Long Run Relationships in Banking

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## Contents

1. Introduction ........................................ 2

2. Brief Review of Theoretical Arguments ........ 6
   2.1 Why do long-run relationships exist? .......... 6
   2.2 Liability structure of the bank and relationship banking ... 8

3. Empirical Evidence .................................. 10
   3.1 Event studies ..................................... 10
   3.2 Bank mergers ..................................... 13
   3.3 Cross-sectional tests of relationship lending effects ... 14
   3.4 Bank profitability .................................. 16
   3.5 Discussion of the contradiction of the results in the literature 17

4. Econometric Issues in Measuring the Effects of Relationship Lending ...................................... 20
   4.1 Implicit assumptions in the use of relationship proxies ... 21
   4.2 Bias on account of sample selection ............... 27
   4.3 Approaches to deal with some of the statistical issues ... 30
   4.4 Approaches to account for endogeneity of relationships ... 32
   4.5 Simultaneity of loan contract terms .................. 34
   4.6 Direct evidence on ways by which relationships add value ... 36

Full text available at: http://dx.doi.org/10.1561/0500000041
5 Relationship Banking and Switching Costs 40
5.1 Evidence using firm’s ex-ante choice of single versus multiple banks .................. 41
5.2 Evidence using the duration of the relationship and likelihood of continuation ............ 41
5.3 Evidence using quasi-natural experiments ................................................. 42
5.4 Why would borrowers continue in relationships with hold-up? 45

6 Multiple Banking Relationships 48
6.1 Diversification as a motive for multiple banking relationships .................... 48
6.2 Endogenizing monitoring costs of engaging in multiple banking relationships ........ 50

7 Relationship Banking and Competition 52
7.1 Later theoretical developments .......................................................... 52
7.2 Indirect empirical evidence ................................................................. 54
7.3 Direct evidence .................................................................................... 55
7.4 Competition due to changes in information environment ......................... 60

8 Soft Information in Relationship Banking 64
8.1 Soft information and bank type ............................................................ 64
8.2 Disadvantage to soft information via decentralized bank ...................... 71
8.3 Soft information and collateral ............................................................ 73
8.4 Soft information’s impact on the loan process ........................................ 73

9 Conclusion and Directions for Future Research 77

References 79
Abstract

This monograph surveys the effects of long-run relationships in banking between corporate borrowers and lenders. The first part of the survey analyzes econometric issues in the measurement of the costs and benefits of such relationships. In particular, we analyze potential issues with commonly used proxies of relationship lending — duration, scope and intensity. This analysis, as well as studies that have access to internal bank records, suggest that intensity (fraction of the total lending of a borrower by a given bank) would be a better measure of relationship lending, relative to duration. This analysis also suggests that accounting for endogeneity of relationships and simultaneity of loan contract terms does not qualitatively impact the results of earlier literature. Papers with the ability to circumvent several of the econometric issues are discussed in detail. The second part of this monograph is similar to a standard review where papers relating to hold-up costs, multiple banking relationships, impact of competition on relationship banking, and measurement of soft information in banking are covered.

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Relationship banking is defined as repeated purchase of banking services by firms from the same financial intermediary (or set of financial intermediaries) over time. To fix ideas, consider the situation where a borrowing firm is choosing a bank to take a loan. Within the framework of relationship banking, the proposed loan’s price and non-price terms would depend on other financial services for which the borrower uses the bank, as well as the potential for future lending and other financial services for which the borrower is likely to retain the bank. A natural corollary of the above is that we should expect the likelihood of a relationship loan as well as its price and non-price terms, to vary from the ‘transactional’ likelihood and price and non-price terms of a similar loan by the same bank to the same borrower, where the transactional terms of the loan are those that would prevail in the absence of such cross-product and inter-temporal considerations — both for the borrower and the bank.

In simple terms, the possibility of cross-product interactions and repeat business between the bank and the borrower creates gains to trade from maintaining this relationship for both counter-parties. There are several sources for these gains, especially in the context of lending.
between banks and borrowing firms. These are: (1) inter-temporal smoothing of loan contract terms; (2) reduction of information asymmetry between the borrower and lender; (3) continual monitoring of the borrower; (4) certification of the borrower quality to external financiers, and (5) optimal liquidation/continuation decisions by the lender when the borrower is in distress.

Most papers on relationship banking examine how these potential gains to trade benefit the borrowing firm. Thus, the default point of view is from the purchasing firm’s perspective. A notable exception to this point of view is that proposed by Bharath et al. [2007], who examine the decision problem from the bank’s perspective.

The structure of this review is as follows. In Section 2, we briefly review the theoretical arguments for the prevalence of long-run relationships in banking. In Section 3, we review evidence on the ways by which relationships add value. Recent literature challenges the traditional argument that bank relationships are special and add value. We review arguments for and against this assertion, using evidence both from event studies from outside the United States, as well as non-event study-based research. We conclude this section by speculating on potential causes for the conflicting results.

In Section 4, we critique existing empirical approaches used to measure relationship banking effects, focusing on the validity of the commonly used empirical proxies to capture the underlying economic constructs of relationship banking. Interestingly, for example, from the survey in Elsas [2005], internal bank records suggest that banks view relationship intensity (the fraction of the borrower’s total lending by a given bank) as one of the important determinants of relationship lending. In contrast, duration and scope do not figure as prominently. This provides a good empirical justification for recent use of intensity measures in studies such as Bharath et al. [2011].

A key empirical issue that is identified is that for commonly used proxies (duration, scope and intensity) to have their hypothesized effects on loan contracts, the researcher needs to make two assumptions: (1) the correlation of these proxies with the non-public information that the lender has about credit risk of the borrower is positive, and (2) this non-public information implies a lower credit risk of the
Introduction

firm than its publicly available signal of credit risk. We argue that these conditions may not always be satisfied in the empirical data.

We cover potential sample selection issues here in the context of commonly used empirical models. Lastly, in this section, we explore the connections between borrower hold-up and bank hold-up. We show that both phenomena are manifestations of splitting the gains to trade from engaging in relationship banking. We also show that an increasing loan rate with relationship duration is not necessarily indicative of borrower hold-up, as commonly interpreted.

In Section 5, we survey the burgeoning literature on hold-up (switching costs) of borrowers by banks that circumvent some of the empirical issues raised above. In Section 6, we examine the motivations for firms to engage in multiple banking relationships that are not related to circumscribing the rents arising from hold-up. In Section 7, we examine the impact of competition on relationship banking. Theory and empirical evidence suggests a complex relationship between the two. In Section 8, we review more direct evidence on the importance of soft information in relationship banking. This evidence provides a micro-foundation for the earlier papers’ claims that banks are indeed special. Thus, we conclude the bank relationships continue to be important, notwithstanding the contradictory evidence reviewed in Section 3.

In Section 9, we conclude with directions for future research.

For reviews of earlier papers, we refer the reader to surveys by Bhat-tacharya and Thakor [1993], Boot [2000], Ongena and Smith [2000a,b] and Gorton and Winton [2003]. Other surveys that partially cover papers on relationship banking include Drucker and Puri [2007], Strahan [2007], and Freixas and Rochet [2008].

The very large number of papers in this area necessitates exclusion of several papers in this review and we apologize to authors whose relevant articles may not be cited here. Degryse et al. [2009], as well as the meta-analysis by Kysucky and Norden [2013], provide readers with a very comprehensive list of relevant references. Our survey emphasizes deeper coverage of the referenced papers. This review has a larger sampling of studies that use US data sets. Nevertheless, we do cover several studies based on European data, as well as a few using Japanese data.
In addition, there is significantly larger coverage of empirical work, both in number and depth of coverage, relative to theoretical papers. Lastly, some important branches of literature that are closely linked to relationship banking have been excluded due to length and time considerations. Specifically, the comparison of bank- versus market-dominated systems [Allen and Gale, 2000, 2004, Allen and Carletti, 2009] would merit a separate survey article in itself. Therefore, we do not include it. In the context of this literature, there is also a large literature on the real effects of such main banks, for example, as studied in Hoshi et al. [1991]. These effects are also not covered in this monograph. The connections between relationship banking and investment banking are also not covered here. We refer the reader to the survey by Drucker and Puri [2007] for insights into this topic.
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