Financial Statements and Lending Decision by Large Banks and Small Banks

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The loan decision model of small banks is known to differ from loan decision model of large banks. This study examines whether there is a significant difference in utilizing financial statements information between at small banks and at large bank when they make a lending decision. The survey results of 55 loan officers from 6 small banks and of 49 loan officers from 3 large banks indicate that while financial statements are perceived to be important information in the loan decision at both large and small banks, loan officers of small banks consider the credibility of the financial statements less adequately than those of large banks when evaluating loans.

Field of Research: Accounting and Banking

1. Introduction

Bankers are known to be major users of financial information. Large banks rely on hard financial information, computer models and centralized decision making, as a basis of loan decision. Small banks, however, rely more on non-financial information collected by personal contact, community ties and close lender–borrower relationships, because small business borrowers who are major loan clients of small banks tend to be more informationally opaque than their larger brethren (Cole, et al, 2004; Berger and Udell, 2006). Small banks depend more on non-financial information principally because: (1) Reliable financial data of small business loan applicants are not available, and (2) Small banks have better understanding of local business and economic conditions through informal meetings and conversations with business owners (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 small banks rely more on non-financial information while large banks rely more on hard financial information. (Cowen and Page, 1982; Whiteman, 1998; Cole, 1998; Berger and Udell, 1995; Berger and Udell, 2002; Elyasiani and Goldberg, 2004; Ebben, 2004).

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It is also well known that both small and large banks require financial information, including business and personal financial statements, in a loan application package (Barret, 1990). Banks require updated financial statements to manage loan clients. Most banks require some form of auditor association in the preparation of financial statements. Some banks require audit or review while others require compilation by the certified public accountant. Nevertheless, it is not clear whether these financial statements are actually an important consideration in lending decision by banks, especially by small banks, or whether 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 large and small banks. The secondary purpose of this study is to examine whether the level of different types of attestation of financial statements influences the perception of the importance of financial statements in lending decisions.

2. Hypotheses

The difference of the loan decision model of large banks from the loan decision model of small banks may be explained by operational and organizational differences between small and large banks. (Cole, et al, 2004)
The operational differences between small and large banks with respect to lending can be explained by the theory of hierarchical control (Williamson, 1967). As the size of an organization increases, it loses control between successive hierarchies. As managerial orders and directions are transmitted to successive hierarchical levels, distortions increase. Consequently, a large bank needs explicit rules in the lending process to avoid distortions. However, as there are fewer intermediaries between top management and lending officers at small banks, management of small banks can grant loan officers more discretion in the lending process.
Similarly, as an organization increases in size and geographic extent, it becomes more difficult for the top management to monitor the behavior of employees, and agency problems arise. To maintain control over the whole organization, large banks must establish procedures that will be followed throughout the whole organization. Therefore, large banks may develop loan approval systems that are homogeneous across the branches and personnel. These systems must employ readily available and verifiable information about the borrowers, such as a firm’s financial statements. This leads to a cookie-cutter approach for the loan approval process of large banks, where standard financial variables of potential borrowers significantly affect the loan decision.
In contrast, small banks face agency and control problems that are less severe. Top management can more easily monitor the behavior of loan officers and coordinate operations. Small banks are more likely to have private information about potential borrowers because of proximity and personal relationships between bankers and customers. Consequently, small banks may evaluate small business loans using information about the borrower obtained through

relationships and from other sources. Thus, a first hypothesis is proposed as follows.

> H1: Financial statements are considered to be more important at large banks than at small banks in the lending decision.

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 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. In contrast, loan officers of large banks are

expected to know the difference of credibility of financial statements better than loan officers of small banks because large bank use financial statements more than small banks in lending decisions. Based on the previous research results and interview with bank loan officers, a second and a third research hypothesis are proposed.

H2: The level of attestation has significant difference in the perception of importance of financial statements in the lending decision at large banks

H3: The level of attestation has no significant difference in the perception of the importance of financial statements in the lending decision at small banks.

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3. Research Method

The sample for this study consisted of loan officers of six small banks and three large banks in the Southern California area. The criterion to classify a bank into small or large bank is the size of total assets. The size of total assets of each small bank does not exceed 3 billion dollars. The size of total assets of each large bank exceeds 20 billion dollars. Author contacted senior officers of each bank and asked for their cooperation on data collection. A total of 105 survey forms were delivered to small bank officers and a total of 120 survey forms were delivered to large bank officers to distribute to loan officers. 57 surveys were collected from small banks and 50 surveys were collected from large banks. After eliminating surveys with missing responses, the usable sample consisted of 55 responses for small banks and 49 responses for large banks. In order to measure the loan officer's perception of importance of financial statements in lending decision, 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 bank officers and from loan evaluation worksheets of two banks. Three variables—client education, legal structure of business and client personal net worth—were selected from the study by Page, Trombetta and Werner (1977). Respondents recorded 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 assured of complete anonymity and were requested to disregard whether such data is required by regulatory agencies.

4. Findings

To test the importance of financial statements in the lending decision, the overall means for considerations were calculated. The survey results of large banks are presented in the Table 1. Audited financial statements, loan purpose and reviewed financial statements were the three top-ranked considerations in large

banks. Collateral, CPA-compiled financial statements, and tax returns were also perceived to be important considerations. Financial statements prepared by client, however, were not perceived to be important in the lending decision. Non-financial variables such as years in current business, physical observation of business, nature of business and guarantor were also perceived to be important in the lending decision.

The survey of small banks yielded slightly different results. Those 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. Financial statements with the involvement or input by a CPA—whether audited, reviewed or compiled—were also perceived to be important considerations by loan officers. Other information such as the nature of business, tax returns, client credit scores and physical observation of business ere perceived to be important information in the loan decisions of small banks. On the other hand, client education, client race/nationality and client gender were not considered to be important in the loan decision.

Three non-financial variables-legal structure of business, other business experience and client reputation-were perceived to be significantly less important considerations by large banks compared to small banks (Table 3). However, all three forms of financial statements with the involvement of a CPA-audited, reviewed or compiled-were considered important in both large and small banks. The mean scores of those three financial statements-related variables are not statistically different between large and small banks. Therefore, H1 is not supported.

To test H2 and H3, the difference of mean scores of the three different financial statements-related variables involving a CPA were analyzed for both large and small banks. A statistically significant difference was found between the mean scores of compiled financial statements and reviewed/audited financial statements in large banks. The t-value of means between financial statements compiled by a CPA and those statements reviewed by a CPA was 1.95 ($p<0.1$). The t-value of means between compiled financial statements and audited financial statements was 2.77 ($p<0.01$). There was no significant difference between mean scores of CPA-reviewed financial statements and CPA-audited financial statements. Therefore, H2 is partially supported.

Table 1
Mean Scores of Consideration in Lending of Large Banks

Consideration	**Mean**
F/S audited by CPA	6.28
Loan purpose	6.14
F/S reviewed by CPA	6.10
Collateral	6.04
Tax return	6.04
F/S compiled by CPA	5.65
Nature of business	5.65
Years in current business	5.62
Physical observation of business	5.61
Client credit score	5.60
Guarantor	5.46
Client personal net assets	5.44
Other business experience	5.08
F/S prepared by client	4.91
Reputation of client	4.63
Legal structure of business	4.28
Client education	3.77
Client race/nationality	2.02
Client gender	1.83

Scale	
	1 Not at all important
	4 Neutral
	7 Extremely important

Table 2
Mean Scores of Consideration in Lending of Small Banks

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

In small banks, the difference of mean scores of the three different financial statements involving a CPA is not significant despite the fact that audited financial statements were perceived to be more important than reviewed financial statements and, in turn, reviewed financial statements are as more important than compiled financial statements in small banks. In perceived importance, only financial statements prepared by the client is significantly different from other financial statements involving a CPA. The t-values of means between financial statements prepared by clients and those complied by a CPA was 5.69 ($p<0.01$).

Based on the results, H3 is supported. As long as a CPA is involved, the level of that involvement, in other words, the level of attestation does not matter much in the perception of importance at small banks. On the other hand, client-prepared financial statements with no CPA involvement are not perceived to be important

as those financial statements with CPA involvement.

Table 3

Results of t-tests (large banks vs small banks)

Consideration	t-value
Legal structure of business	1.68*
Other business experience	2.40**
Reputation of client	1.96*

* p<0.10, two tailed test

** p<0.05, two tailed test

5. Conclusion

The results of this study provide evidence that financial statements information is perceived to be important information used in the loan decisions at both large and 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 here suggest that loan officers at both large and small banks do not fully realize the significant difference in credibility among financial statements of different levels of attestation. The implications for practice are that bank loan officers, especially those at small bank, may not adequately consider the credibility of financial information when evaluating commercial loans. Though the compilation report of CPAs does not provide financial statements users any assurance, small bank loan officers consider compiled financial statements as important as those statements that have been reviewed or audited. Some loan officers may not think that the difference in credibility associated with the various levels of attestation does not justify the significant amount of cost related with the attestation services provided by CPAs. Training bank loan officers may be warranted to teach the significant differences in credibility among financial statements with different levels of attestation.

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

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