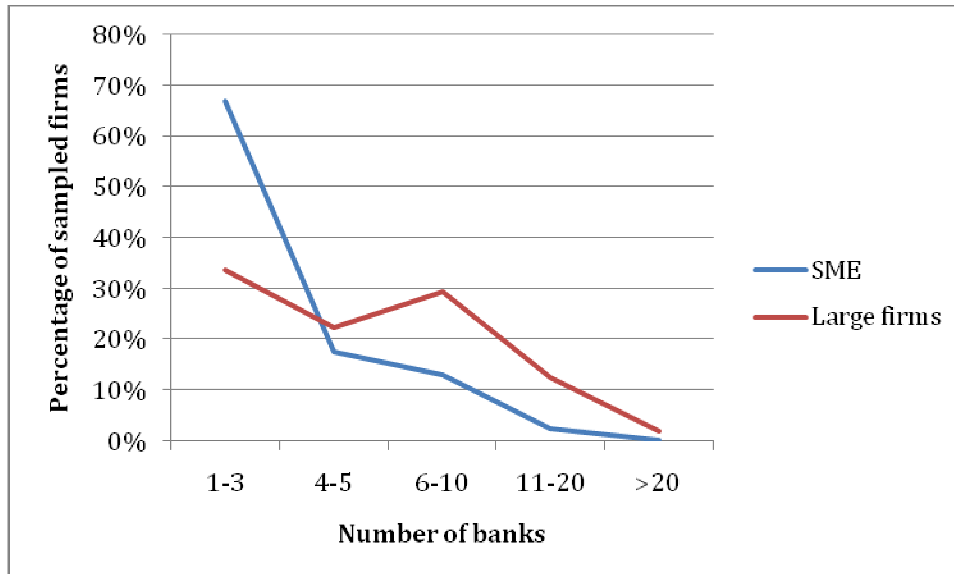
a) The size effect: Multi-banking increases with firm size

It is well-known that large companies account for a disproportionate share of outstanding credit. To illustrate this, empirical assessments often contrast the situation of large companies with that of smaller ones (defined either in terms of turnover or in terms of staff). A survey carried out by Lefilliatre (2000) for Banque de France found that, on average, large companies borrow ten times as much as smaller firms. Although SMEs comprised 85% of the sampled firms, they merely accounted for a third of all the types of credit obtained.

Empirical studies have also established that the number of bank relationships increases with firm size. The aforementioned Santander study (2010) finds that 53% of companies with an annual turnover in excess of £1 million have more than one banking partner. By contrast, multi-banking is significantly less common amongst smaller companies. Indeed, little more than a quarter of firms with an annual turnover below that threshold admit to maintaining relationships with more than one bank.

Furthermore, for a similar share of outstanding debt (14%), half of SMEs rely on up to two banks, whereas half of large firms resort to five or more credit providers. Likewise, up to six banks account for half of SMEs' liabilities, but more than ten bank account for a similar share in firms with more than 500 employees (Lefilliatre, 2000).

Figure 2.1 Distribution of the number of bank relationships
(Lefilliatre, 2000)



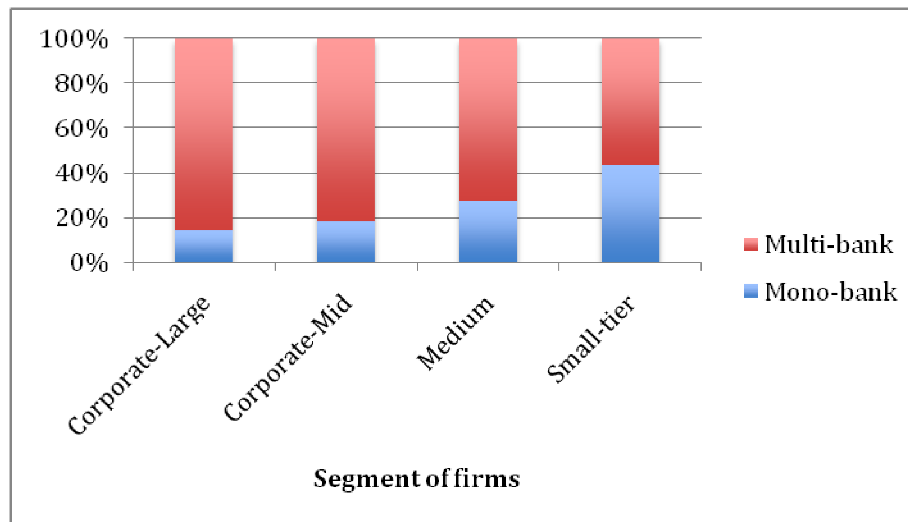
Increased size brings greater complexity to a firm's activities. A single bank may no longer be able or willing to cover a firm's balance sheet expansion. The larger a firm becomes, the more borrowing it is likely to need to do: a single bank may no longer be sufficient to cater to these greater needs. Multi-banking is therefore forced upon any firm intent on raising more funds. Also, a bank may simply be reluctant to underwrite all the loans needed by a firm, seeing this deliberate reticence on its part as a means of reducing its firm-specific credit risk.

Further evidence of the size effect on a firm's number of banking relationships comes from a survey commissioned from the research bureau IVOX by Belgian financial intermediary Isabel of Isabel's client firms. Based on interviews of about 200 financial executives across Belgian companies, the survey's results confirm the tendency for multi-banking to increase in parallel with a firm's size.

The sample covered all of Isabel's clients, which leans heavily towards large or medium-sized corporations and includes few smaller firms. All the companies in question are registered in Belgium. We note that while 86% of large firms maintain relations with more than one bank, this ratio diminishes steadily with size, totalling 57% among small-tier companies, defined as firms with a turnover of less than €1 million and a staff of less than 10.

isabel
beyond banking

Figure 2.2. Multi-banking increases with size (IVOX, 2011)[5]



b) The opacity effect: more opaque firms are likelier to have to rely on a single house bank

In addition, small firms may well rely on banking relations more than larger entities. SMEs' very size makes them de facto more opaque than large firms and thus supposedly more bank-dependent. Indeed, as identified earlier, one of the main advantages of single banking is the establishment of a bank-borrower relationship that plays a significant role in resolving asymmetric information problems by gathering and processing information over the course of that relationship and devising loan terms (including interest rates and collateral) that generate greater incentives to borrow.

Although this may not be the case for all types of firms, there is strong evidence that it is true for small firms. Berger and Udell (1995), for instance, argue that *"small firms with longer banking relationships borrow at lower rates and are less likely to pledge collateral than other small firms."* Indeed, small organisations find it more economical to give a single bank direct access to the organisation's decision-making process than to produce the range of publicly available information needed to secure finance from various providers of funds.

Finally, simple geographical expansion that may accompany a firm's economic growth also means it has to seek services from banks that are present in those

[5] Overview of the structure of Belgian companies, ordered by size (Business Banking Barometer, IVOX, 2011):

Segment	Turnover (T)	And/Or	Personnel (P)	Belgium
Corporate-Large	T≥€250m	Or	P≥1000	353
Corporate-Mid	€250m>T≥€10m	Or	1000>P≥100	7,592
Medium	€10m>T≥€1m	Or	100>P≥10	28,718
Small-Tier	€1m>T	And	10>P	886,359

places, which increases the likelihood of multi-banking for large and complex organisations.

Table 2.7 Firm complexity

Paper	Type of paper	Context	Finding
Lefilliatre (2000)	Survey	This survey used a sample of 3,476 firms registered with the Fiben Database on Companies and the Central Risk Register, two bodies directly related to the Banque de France.	Large companies, merely by virtue of their size, borrow far more than SMEs (on average ten times more). This size effect is also reflected in the fact that, to account for a similar share of liabilities, large firms need far more banks (six banks account for half of SMEs' liabilities, but more than ten banks account for those of firms with more than 500 employees).
Berger and Udell (1995)	Empirical study	Focus on lending by issuing lines of credit to small, mostly non-listed companies that are likelier to be bank-dependent. The sample of firms was taken from the US National Survey of Small Business Finances	This paper analysed the path of loans' interest rates over the course of the bank-borrower relationship and found that small firms with longer banking relationships borrow at lower rates and are less likely to pledge collateral than other small firms. This illustrates the value of single banking.

Box 6. Smaller firms may benefit more from single banking while large ones find more reasons to multi-bank

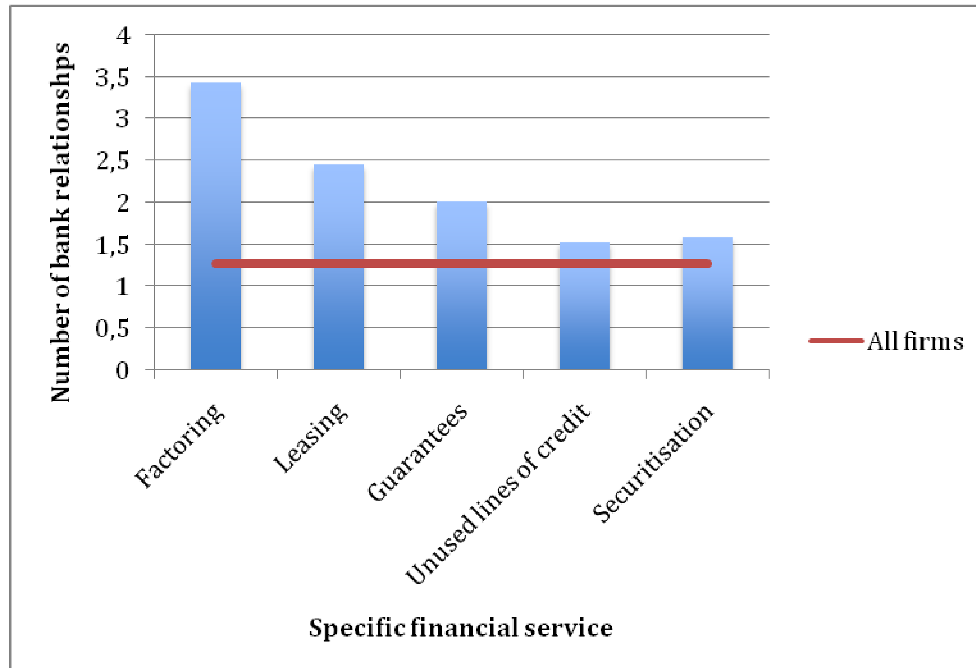
A strong single bank relationship is more important for and beneficial to smaller –and thus more opaque– firms, than it is for larger, usually more transparent firms. Moreover, multi-banking tends to become a necessity for a growing company, not only because it needs to raise more funds in more places, but also because banks want to limit their firm-specific exposure.

c) The specificity effect: complex firms' specific financial needs require multiple specialised institutions

Corporate finance needs can become very specific in large or complex corporations, hence the need for specialised institutions. According to the Santander survey (2010), 43% of surveyed multi-banking firms shop around because their main bank does not offer the right products for their business. For instance, only a few banks are in a position to provide specific services such as leasing, factoring, guarantees or securitisation.

The Isabel 2011 survey aimed at senior financial officers within Belgian firms found that fully 85% of firms maintaining multiple bank relationships claim that doing so enables them to benefit from the biggest advantages and the best products and services. 39% of the surveyed firms said that each bank has its own specialisations, solutions and products.

Figure 2.3 The effect of the specificity of needs
(Observatoire des enterprises, 2010)



At the same time, banks themselves also have a tendency to become less flexible and more specialised (i.e. less 'universal'). Anecdotal evidence of this trend can be found in the financial press. For instance, when Steve Pateman, head of Santander Corporate Banking, was interviewed after the completion of the survey his department had commissioned, he said: *"Businesses have traditionally had one banking partner which has acted as depositor, creditor and guarantor. However, we are increasingly finding that this role has changed and become more fragmented as the overall level of service offered by many banks has become less flexible in meeting the needs of their corporate and commercial customers."*[6]

Box 7. Large or complex firms multi-bank to meet specific financial needs

Large or complex firms often multi-bank because their needs have become very specific and they find themselves struggling to obtain the right products or services. This is exacerbated by the fact that banks themselves tend to become increasingly specialised over time.

[6] http://www.invoicediscounting.com/blog/detail/smes-adopting-a-multiple-bank-approach-to-finance/

3. Banks' reasons for multi-banking

Whereas Section 2 adopted the debtor's point of view, this section sets out to take the creditor's attitude. Firstly we consider how multiplying bank relationships can disincentivise strategic defaulting by firms. Secondly, we look at how effectively a firm, by turning to multiple lenders to meet its borrowing needs, can discipline itself to avoid the continuation of bad projects.

3.1 *Anti-strategic default discipline*

Single banking typically reduces debt renegotiation costs when defaulting on payments because such a bank will be a *"monolithic, readily accessible creditor"* (Rajan, 1992). Firms may thus be tempted to 'strategically default' on their repayments, e.g. in a scenario where managers trigger a default to divert cash from the firm to themselves. Debt structuring should therefore deter such behaviour, but do so without overly compromising unavoidable default scenarios, such as 'liquidity defaults' that are beyond managers' control.

Debt structure affects this trade-off by influencing the price at which creditors can sell off the firm's assets after defaulting. At optimum, debt structure makes debt renegotiation agreements inefficient enough to discourage strategic defaulting, while preventing unavoidable defaults from proving too costly. Indeed, should a liquidity default occur, the liquidation value should be set as high as possible, reducing the costs of such financial distress as far as possible.

Table 3.1 Multi-banking as a disciplinary device deterring strategic defaulting

Paper	Type of paper	Context	Finding
Bolton and Scharfstein (1996)	Theoretical modelling	This paper analysed the optimal number of creditors a company borrows from.	Debt structures that lead to inefficient renegotiation are beneficial in that they deter defaulting, but they also prove costly if defaulting is beyond a manager's control. Optimising debt structure balances these effects.
Bulow and Shoven (1978)	Theoretical modelling	This paper addressed the choice and timing of bankruptcy for a firm in a financial crisis.	In a scenario involving several asymmetrical claimants on a firm, negative net worth is not a sufficient condition to force a firm into bankruptcy. The respective maturity structure and priority structure, the ownership of the firm's debt and the tax system all affect how the proceeds of the firm's liquidation are divided up between the claimants.
Yunus and Stover (2009)	Econometric study	This paper attempts to quantify the notion of propensity to strategic defaulting. The magnitude of such an event is assessed in the context of syndicated loans. The sample includes 8,778 loans awarded to US non-financial firms between 1990 and 2006.	In times of financial difficulty, lenders are amenable to favourably amending loans to a borrower if the cost of making these concessions is lower than the costs they would incur in the event of that borrower's bankruptcy.

Bolton and Scharfstein (1996) and Bulow and Shoven (1978) argued that debt renegotiations are likely to be more complex and thus more costly when multiple creditors are involved, but the loss of ex-post efficiency may be beneficial ex ante, as it limits the firm's incentives to intentionally under-perform when repaying its loans (Yunus and Stover, 2009). Indeed, when renegotiating a loan, if the debtors are numerous and widely dispersed, it is more difficult for the firm to amend the terms of loans to extort favourable concessions from its lenders. As the firm will have to pay more to prevent its creditors from liquidating the assets, this requires managerial discipline. On the other hand, creditors will receive less in the event of a default, not least because carving up a business creates dissynergies.

The principal finding in Bolton and Scharfstein (1996) is that *"it is optimal for firms with low credit quality to (...) borrow from just one creditor, by giving only one creditor a security interest, and by adopting voting rules that make it easier to complete an asset sale or debt restructuring"*. By contrast, *"it is optimal for firms with high credit quality to (...) borrow from multiple creditors, by giving each equal security interests, and by adopting voting rules that allow some creditors to block asset sales."* Finally, they show that *"firms with strong asset complementarities and in noncyclical businesses will tend to borrow from more creditors, spread out security interests and adopt more stringent voting rules."*

Box 8. Multi-banking deters strategic defaulting

In a single bank relationship, a firm may be tempted to strategically default, because this makes it easier for managers to divert cash to themselves. The best way to ensure managerial discipline in this respect is to render debt renegotiation difficult enough to discourage such opportunistic behaviour, but not too difficult as to make unavoidable defaulting too costly. Multiplying the number of bank relationships makes debt renegotiation more complex and thus more difficult. Once again, a balance needs to be struck.

3.2 Asymmetric multi-banking

The literature reviewed above has focussed on the rationale behind multi-banking, whilst all along assuming a situation involving *symmetric* creditors. However, an important issue in multi-banking is whether a firm should spread its borrowing symmetrically or differentially across multiple lenders. Indeed simple, symmetric multi-banking fails to address one key consideration, namely the risk of creditors' opportunistic continuation of bad projects. As we will demonstrate below, a firm can resolve this problem by differentiating its relationships with multiple banks.

To better visualise this problem, Minetti (2003) proposes a thought experiment. Imagine a firm whose activities are funded partly by one or more symmetric relationships with banks and partly by non-bank, arm's-length stakeholders, such as bond markets, trade creditors and shareholders. The first group is far better informed than the second group. The problem here is that knowledge is power. As contracts are necessarily incomplete, well-informed creditors may be

tempted to misbehave and exercise their power when a private restructuring kicks in. This power is twofold: firstly, detailed knowledge not only facilitates the ability to distinguish between a good firm worth restructuring and a bad one worth liquidating, but also enhances lenders' ability to differentiate between valuable and less valuable assets, i.e. to assess the redeployability of the firm's assets in the secondary market.

Penati and Zingales (1997) and Sheard (1994) provided evidence that the negotiating process during private restructurings may lead to a significant reallocation of claims, with well-informed banks using their power to seize resources at the expense of other stakeholders, in spite of the equal priority of their claims. Although everyone agrees that a troubled, yet essentially sound, project should be restructured and continued whereas a bad project in difficulties should instead be terminated and liquidated, well-informed creditors may find it to their advantage to keep bad projects on board because they can ultimately impose greater claims in the restructuring process.

Table 3.2 Creditor misbehaviour in debt restructuring

Paper	Type of paper	Context	Finding
Penati and Zingales (1997)	Case study	Analysis of a 1993 out-of-court restructuring of Ferruzzi Group's $20 billion debt involving some 300 banks and 300 companies.	The authors observed a major redistribution among creditors with equal priority without any gains in efficiency. In particular, the five-bank restructuring committee was favoured at the expense of other creditors.
Sheard (1994)	Case study	Japanese informal debt restructuring, characterised by a 'main bank' leading an out-of-court procedure, is assessed. The Corporate Reorganisation Law is seldom applied, and when it is invoked, this is chiefly for liquidation, as opposed to restructuring, purposes.	The main bank arranges the package and liaises with the other lenders to reach an agreement. This may enable it to boost its claims. Being better informed, the main bank might rationally try to recover as much finance as possible, leaving other creditors saddled with the bad debts. This practice is known as *baba o nuku* (playing the joker) in Japanese.
Picker (1992)	Theoretical modelling	A game-theory model is devised to ascertain whether secured credit may be a device that mitigates creditor misbehaviour.	When the same debtor has multiple creditors, issues arise regarding the monitoring of this common debtor. Creditors fear their fellow creditors. Aggressive creditors seek full payment of their claims from the failing debtor in the hope of avoiding the pro rata regime that would otherwise apply in the event of a bankruptcy.

The idea is that in out-of-court restructuring it pays off to be as aggressive as possible to avoid the pro rata payment regime that a court would normally apply. As Picker (1992) put it, *"when the going gets tough, the tough creditor gets going".* Arm's-length stakeholders, unable to ascertain whether or not the firm is a lemon and incapable of identifying the more redeployable assets of the firm, will tend to remain passive during the restructuring, allowing it to go ahead and running the risk of losing some liquidation value rather than doing any costly digging for information.

Logically, then, relationship banks in a restructuring pool have an incentive to misrepresent the quality of the firm to less-informed arm's-length stakeholders. This holds true regardless of the number of privileged relationship banks, all of which will see an incentive to collude to collectively misrepresent the situation to the more ignorant players, opt to restructure a bad firm and, in so doing, grab the best resources. This shows that the issue of differentiated borrowing is orthogonal to the choice of whether or not to multi-bank.

Minetti (2003), Guiso and Minetti (2003) and Guiso and Minetti (2007) argued that the solution lies in having multiple bank lenders *and differentiating the quality of their information* . In this scenario will see well-informed relationship banks and less well-informed transactional banks. Although the latter are less well-informed, , being concentrated creditors they will play an active role in any restructuring process. As a result, the better-informed banks will have to coordinate their approach with their less well-informed fellow lenders. And since transactional banks know that relationship banks are privy to better information, they will balk at restructuring a firm presented as 'fundamentally good, just needing a little shake-up', and anticipate that they will be at a disadvantage when it comes to picking out the borrower's more redeployable assets. If the information asymmetry is sufficiently pronounced, the transactional banks' best strategy may well be to veto the continuation of any project that is in trouble, thus preventing any opportunistic behaviour, even if this means running the risk of hampering the restructuring of worthy projects and prompting premature liquidation.

Once again, it is all about trading off a debt structure's costs and benefits. By differentiating the allocation of information rights, a firm can discipline its creditors during a private restructuring, preventing them from securing a bigger slice of the cake than they can legitimately lay claim to.

Box 9. Asymmetric multi-banking deters opportunism by well-informed creditors

When a firm is funded partly by well-informed banks in a symmetric relationship and partly by clueless arm's-length stakeholders, the better-informed creditors have an incentive to continue bad projects because their more detailed knowledge gives them the power to seize resources at the expense of the other stakeholders. To avoid this pitfall, firms should differentiate the quality of information between their multiple lending banks, because their less well-informed lenders, dreading losing out, will then have an incentive to veto the continuation of bad projects. However, the downside is that they may risk hindering the restructuring of projects worthy of support.

Empirical evidence suggests that the practice of differentiated funding is widespread. Guiso and Minetti (2003) reported that it is quite common in Germany and Japan to find firms with links to financial institutions ranging from a closely tied 'house bank' to more transactional funding lenders. Elsas (2005) reported that the *Hausbank* of a medium-sized German firm accounts, on average, for 44% of the borrower's debt financing, whereby the average firm has

4.4 bankers. Similar diversity is commonplace in the United States, for research by Petersen and Rajan (1995) based on the 1993 National Survey of Small Business Finances (NSSBF) found that firms' leading lender has an average financing share of between 95% and 76% (depending on the size of the firm in question), while the average firm maintains up to three bank relationships. A 2000 survey of the French banking system conducted by the by Banque de France found that a firm's first bank contributes on average 63.45% of the firm's total liabilities and that the median first bank contributes 58.28%, while the average share of the second bank is as low as 26.67% and that of the third bank is just 15.92%. This confirms the predominant role played by a firm's first banker.

Additional findings by Guiso and Minetti (2003) offer a further insight. *"Lower non-verifiable cash flow and higher reorganisation costs increase the scope for diversified bank funding when stakeholders inactive in the reorganisation cannot screen the quality of the projects but they are neutral when screening is feasible".* Guiso and Minetti went on to say that *"when screening is (not) feasible, the redeployability of the assets of the firm is positively (negatively) correlated with the probability of observing diversified bank funding".* Intuitively, if assets can be recycled without too much trouble, a bank will have a strong incentive to prolong bad projects for the mere sake of seizing the assets. Moreover, they find that the more heterogeneous the assets, the greater information asymmetry is needed, because then even a tiny difference in the quality of information will entail a big disadvantage. Finally, the authors remark that *"where creditors have strong power under the bankruptcy law, the latter offers limited solution for the problems associated with the misconduct of large creditors and* […] *firms* [thus tend] *to choose diversified bank funding more frequently".*

4. Conclusions

Given the importance of debt issues for firms' external financing, a sound understanding of debt financing is key to the successful management of corporate finance. Although hitherto relatively neglected in the academic literature, the optimal number of bank relationships has become an ever more important topic. The present study thus set out to review the literature on the pros and cons of multiple bank borrowing with respect to two criteria: credit availability and credit cost. That review highlighted a number of important points.

The first main finding was that it is difficult to obtain reliable figures about the overall structure of multi-banking, because any empirical result is highly dependent on the nature of the sample used. In general, results will tend to be more biased towards single banking if the sample includes a relatively high proportion of SMEs, because the smaller the firm, the likelier it is to maintain fewer bank relationships.

A second key finding was that multi-banking has gained momentum in the wake of the recent financial crisis. One recent survey commissioned by Santander Corporate Banking found that one in three SMEs relies on two or more banks for financial services, and that the trend towards multi-banking has risen steadily since the credit crunch, with 14% of 'multi-banking firms increasing their number of bank relationships.

A third important finding was that the rationales in favour of multi-banking are multiple. Indeed, the choice of the number of bank relationships that a firm should maintain necessitates consideration of a number of trade-offs. The first of these is that a house bank that is a firm's sole creditor has an incentive to help it through hard times because it knows that it will share in any future surplus generated by the firm. Moreover, having a single powerful bank monitoring the firm's activities entails a valuable transfer of proprietary information. However, if the firm is stuck in a single bank relationship, the bank in question may extort unfavourable conditions from it, thanks to its monopoly on information about the firm. This consideration may tip the balance in favour of multiple bank relationships. However, if a firm contracts multiple fund providers, monitoring of its activities becomes diffuse and the original single bank sees its control over the project drastically reduced. Bearing this in mind, the optimal number of bank relationships will be neither very low nor very high.

One of the variables determining where a firm should position itself along this continuum of possibilities is its size and opacity (which are linked insofar as size means sufficient revenues to cover the high fixed cost of transparency). Indeed, for a firm with very uncertain prospects or which is relatively opaque, the competitive credit market accompanying a multi-banking approach may very well prove counterproductive, by forcing short-sighted lending, as competitive pressure induces creditors to charge a high interest rate until any uncertainty is resolved, resulting in considerable distortions to a firm's incentives.

A second trade-off emerging from this literature review is as follows. Multi-banking sends out a signal that a firm's credit is good, which attracts further funds because periodic short-term loan rollovers by house bank are viewed as credible indicators of a client's ability to meet its repayment obligations (thereby sparing outside banks at least part of the costly task of re-evaluating the firm's creditworthiness). However if all third parties become over-confident about these kinds of signals, the risk is that they will stint on their overall monitoring and end up becoming too complacent.

A third trade-off stems from the fact that, by multi-banking, firms discipline themselves to avoid strategic defaulting by ensuring that debt renegotiation is costly to them because multiple players are involved. However debt renegotiation should not be rendered too inefficient either, otherwise unavoidable defaulting will become too costly.

A fourth trade-off identified from this review of the literature stems from research suggesting that asymmetric multi-banking offers a solution to the problem of opportunistic creditors' incentive to continue bad projects in a symmetric multi-banking scenario. Indeed, the literature in question shows that, by differentiating the allocation of information rights, a firm can discipline its banks during a private restructuring, preventing them from opportunistically extracting resources. However, the prevention of such behaviour must be weighed against the costs of hindering the restructuring of worthy projects.

The final key lesson to be learned from this review of the literature is that firms may shop around for banks not just for economic reasons, but also as a result of strategic considerations, ranging from a determination to reduce the risk of confidentiality breaches by only disclosing information to a limited number of banks, to the wish to play competing suppliers of funds off against each other in order to benefit from more attractive loan conditions.

In conclusion, research has been over the years consistently accumulating evidence that multi-banking can be a powerful financial strategy, while always reminding that there scarcely is an unambiguous rationale in favour of multi-banking and that it is all about understanding the right trade-offs. Moreover, the financial shake-up following the recent credit crunch has prompted renewed interest in multi-banking. This momentum calls for further research in order to better understand the evolution of banking relationships.

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