Financial Statements, Attestation Level and Lending Decision by Small Banks

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Abstract

The loan decision model of small banks is known to differ from loan decision model of large banks. This study focuses on small banks and examines whether financial statements are an important consideration in the loan decision and whether the level of attestation affects loan officers' perception of the importance of those financial statements. The survey results of 55 loan officers from 6 small banks indicate that while financial statements are perceived as important information in the loan decision of small banks, loan officers may not adequately consider the credibility of the financial statements when evaluating loans.

Introduction

Lending to small businesses constitutes an important area of research in finance. Small business borrowers tend to be more informationally opaque than their larger brethren and thus pose greater challenges to lenders (Cole, et al., 2004; Berger and Udell, 2006). It is well known that commercial banks use both financial and non-financial information for their loan decision making. Novice loan officers are generally taught to seek and organize information using a framework called the five C's of credit (character, capacity, capital, conditions, and collateral), giving a common structure to their judgments (Beaulieu, 1994). However, large banks rely more on hard financial information, computer-based financial models and centralized decision making, as a basis for their loan decision, while small banks whose loan clients are mostly small business borrowers rely more on non-financial information collected by personal contact, community ties and close lender–borrower relationships. As large banks have more branches that are more geographically dispersed than do smaller banks, it becomes more difficult for the top management of large banks to monitor the behavior of employees, and agency problems arise (Jensen and Meckling, 1976). To ensure that loans are evaluated in an appropriate manner, large bank managers develop loan approval systems that employ readily available and verifiable information about the loan applicants, such as financial statements information. In contrast, small banks face agency and control problem that are less severe than large banks. Small banks are likely to have private non-financial information about borrowers because small banks have a better understanding of local business and economic conditions through informal meetings and conversations with customers (Feldman, 1997).

Cole, Goldberg, and White (2004) found evidence that the lending decisions of large banks are more likely to be a function of financial variables, whereas the lending decisions of small banks are more likely to be a function of variables indicating pre-existing relationships between the bank and loan applicants. Many other studies confirm our understanding that non-financial information is important in the lending decision of small banks. (Cowen and Page, 1982; Whiteman, 1998; Cole, 1998; Berger and Udell, 1995; Berger and Udell, 2002; Elyasiani and Goldberg, 2004; Ebben, 2004; Berger et al., 2005).

Despite those previous study results that confirm the importance of non-financial information in small banks, it is also well known that small banks require financial information, including business and personal financial statements, in a loan application package (Barret 1990). Small banks require updated financial statements to manage loan clients. The majority of small banks require some form of auditor association in the preparation of financial statements. Some small banks require audits or reviews while others accept financial statements either compiled by the independent public accountant (CPA) or prepared by the borrower. Nevertheless, it is not clear whether these financial statements are actually an important consideration in the lending decision of small banks or whether small banks require them simply because government regulatory agencies require banks to obtain such documentation in loan processing.

The primary purpose of this study is to investigate whether financial statements are an important consideration in lending decisions of small banks. The secondary purpose of this study is to examine whether the different types of attestation influence the loan officers' perception of the importance of financial statements in the lending decisions. This study also investigates whether that perception differs among different groups of loan officers such as more experienced vs. less experienced, and those with undergraduate business (or accounting) degrees vs. those with non-business degrees.

Background and Hypotheses

Though many prior studies stressed the importance of non-financial data in the lending decisions of small banks, the approval procedures of small business bank loans have become more formal and the relationship with loan officers less personal (Barret 1990). Berger and Udell (2006) found that various lending technologies that are based on 'hard' quantitative information are targeted to both large and small business borrowers. Small banks may have adopted those technologies as they grew larger in size. The average size of small banks grew through a striking amount of consolidation in the banking industry in the last two decades. Since 1985 the average asset size of U.S. banks (in real terms) has more than tripled and the number of commercial banks in the United States has fallen to half.(Mester, 2007). Stanga and Tiller (1983) suggested that the financial information needs of loan officers who make lending decisions involving small private companies are actually similar to the information needs of loan officers who make lending decisions involving large public companies. Beaulieu (1994) found that though loan officers use non-financial information to assess the credibility of financial statements by judging the credibility of borrowers, the officers use non-financial information only when financial information supports loan approval. They tend to ignore non-financial information when financial information does not support approval. The authors' initial interview with senior officers of four small banks revealed that financial statements are one of many variables considered important in the lending decision. Examination of loan evaluation working papers of two small banks revealed that information from financial statements were included in the data evaluated. The preceding findings lead to the first hypothesis:

H1: Financial statements are an important consideration in the lending decision of small banks.

The independent public accountant has been permitted to perform three levels of financial statement service since July 1, 1979 (Martin et at. 1988). These are compilation, review and audit. Each level of service results in a different level of assurance and an appropriate accountant's report. The Statements on Standards for Accounting and Audit Services (SSARS) 1 issued by the Accounting and Review Services Committee of AICPA clearly states the different level of assurance among these three services. The compilation report provides statement users no assurance. The review report offers limited assurance. The highest level of assurance is provided by the audit report.

When loan officers consider financial statements in a lending decision, they should find that audited financial statements are more credible than reviewed financial statements and, in turn, reviewed financial statements are more credible than financial statements compiled by a CPA or prepared by the borrower. Three prior studies considered different levels of auditor attestation associated with financial statements. Bandyopadhyay and Francis (1995) presented loan officers with a commercial loan application that included financial information. Three different case versions included compilations, reviews, and audit reports. Using loan officers as subjects, they found that both the decision to lend and the interest rate to be charged were related to the level of attestation. Higher loan approval rates and lower interest rates were associated with audited statements.

Two other studies, however, reported conflicting findings. Johnson, Pany and White (1983) asked loan officers to evaluate financial statement information, approve a loan, and determine an interest rate. Four levels of attestation were provided: no attestation at all, compilation, review, and audit. The results of their study indicated that the level of attestation had no economic effect on either the loan acceptance or interest rate decision. Wright and Davidson (2000) examined the effect of auditor attestation on commercial lending. Results of their study indicated that auditor attestation had no effect on risk assessment, and, in turn, on the decision to recommend the loan.

Initial interviews with senior officers of small banks also revealed that audited financial statements are rarely required for a loan application in small banks. Small business borrowers' ability to use audit-level services is limited because audits are often prohibitively expensive (Martin et al. 1988). During the initial interview, a bank officer mentioned that the high cost involved in auditing and the competition among small banks prohibit those banks from requiring audited financial statements. Other officers stated that compilation by a CPA is sufficient for a loan evaluation in small banks. They suggested that rather than assessing the credibility of financial statements through independent attestation services, they evaluate the credibility of financial statements by judging the credibility of the borrower who provides them. Based on the previous conflicting research results, a second research hypothesis is tested in the null form.

H2: The level of attestation has no significant difference in the perception of the importance of financial statements in the lending decision of small banks.

A possible reason why the level of attestation has no effect in the loan decision by loan officers is suggested by Waterston (1979): loan officers may not understand the differences among audits, reviews, and compilations. Wright and Davidson (2000) proposed training and educating loan officers to explain the difference among audits, reviews, compilations and information prepared by management. If we assume that training and education are effective methods of teaching loan officers such knowledge, the response of loan officers who have more banking experience and those with a business degree may be different from those of loan officers with less experience and those with non-business degrees. Loan officers with more banking experience might have more training and loan officers with business degrees might have taken accounting courses, thereby learning the different levels of attestation of financial statements. Thus, a final research hypothesis is tested.

H3: There are significant differences in the perception of the importance of different levels of attestation based on banking experience and business coursework in college.

Research Method

Sample Selection

The sample for this study consisted of loan officers of six small banks in the Southern California area. The size of total assets of these banks ranged from about four hundred million dollars to three billion dollars. Authors contacted either the president or vice president of operations at each bank and asked for their cooperation on data collection. A total of 105 survey forms with self-addressed envelopes were delivered for them to distribute to loan officers, and 57 surveys were collected. Members of each bank's board-level loan committee were allowed to participate in the survey as well. After eliminating surveys with missing responses, the usable sample consisted of 55 responses. The survey included several demographic questions such as banking experience and college major (or minor). Table 1 presents demographic characteristics of the respondents.

Table 1
Demographic Characteristics of Loan Officers
(N = 55)

Banking Experience	N
3 years or more	26
Less than 3 years	29
Major (Minor) in College	
Business Administration or accounting	30
Non-business	25

Survey Instrument

In order to measure the loan officers' perception of the importance of financial statements in lending decisions, an opinion survey questionnaire was developed. It included 19 variables that may be considered in lending decisions. Sixteen variables were selected from results of initial interviews with senior bank officers and from loan evaluation worksheets of two community banks. Three variables—client education, legal structure of the business and client's personal net worth—were selected from the study of Page, Trombetta and Werner (1977). Respondents were instructed to record their opinion on the importance of loan decision variables on a seven-point scale ranging from "not at all important" to "extremely important." Respondents were asked to assume that the borrower applied for a commercial line of credit loan that is significant in dollar amount, but less than the respondent's legal lending limit. From the initial interviews with senior bank officers, authors found that most commercial line of credit loans are less than two million dollars. Respondents were assured of complete anonymity and were requested to disregard whether such data including financial statements attested by a CPA is required by any other parties including regulatory agencies.

Research Results

To test the importance of financial statements in the lending decision, the overall means for considerations in lending decision was calculated. The results are presented in the Table 2. Three non-financial variables—loan purpose, collateral and years in current business—were the three top-ranked considerations in the lending decision. These three variables were identified as very important by the senior officers whom the authors interviewed. The importance of personal collateral in relationship lending was also found in the study by Brick and Palia (2007). Financial statements with CPA involvement—whether audited, reviewed or compiled—were also perceived as important considerations. The mean scores of the first three non-financial variables and the second three financial statements variables are not statistically different. Other information like nature of the business, tax return, credit scores and physical observation of the business are perceived as important information in the loan decision of small banks. Client education, client race/nationality and client gender were not considered as important in the loan decision. Therefore, H1 is supported.

Table 2
Mean Scores of Consideration in Lending (Overall)

Consideration	**Mean**
Loan purpose	6.20
Collateral	6.18
Years in current business	6.07
F/S audited by CPA	6.01
F/S reviewed by CPA	5.98
F/S compiled by CPA	5.94
Nature of business	5.94
Tax return	5.90
Client credit score	5.89
Physical observation of business	5.81
Client personal net assets	5.63
Guarantor	5.56
Other business experience	5.49

Reputation of client	5.12
F/S prepared by client	5.00
Legal structure of business	4.70
Client education	3.74
Client race/nationality	1.98
Client gender	1.72

Scale 1 Not at all important
4 Neutral
7 Extremely important

The difference of mean scores of the three different levels of financial statements involving a CPA is not significant. Though three levels of financial statements involving CPAs were perceived as important, financial statements prepared by the client (mean = 5.0) were not considered as important as financial statements involving a CPA (mean = 6.01 for audits, 5.98 for reviews and 5.94 for compilations). The t-value of the comparison of means between financial statements prepared by clients and those complied by a CPA was 5.69 ($p<.01$). With regard to the perceived importance, only financial statements prepared by the client are significantly different from the statements involving a CPA. Based on these results, H2 is partially rejected. As long as a CPA is involved, the level of attestation does not affect the perceived importance. However, financial statements prepared by clients are not perceived as important information, compared to those financial statements with CPA involvement.

Table 3 shows mean scores of considerations by different groups. It is noteworthy that financial statements compiled by a CPA were perceived as most important among three kinds of financial statements involving CPAs in the less experienced group and the non-business major group. T-test results (Table 4) show that between the more experienced group and the less experienced group, there is a statistically significant difference in mean scores of financial statements compiled by a CPA (t-value=2.10, $p<.05$) and financial statements prepared by clients (t-value=2.06, $p<.05$). More experienced loan officers recognized that the compiled financial statements and financial statements prepared by clients are less credible than the two types of financial statements with some form of attestation.

The other three variables that have significant differences between the more experienced and the less experienced groups are client experience in current business, client personal net worth and guarantor. The more experienced group put more emphasis on these three variables than the less experienced group. There is no statistically significant difference in any one of 19 variables for college major background at the .05 significance level. Therefore, H3 can be supported on the basis of banking experience only.

Table 3
Mean Scores of Consideration in the Lending Decision by Group

Consideration	More Experience	Less Experience	Business	Non Business
Loan purpose	6.23	6.17	6.20	6.20

Collateral	6.23	6.13	6.23	6.12
Years in current business	6.23	5.93	6.16	5.96
F/S audited by CPA	6.03	6.00	6.10	5.92
F/S reviewed by CPA	6.00	5.96	6.03	5.92
F/S compiled by CPA	5.69	6.17	5.83	6.08
Nature of business	5.96	5.93	5.96	5.92
Tax return	5.96	5.86	5.83	6.00
Client credit score	5.96	5.82	5.80	6.00
Physical observation of business	5.80	5.82	5.83	5.80
Client personal net assets	5.88	5.41	5.66	5.60
Guarantor	6.00	5.17	5.73	5.36
Other business experience	5.61	5.37	5.43	5.56
Reputation of client	5.26	5.00	4.96	5.32
F/S prepared by client	4.69	5.27	4.86	5.16
Legal structure of business	4.65	4.75	4.73	4.68
Client education	3.69	3.79	3.73	3.76
Client race/nationality	1.98	1.75	2.00	1.52
Client gender	1.80	1.65	1.83	1.60

Scale 1 Not at all important
4 Neutral
7 Extremely important

Table 4
Results of t-tests (Difference in Experience)

Consideration	t-value
F/S prepared by client	2.06*
F/S compiled by CPA	2.10*
Experience in current business	2.03
Client personal net worth	2.26*
Guarantor	4.89**

* p<.05, one tailed test
** p<.01, one tailed test

Conclusions

The results of this study provide evidence that financial statements information is perceived as important information used in the loan decision of small banks when those statements have CPA involvement. The finding of previous studies that small banks rely heavily on non-financial information is also confirmed in this study.

The findings suggest that loan officers of small banks do not realize the significant difference in credibility among financial statements of different levels of attestation. The implications for practice are that small bank loan officers may not adequately consider the credibility of financial information when evaluating commercial loans. Some loan officers may not think that the size of the difference in credibility among financial statements of different levels of attestation does not justify the significant amount of cost related with the attestation services provided by CPAs. Loan officers with a business degree should have taken some accounting classes in college and were expected to recognize the difference in credibility among different levels of attestation. But results of this study indicate that their perception of the importance of attestation is not significantly different from that of loan officers with a non-business degree. Introductory accounting courses taught in college should be designed to cover the difference in credibility among audits, reviews, compilations and information prepared by the management.

The results of this study also indicate that loan officers may have learned, through banking experience, that the credibility of compilations and client-prepared information is much lower than that of independent reviews and audits. Training may also be warranted to teach the difference in credibility among financial statements with different levels of attestation.

This study does not provide insight into the possible interactive effect of loan officers' educational background and experience on the loan officers' perception of the importance of attestation. A future study in the form of a multivariate analysis is warranted to provide insight into the interactive effects among such variables.

Finally, it is important that the findings and conclusion of this study be considered in light of the limitations of a small and regional sample and possible nonresponse bias. The findings of this study may not be generalized to all loan officers of small banks.

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