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PREVIEW

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DETERMINANTS OF NEW BANK PERFORMANCE

by

Nasser Arshadi

A DISSERTATION

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In Partial Fulfillment of Requirements
For the Degree of Doctor of Philosophy

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TITLE

DETERMINANTS OF NEW BANK PERFORMANCE

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CHAPTER ONE

INTRODUCTION

Most studies in the area of new banks have dealt with the impact of new bank entry on the performance of existing banks - yet very little is known about the performance of new banks themselves. The intention of this study is to better determine those factors that influence new bank performance.

1.1 Background

Due to the agricultural depression of the 1920s and the Great Depression of the 1930s, more than half of the 30,000 existing banks were forced either to close or merge with other banks. Failing banks were usually small and/or rural, whose size and location prevented adequate diversification of their activities and facilities. Those heavily concentrated in one industry failed when conditions in that industry worsened. This situation created such a severe negative impact on the public's confidence in banks that Franklin Roosevelt's administration was forced to declare a bank holiday in March of 1933. Based on this experience, a regulatory framework exists today, concentrated in banking commissions in each of the 50 states and in the following three federal banking agencies:

1. The Federal Deposit Insurance Corporation (FDIC), which insures the deposits of more than 95% of all U.S. banks;

2. The Comptroller of the Currency, which issues federal bank charters and regularly examines all national banks (that is, about one third of the nation's banks);

3. The Federal Reserve System, which supervises the activities of all state-chartered banks that belong to its system (about 1100 banks) and conducts the nation's monetary policy.

Of these agencies, only the Comptroller of the Currency and the 50 states' banking commissions can issue charters for new banks. Organizers filing applications are required to submit background information, defining the area the proposed banks would serve, estimating the new bank's deposit and loan volume, expenses and profitability for the first three years of operation, and documenting the need for the new bank. Federal charter applicants must define the primary service area of the proposed new bank. Defined by the Office of the Comptroller of the Currency (OCC), the primary service area is that smallest geographic area from which it is estimated that the proposed bank would draw 75% of its deposits. Data is also required on the trade area's population, housing, the type and relative sizes of business firms, volume of retail trade, and location of major stores and shopping centers. Because these standards are quite vague and general, the attainment of a bank charter can become an expensive and time-consuming ordeal.

1.2 Objectives of the Study

While many new banks are chartered each year in the United States, the number of studies concerned with the behavior of new banks has been quite limited. This study will concentrate on the performance of new banks.

One of its main objectives will be to identify those factors (such as market structure and bank costs) that are best able to explain new bank performance measures (such as profitability) as well as those factors that play a less dominant role. This research will treat new bank performance as a multidimensional concept, which cannot be measured through one variable alone, but through the examination of several performance measures at the same time. A further objective will be to determine the overall relationship between that set of dependent variables measuring different aspects of new bank performance with that set of independent variables, which together proxy new bank performance.

Since the passage of the Depository Institutions Deregulation and Monetary Control Act (MCA) in March 1980,¹ federal thrift institutions have been able to compete for consumer transaction accounts and consumer loan business. A further objective of this study will be to

¹ Federal thrifts include federal mutual savings banks, federal savings and loans, and federal credit unions.

determine the thrifts' competitive impact upon new banks. Because thrifts expanded powers have only recently come into effect, there is relatively little data to determine what impact these changes will eventually have on new bank performance in general. However, since the early to mid-1970s, thrifts in New England have been able to offer such services as consumer and business loans, and Negotiable Order Withdrawal (NOW) accounts. It is a contention of this study that, by looking at the impact of increases in thrift institutions' power upon the performance of new banks in this region, a nationwide prediction may be made.

A final objective of this study will be to consider whether or not commercial banking as a line of commerce remains a valid argument, now that thrifts offer many of the services which once belonged solely to commercial banks.

1.3 Data and Sources

The performance experience of more than 1500 banks chartered between 1970 - 1975 will be studied. The list of newly chartered banks was furnished by the Federal Deposit Insurance Corporation's (FDIC) "Changes Among Operating Banks and Branches, 1970 - 1975." Certain types of new banks were dropped from the sample. They include: 1) industrial banks, 2) foreign bank branches, 3) banks in Alaska, Hawaii, Puerto Rico, 4) trust companies or mutual

savings banks, and 5) any banks organized to take over an existing bank or organized incidentally to a merger or consolidation.

The data came from three sources. The balance sheet and income statement data was supplied by the FDIC. Another source included the SALES AND MARKETING MANAGEMENT MAGAZINE, which furnished population and Effective Buying Income (EBI) data. Finally, the data regarding mutual savings banks and savings and loan associations in the New England subsample came from the FDIC and the Federal Home Loan Bank Board (FHLBB).

1.4 Methodology

Canonical correlation analysis has been chosen to be used in this study. This particular multivariate technique will be applied to determine the relationship between the performance of new banks and the structure of banking markets, the demand for bank services, bank costs and other factors.

Canonical correlation analysis is a technique by which a linear combination of p predictors on one hand, and a linear combination of q criterion variables on the other, can be determined such that the correlation between these linear combinations in the total sample is as large as possible. Its utilization can provide information concerning (Levine, 1977):

1. The nature of the links or patterns of interdependency that join the two sets;
2. The number of statistically significant links between the sets; and
3. The extent to which the variance in one set is conditional upon or redundant given the other set.

This method can determine those factors that explain new bank performance and can also determine those relationships between the independent and dependent factors that taken together proxy new bank performance. In this study a total of 6 dependent variables (performance measures) and 14 independent (predictor) variables will be used. The data consist of all banks chartered (1537) in the 48 states between 1970 and 1975.

1.5 Literature Review

As was alluded to in the beginning of this introduction, only a few studies have been concerned with the behavior of new banks. This section will cover the basic findings from those studies.

Motter (1965) examined the performance of 64 newly organized national banks chartered in 1962. Their immediate competition came from one or more established banks or branches present in their own local market. Motter concluded that a new commercial bank's primary problem was in attracting deposits, not in finding loans. Motter determined that their credit risks would likely be higher than

those faced by established banks, since a significant number of new bank loan applications either came from businesses or individuals that had previously been denied credit from other institutions. On the other hand, he found that in their struggle to become established, new banks do enjoy certain inherent advantages, which were all related to their "newness" and "smallness". For example, the novelty of dealing with a new enterprise attracts some customers to a new bank. This would most likely be the case where there were a limited number of existing banks or when a new bank had not entered the market for a long time. Dissatisfaction with their present bank might lead others to a new bank.

Surprisingly, despite their greater credit risks, Motter's study found that new banks fared well almost from their very beginning. Their average rate of return on invested capital rose steadily. Their profits normally became positive during their second year. However, it should be pointed out that Motter's study concerned only 64 new national banks chartered in 1962, and it was limited to their growth experience during the initial 24 - 36 month period after entry. Obviously, this study represents only a small sample of national banks chartered in one year, and therefore, its results cannot be safely generalized.

Shea (1967) examined the performance of 32 newly chartered banks in Massachusetts (which permits branch banking within county boundaries). His results were similar to those of Motter. He discovered that a new bank's early

success or failure can be heavily attributed to its organizers' ability to attract new deposits before it opens its doors. However, in order successfully to attract customers from other better established institutions, a new bank must frequently be willing to offer distinctive and costly new services, such as extended hours, free checking, maximum rates on time and savings deposits, low loan rates, and/or rebates on loan charges. As a consequence, new banks frequently attract riskier loans, suffering proportionately greater loan losses than do established banks. Like Motter's findings, the main reason for this outcome appears to be because many of their customers have had credit applications rejected by other institutions. Nevertheless, none of these 32 new banks were judged to be in financial difficulty.

New bank growth was the focus of three recent studies. Austin and Binkert (1975) followed growth rates of 361 banks between the year each bank's charter was issued and the end of 1973. Results showed that most new U.S. banks grew below the expectations of their organizers and of the regulatory agencies as well. For instance, by year-end 1973, 30.5% of the sample had deposits of less than \$5 million. Further, after no more than four years of operation, 68.1% of the sample banks were less than \$10 million in size. Although none of the sample banks had actually failed, their slow average growth rate suggests that new bank organizers tend to be overly optimistic in their projections.

Yeats, Irons, and Rhoades (1975) tried to estimate a deposit growth curve for 48 new commercial banks selected at random from those chartered during the early 1960s. A relationship was specified between the bank's percentage growth in deposits from year-to-year and the length of time each bank had been chartered, the growth of local market disposable income, and the number of banks subsequently entering the market. Their results showed that a bank's deposit growth is closely tied to the growth of family income in its trade area. It also indicated that higher levels of new bank entry slow the growth of existing banks. They argued that the high predictability of bank deposit growth should permit management to use effectively long-range planning in order to maintain adequate capital and personnel and to avoid costly emergencies.

In another study, Alhadeff and Alhadeff (1976) studied one-half of all U.S. banks chartered during 1947 - 1966. They discovered that more than half of the variation of new bank deposit growth could be explained by the ratio of population to bank offices in the local town or city. Yet, also positively related to growth were the number of branch offices opened, the new bank's age, and the rate of growth in the local area. For those new banks in branch banking states, the dominant factors in determining how large a new bank could become consisted of the number of branch offices opened and the community's population size.

However, the mortality rate among new banks was quite high: more than 40% had disappeared by 1970, primarily due to mergers.

The latter three studies suggest that new and small banks fare quite well in competition against the larger, well-established institutions in their respective markets. Apparently their success is largely due to their willingness to accept and respond to the challenges in their competitive environments, and not to their size. On the other hand, the only performance criteria used in these studies have been the deposit level or growth of deposits. While these are valuable measures, they are by no means complete. Even if growth of loans were added as another measure, caution is still required. Other factors, such as new bank management policies regarding, for example, CDs and credit standards, would significantly affect the total deposits and loans achieved. Thus, in order to cover a broader spectrum, multiple performance measures will be used in this research, instead of one or two single measures.

The issue of whether or not new banks can survive in a competitive environment is a critical one. In this respect, the following questions can be raised: 1) Does the public gain any significant benefit(s) from the chartering of new banks? 2) What effects are new banks likely to have upon established institutions? 3) Is there any risk that some established institution will fail in the wake of new competition? The following studies have attempted to answer these questions.

Fraser and Rose (1972) studied the impact of new bank entry on existing Texas banks. They examined the before-and-after performance of 34 established unit banks with at least one competitor in one-, two-, and three-bank towns. Chandross (1971) analyzed the performance of 98-unit banks, originally situated in one-bank towns, which later faced competition from newly chartered banks. Motter and Carson (1964) reviewed the effects of entry by New York City banks into Nassau and Westchester counties following the passage of the Omnibus Banking Act in 1960. Finally, a more recent study by McCall and Peterson (1977) examined the effects of new bank entry into one-, two-, and three-bank rural towns served by both branch and unit banks.

All of these studies examined a wide range of performance measures, from earnings and expenses, investments, capital adequacy, loan quality, to prices. In general it was found that more loans were made relative to other assets. In two of the studies, increasing emphasis was placed upon business and consumer loans, rather than upon farm, security, and real estate loans. On the other side of the balance sheet, several researchers found that time and savings deposits were expanded relative to checking accounts; however, competition did not have much effect on profits.

McCall and Peterson showed that new entry caused income to fall relative to expenses, and net return on assets and capital to drop on a long-term basis among unit banks. However, despite a new competitor's entry, the earnings of

branch banks related to other banks showed no apparent tendency to decline. Additionally, no evidence of either destructive competition or of any threat to the sample branch banks' viability was determined. McGill and Peterson criticized the above mentioned studies on the grounds that they were not able to isolate the impact of entry from other factors affecting the performance of existing banks.

1.6 Outline of the Study

Chapter Two will cover the design of this research, which will include the statistical technique, the sample data and its sources, the research objectives, and the estimating model.

Chapter Three will report the canonical correlation results and their interpretation.

Chapter Four will deal with the competitive impact of thrifts' broadened powers upon new banks since the passage of the 1980 Monetary Control Act. It will further investigate whether or not commercial banking still falls into the category of a line of commerce as thrifts have been granted many of the same powers once extended only to commercial banks through the Monetary Control Act.

Identification of important variables in determining the performance of new banks will make it possible to examine the validity of the criteria used by the Office of the Comptroller of the Currency (OCC) in its evaluation of the profitability and viability prospects for a new bank.

This discussion will be included under a section on policy implication in the concluding chapter, where the overall results of this research will also be summarized.

PREVIEW

CHAPTER TWO

RESEARCH DESIGN

This chapter will cover the statistical technique used in examining the objectives of this research, the sample data and its sources, and the research objectives.

2.1 Statistical Method

Most of the studies of bank performance have employed statistical methods that have neglected the importance of treating bank performance as a multi-dimensional concept, which cannot be measured by one variable in isolation, but by several simultaneous measures of performance.¹ Even though it has been realized that through one measure of performance (i.e., deposit growth or income/capital) it is not possible to depict the entire picture of performance, there has been little attempt to counter the problem. In the best case, several dependent variables (performance measures) have been regressed against a set of independent variables one at a time, and in some arbitrary fashion several results were combined together. Therefore, there has been no previous investigation into the possibility that combinations of several performance proxies relate to combinations of several independent variables.

¹ Multiple regression has been the most favored technique to be used in performance studies.