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WALTRIP, Oakie Raymond, 1931-  
THE RELATIONSHIP OF TEACHING FINANCE  
IN STATE COLLEGES TO THE PRACTICE OF  
FINANCE IN SERVICE FINANCE INSTITUTIONS.

The University of Oklahoma, Ed.D., 1976  
Education, business

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THE UNIVERSITY OF OKLAHOMA  
GRADUATE COLLEGE

THE RELATIONSHIP OF TEACHING FINANCE IN STATE  
COLLEGES TO THE PRACTICE OF FINANCE IN  
SERVICE FINANCE INSTITUTIONS

A DISSERTATION  
SUBMITTED TO THE GRADUATE FACULTY  
in partial fulfillment of the requirements for the  
degree of  
DOCTOR OF EDUCATION

BY  
OAKIE RAYMOND WALTRIP

Norman, Oklahoma

1976

THE RELATIONSHIP OF TEACHING FINANCE IN STATE  
COLLEGES TO THE PRACTICE OF FINANCE IN  
SERVICE FINANCE INSTITUTIONS

APPROVED BY

Loy E. Pickett  
Ralph S. White  
Robert H. King  
Lloyd P. Stearns

DISSERTATION COMMITTEE

#### ACKNOWLEDGEMENTS

With pleasure, the writer acknowledges the contributions made by many persons to his learning and to the completion of this project. Deep appreciation and gratitude is expressed to Dr. Loy E. Prickett, the writer's committee chairman. Without his guidance and encouragement, this study might never have been undertaken and completed. Appreciation is also expressed to Dr. Robert A. Ford for the development of the writer's initial interest in finance, and to the other members of the committee, Dr. Raymond R. White and R. Lloyd P. Williams. The writer is indebted to the Business Division Chairmen of the state colleges and the Personnel Directors of the service finance institutions for the giving of their time to complete the questionnaires.

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## CHAPTER I

### STATEMENT OF THE PROBLEM

#### Introduction

Educators and the public historically have been interested in the relevancy of the curricula taught in the public educational institutions of the United States. Recently, one of the pressing educational problems has been the increasing number of students enrolling in our colleges. This rapid growth in student enrollment caused many state colleges to introduce areas of study that traditionally had been left to the universities. One of these areas is business finance.

One of the fastest growing industries in the past decade has been the service finance institutions.<sup>1</sup> As a result of this growth there has been an increasing demand for people trained in the area of finance. As usual, growth creates additional problems. There have been problems with salaries, job hopping, compensation plans, and advancement opportunities in these same financial institutions. In observing these institutions it is not clear whether finance education is helping to solve or adding to the "people" problem within the service finance institutions.<sup>2</sup> There is also some evidence that service finance

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<sup>1</sup>Keith V. Smith and Maurice B. Goudzwaard, "Survey of Investment Management," Journal of Finance, 25 (May, 1970), 329-437.

<sup>2</sup>Ibid., p.329.

institutions do not appreciate the role and functions of finance education, and that finance education does not understand the problems of the service finance institutions.

The purpose of this study was to provide evidence to determine the degree to which finance education in state colleges in the United States prepares students to: (1) engage in work at the finance managerial level, and (2) obtain entry level jobs in a multiplicity of financial institutions.

#### State of the Problem

The problem of this researcher was to conduct a descriptive study to compare the stated needs of service finance institutions and the expected outcomes of finance education programs offered by selected state colleges. After the collected data was analyzed and compared, a report was prepared containing the findings, conclusions, and recommendations.

#### Objectives of the Study

The objectives of the study were to (1) determine the nature of subject material taught in the finance courses at state colleges; (2) determine the desired educational background requirements for job entrance in financial institutions; (3) determine whether there is a lack of understanding between academia and practice; (4) determine whether academia falls short of the requirements of service finance institutions.

### Hypotheses

As this research project was conducted, the researcher tested the following hypotheses.

1. State college finance programs offer the course requirements needed for job entrance in service finance institutions.
2. State college finance programs offer the students an opportunity to develop necessary communicative skills for service finance institution job performance.
3. State college finance programs provide an opportunity to develop application techniques by utilizing knowledge and skills of business.
4. State college finance faculty do not understand the course needs of service finance institutions.
5. State college finance programs develop student personalities satisfactory for people management in service finance institutions.
6. State college finance programs provide adequate training for job mobility in service finance institutions.
7. The type of relationship existing between education and practice has resulted in a lack of understanding as to the type of reading material needed by both the personnel in the service finance institutions and the personnel in academia.

### Delimitations

The scope of this study was restricted to business finance programs in state colleges. A state college is an entity composed of a lay governing board, a faculty subdivided into schools, colleges, and departments according to specializations, a heterogeneous student body, and

administrators for varying operations. It serves students of equally varying competencies, skills, and interests and a public as diverse as society itself.<sup>3</sup>

The service finance institutions were utilized in this study to mean commercial banks, life insurance companies, brokerage firms, mutual fund management companies, and large consumer finance companies.

The study included only undergraduate course work in business finance. Finance as applied to a field of study is somewhat more limited in scope than common usage implies. Finance has been limited by the American Assembly of Collegiate Schools of Business to include courses in or derived from money and banking, business finance, corporation finance, and investments.<sup>4</sup>

#### Research Design

The first step in the survey was to select a sample of schools offering course work in business finance. Ten state colleges from each of the twelve Federal Reserve Districts were selected by the random selection process. This provided a sample of 120 state colleges.

The second step was to select finance institutions that were service oriented. This included the five largest, by total assets, (1) life insurance companies; (2) commercial banks; (3) mutual fund management companies; (4) brokerage firms; and (5) large consumer finance companies of each of the twelve Federal Reserve Districts.

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<sup>3</sup>Encyclopedia of Education, 1971 ed., s.v. "The State College."

<sup>4</sup>Frank C. Pierson, et al. The Education of American Business, (New York: McGraw-Hill Book Company, Inc., 1959), p. 392.

The third step in the survey was to design two sets of questionnaires: one for the educational institutions, and one for the service finance institutions. The questionnaires had objective and short answer types of questions. The questions were yes-no, multiple choice, ranking, and short specific answers.

The fourth step was a pilot study of schools and financial institutions, and a revision of the questionnaire.

The fifth step was to distribute the questionnaires. The academic questionnaires were sent to the Business Division Chairman.

The sixth step was to send the industry questionnaire to the personnel manager of each service finance institution in the sample.

The seventh step was to tabulate the responses of the questionnaires returned: to analyze and summarize the stated attitudes and perceptions of the roles of each population and performance and functions of both service finance institutions and the offerings of state colleges.

The last step was to formulate a report of all findings, analyses, and conclusions resulting from this descriptive study.

#### Significance of the Study

This study should provide more knowledge of the needs of the service finance institutions to finance educators for possible curricular changes. State colleges that are presently considering the development of a finance curriculum will have some guidance to help develop new courses. In some situations where finance is not offered, the completed study will afford data to assist in making decisions as to whether or not to offer courses in finance.

Employers in service finance institutions will be able to see both the strengths and weaknesses of the state college finance programs, and determine whether state colleges will be a source for recruiting prospective employees.

On a more personal note, I have collected data which will be useful in the institution in which I am employed. The faculty at Northeastern Oklahoma State University will have the information it needs to determine the possible needs for a major in finance. Many times faculty members develop new programs by following programs developed by other schools, and occasionally this leads to problems that are difficult to overcome. After having completed this study, I feel Northeastern Oklahoma State University can avoid these types of problems.

#### Organization of the Report

Chapter I of the formal report includes the statement of the problem, objectives, delimitations and definition of the terms, hypotheses, research design, and the significance of the study.

Chapter II is a review of the related research.

Chapter III consists of the research design and procedures.

Chapter IV presents an analysis and discussion of the data from the service finance institutions.

Chapter V presents an analysis and discussion of the data from the state colleges.

Chapter VI presents a comparison of selected data and the testing of the hypotheses.

Chapter VII is a summary of the findings, conclusions, and suggestions for further study.

## CHAPTER II

### A REVIEW OF SELECTED RELATED RESEARCH AND LITERATURE

#### Introduction

Business school finance education and finance industry practice have undoubtedly been discussed informally many times, but little formal structured investigation has been conducted. There has been some investigation in finance education relative to class size, class objectives, and instructor's background. This review of the literature and research will cite the more pertinent investigations.

#### Related Literature

Finance as a field of study began to develop in the latter part of the nineteenth century. Prior to this time it had been a part of the economic discipline. The increasing complexity of the American business system brought about a need for a better understanding of detailed financial problems and processes. After the emergence as a separate field of study, finance education first began to move in the direction of more technical specialties, and then moved back to a more general economic approach.

Because finance vacillated in approach for several decades, there was need for developing a better understanding of finance in the business

schools at existing colleges and universities. Finance was one of the first of the specialty studies in Business Administration, to be differentiated from the all-inclusive subject of political economy.<sup>5</sup>

This was primarily due to the fact that the first business schools were founded by international financiers and bankers. During the ten year period before 1929 the field of finance had tremendous growth, and in many cases became a separate department in some schools. The period of growth, for Finance Education, continued through 1930, but started a steady decline after the stock market crash in 1929.

John A. Griswold discussed the period of time after World War II to 1959. Griswold writes:

With some exceptions, the current period since 1946 has been one of consolidation and combination of finance courses, together with a turn toward more reliance on economic theory and rejection of specialized technical training. The reasons for the trend toward consolidation in finance lie first in the naturally close relationship between economics and finance; second, in the special impact on the finance field of the 1929-1933 experience; third, in a shift in the philosophy of business education; and finally, in a shortage of finance teachers. Most subjects grew logically from political economy, although in the mushrooming of investment specialties the connection with economics became quite tenuous. But this proliferation into technical and detailed aspects met an automatic cutback, not experienced in the same degree by other business fields, when disillusionment with overspecialized investment training reduced student demand during the early thirties. The unnecessary "skill" courses were weeded out because they did not meet the practical needs they purported to serve. Demand for "advanced" or technical courses dropped except in some night schools. Thus through the economic influences of the thirties, the efforts of finance instructors became to quite a large extent concentrated in the fewer and still popular service courses. The postwar period brought increased pressure from educators, the foundations, and sometimes from business leaders toward providing general education rather than specific training. This philosophy of business education, reflected in newly stated objectives of most business schools, reinforced the depression trend in finance against developing a variety of specialized courses.

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<sup>5</sup> Ibid., p. 393.

A final condition that influenced the field of finance was the great postwar influx of students. It was no longer necessary or desirable to engage in the practice that most, if not all, schools had followed to some extent of attracting students by "window dressing" in the form of practical courses. After 1929 finance could no longer be considered a "bread-and-butter" field, and since World War II the sheer weight of numbers combined with a shortage of finance teachers had discouraged the development of new courses. Not only did finance share the increased business school enrollment, but the recent return of the field to popularity as a subject has kept its instructors exceptionally busy on the courses offered.<sup>6</sup>

The growth of finance after World War II created a need for additional competent finance employees, and as might be expected this brought about some discussion as to the quality of the college graduate. Some individuals thought the shortage of competent personnel could be blamed on the colleges. Criticism was quite varied; ranging from lack of broad backgrounds to lack of specialization. One business executive expressed the opinion that he could get plenty of job applicants every day with college degrees, but the college degree is all they would possess. "What do I get? Men just out of college with a broad cultural background. Maybe the banks and insurance companies can use them. I can't."<sup>7</sup>

In 1948 a significant article was presented at the annual meeting of the American Finance Association.<sup>8</sup> Calkins' research consisted of a catalog survey of 58 member institutions of the American Assembly of Collegiate Schools of Business. In his research he concerned himself with identifying the credit hours offered in eight major areas of finance.

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<sup>6</sup>Ibid., p. 395.

<sup>7</sup>"Overspecialization in Industry Seen as Highly Paid Jobs Go Begging," Journal of Commerce, April 5, 1949, pp. 1,3.

<sup>8</sup>Francis J. Calkins, "Conference on the Teaching of Business Finance," Journal of Finance, 4 (September 1949), 244-265.

The areas covered were money and theory, banking management, business cycles, investments, and insurance. He also collected data on closely related courses. Calkins stated:

The anomaly of a demand for business and industrial specialists and also for "broad-gauge" executive talent poses at least a small dilemma for the college and university schools of business which profess to give their students a well-balanced introduction to professional careers in business through study of business subjects and the solution of illustrative problems. While practical experience is cited as a necessity for business success by practically all catalogs of schools of business, it would appear that business in general is tending to look for more specialists and for fewer general executives, at least proportionate to the number of students being graduated from colleges and universities.<sup>9</sup>

Calkins took the major areas and discussed the employment possibilities and limitations in each. He felt that students specializing in monetary theory, public finance, and business cycles would find the greatest chance for employment with the government, but even here the specialists would have to compete with highly trained economic students and statisticians (mathematical and analytical). He believed that in these areas it is necessary to relate the practicality of theory to the political expediency, to the tenor of local situations, to effects upon individuals and upon firms, small as well as large.

Calkins' viewpoint seemed to be that the specialists in business cycles and forecasting have the best chance for employment of all those specializing in the economic side of finance. So that students might enhance their chances of employment in this area, they must receive training emphasizing the relation of general trends to specific circumstances. This could be accomplished by expanding the offerings in

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<sup>9</sup>Ibid., p. 244.

commodity markets and by showing the relation of forecasting to market analysis.

Calkins expressed the opinion that businesses desiring to hire people to step into positions of responsibility would certainly be disappointed. This would mean that business would, out of necessity, hire people at low salaries to serve in apprenticeship positions. This, he felt, might keep higher caliber students from entering the finance field. Here he believed that a cooperative program between education and business might improve the situation.

In the area of credit and collections Calkins thought the future looked bright, but there should be more emphasis placed here in spite of the "trade school" characteristics of the subject.

One of his greatest concerns was for employment areas in the technical finance field. In particular he made reference to the banking positions, and he thought they could be improved by offering more courses in bank management, aided by more recent and adequate texts and reference materials. This he believed might improve the intellectual level of the practicing banking profession.

In the investment and insurance fields, two major areas appear open for employment of students in finance, sales or more specialized training. In these areas of employment the mortality rate is high.

This might be helped by providing longer periods of on-the-job training, pre-employment training, and better pay scales.

Calkins, in summarizing his research, indicates he is opposed to trade school education, advocates an apprenticeship program for some types of employment, and sees a need for both generalist and specialist education.

As a final summary concerning the curriculum, Calkins stated:

In this basic curriculum of the modal school, each of the economic branches of finance has two offerings, while the two corporate or business divisions have only one each, the banking division two, and the investment and insurance divisions, three and four respectively. It would appear doubtful that any student majoring in finance could gain sufficient specialization to meet business requirements except in the latter two divisions, the one in which financial businesses appear least anxious to require finance training before employment.<sup>10</sup>

In 1965 at the annual meeting of the American Finance Association, Wendt reported the results of another catalog survey.<sup>11</sup> Wendt's catalog survey consisted of 114 member schools of the American Assembly of Collegiate Schools of Business and 91 non-members. Wendt's article, as the title indicates, was concerned with the reasons for teaching a course in investments. Wendt says:

The most obvious reason for the offering of courses in Investments is found in the growing affluence of our capitalistic society. Viewing trends in securities ownership in the United States, I am prepared to forecast that virtually every university student of today can look forward to the ownership of stocks or bonds during his lifetime, either directly or indirectly.

A second and closely related justification for offering courses in Investments is found in the observation that there are jobs in the various sectors of the investment business and hence strong incentives for students to secure some know-how in preparation for future jobs.<sup>12</sup>

Wendt sighted the growing numbers of National Association of Securities Dealers member firms that had developed during the postwar years. He also pointed out that our growing pool of investment capital and the apparent trend toward the institutionalization of the

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<sup>10</sup> Ibid., p. 416.

<sup>11</sup> Paul F. Wendt, "What Should We Teach in an Investment Course?," Journal of Finance, 21 (May, 1966), 416-422.

<sup>12</sup> Ibid., p. 416.

investment process forecasts a growing need for investment specialists. Wendt presented two conclusions: (1) most individuals who are participating members of an affluent peoples' capitalism should know something about investments, and (2) there should be opportunity for professional education in the field of investments for those who plan to enter some phase of the investment business.<sup>13</sup>

Wendt's work concentrated in the areas of investments, security analysis interpretation of financial statements, and personal finance. Also, he restricted his investigation to the undergraduate offerings of the schools he discussed.

Wendt concluded from his findings that the usual curriculum in investments consisted of a two-course sequence. The first course was a macro-level examination of various types of securities and the economic environment of the financial institutions, while the second was a micro-level course in security analysis and portfolio management. As a major conclusion, Wendt argued that investment faculty members have lagged over a decade behind investment practitioners both in theory and practice, and that as academicians they must try to catch up.

In July, 1968, an article appeared in which the author was concerned with the quality of business education in investment management and the related question of whether or not "investment management" can really be taught.<sup>14</sup> This study noted the change in emphasis as far as the curriculum and methods are concerned. There was some concern that as

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<sup>13</sup>Ibid., p. 417.

<sup>14</sup>"What the Business Schools are Teaching Now About Investing," Institutional Investor, 2 (July, 1968), 30-34.

older teachers were replaced by quantitatively and behaviorally oriented young professors, courses were reorganized and redirected with a focus on decision-making. Apart from occasional guest speakers, there was little, if any, exposure in the curriculum to the real world of investments. A main conclusion of the study was that developments in investments education are likely to have a pronounced effect on Wall Street during the next decade.

In 1970, Smith and Goudzwaard presented a study concerned with the relevancy of education in the field of investment management to the practice of investment management by financial institutions.<sup>15</sup> Smith and Goudzwaard in discussing their objectives stated:

The specific objectives of the study were (1) to determine the nature of subject material taught in investment management courses at business schools, (2) to determine the desired educational and background requirements of portfolio managers at financial institutions, (3) to compare the nature of investment courses at business schools and the desired background for portfolio managers at financial institutions and to determine whether there is a lack of understanding and a gap between academia and practice, and (4) to examine the dimensions of our observations and to explore their implications on future directions in the teaching of finance and investments.<sup>16</sup>

Smith and Goudzwaard included both an industry survey and an academic survey. The industry survey consisted of six categories of financial institutions, and the academic survey consisted of accredited schools of business of the American Assembly of Collegiate Schools of Business. Each individual selected in each sample was sent a questionnaire containing mostly objective type questions. In some cases both samples were asked the same questions. This permitted them to compare differences in attitudes and perceptions of the role and function of

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<sup>15</sup>Keith V. Smith and Maurice B. Goudzwaard, "Survey of Investment-Teaching Versus Practice," Journal of Finance, 25 (May, 1970), 329-422.

<sup>16</sup>Ibid., p. 330.

both industry and academia. Each questionnaire contained an open-ended question asking for opinions about the strengths and weaknesses of present business school education in investments. The following is a list of the responses to the open-ended questions.

1. There is general agreement among practitioners that a problem does exist in trying to obtain, train, and hold competent personnel.
2. Practitioners have strong opinions on the type of individual best suited for portfolio management. Most believe that generalists are needed, but they point out that business schools are training specialists.
3. Most practitioners agree that flexibility and decision-focus are the two essential ingredients for a successful portfolio manager.
4. Practitioners often mention that the real weakness of theoretical and quantitatively-oriented courses is that the many externalities cannot be adequately represented.
5. Practitioners are not unanimous on how requisites such as decision-focus and flexibility can best be instilled in students. Experience would appear to lead formal education, although subjective evidence is not conclusive. Case studies are often mentioned, but there is mixed opinion as to their value. Some practitioners are strong advocates of the case method, while others feel that case discussions often fail to get at the real issues.
6. A few practitioners were almost adamant that the ability to appraise other people (such as analysts, brokers, etc.) and their credibility was the key to successful portfolio management.
7. Several interviewees observed that different personality types emanate from MBA programs. Some like the aggressive, self-sufficient type that can operate and produce without much guidance. Conversely, others are disenchanted with the MBA who perceives himself as the "wonder boy" of Wall Street, and somehow must be brought down to earth.
8. There is a definite gap between practitioners and academicians relative to the literature of investments.

9. There is a definite gap between the education provided in investment curricula and the desired requirements of institutional investors.<sup>17</sup>

Smith and Goudzwaard went on to discuss the implications and conclusions of their study. They gave their opinions on what could be done to narrow, to some degree, the gap between practice and academia. First of all they felt that academia and practice are both changing very rapidly. They questioned whether industry was ready for some of the advanced theory that was being taught. A second conclusion was that there existed an age gap in many organizations. To be more specific, the young people have not worked themselves into decision-making positions, and as a result, they are unable to see why some types of decisions are made. They also felt there was a lack of communication between academia and practitioners. There should be more effort by the practitioners to contribute to academic research in the field of investments. They also felt that practitioners should make an effort to see that some type of student employment program was initiated.<sup>18</sup>

Some of their suggestions were directed at the academicians. First, they believed people in education should go out and observe the real problems of finance. Second, academicians should make an effort to see what type of research is being carried on by industry. Third, professors should be careful to not over-emphasize theory. They should try to provide real world assumptions, and thereby provide students with an opportunity to learn decision-making from a practical point of view. Fourth, professors should help students, as well as themselves,

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<sup>17</sup> Ibid., pp. 342-344.

<sup>18</sup> Ibid., pp. 344-346.

to learn the problems and opportunities within the securities industry. Fifth, professors should do research to help solve some of the current problems of the practitioners. Sixth, professors should actively engage the services of guest speakers for their classrooms. Seventh, investments professors should prepare case studies which are current, interesting, and which can be used to apply theoretical concepts and models to important problems.<sup>19</sup>

In summary Smith and Goudzwaard stated:

We are well aware that the findings of our survey primarily established that a gap exists between teaching and practice. As to why the gap exists and what its implications are, we have relied heavily on personal interviews and other conversations with many academicians and practitioners. Further research is needed before these steps of the total project can be completed.<sup>20</sup>

In 1949, at the annual meeting of the American Finance Association, five papers were presented which focused on the material and methods of teaching business finance. They covered a spectrum of interesting issues such as course objectives, class size, theory versus practice, and the importance of the instructor's background and experience. The first of these papers, by Halley, dealt with course objectives. Halley writes:

The more I considered these problems, the more convinced I became that it is most difficult to attempt to set up objectives for a course in business or corporation finance that would be applicable to all institutions, situations, and instructors. First, of course, we run into varying objectives of education itself. We might boil this down to Dewey versus Hutchins although that may be over-simplification.

Secondly, the course may be offered in the economics department of an arts and science college where broader economic aspects are stressed, or it may be offered in a

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<sup>19</sup> Ibid., pp. 346.347.

<sup>20</sup> Ibid., p. 347.

college of business administration where it is regarded as part of professional training for a business career.

Third, we find that the size of classes may vary from a relatively few to one hundred or more. It is clear that larger classes cannot be handled on the same basis as smaller ones. In the former, class discussion has to be at a minimum; difficulty arises in assigning and grading long reports, and examinations tend to be of the objective type.

Fourth, varying teaching methods and techniques are also likely to have an influence in determining course objectives. The lecture and textbook method usually does not strive for the same results as does the case method.

In the fifth place, different social philosophies of instructors will lead to varying emphasis on social versus managerial viewpoints. One may desire to emphasize the abuses that have arisen in corporation finance while another may wish to stress the relationship between sound finance and enlightened managerial self-interest.

Sixth, there is likely to be a great deal of difference in the background of teachers of business and corporation finance. Some have followed primarily an academic career with little contact or interest in the actual operations of business. They may be more interested in the economic, social, or legal aspects. Or they may not be too interested at all, having been "drafted" to teach the course because of a local emergency. Others have either had business experience or are thoroughly familiar with the problems that confront businessmen as well as their attitudes toward their problems.

Next, and seventh, students may vary in their background work. In some institutions they have had accounting, statistics, and report writing before they come into courses in business and corporate finance. In others, students may have had none of these prerequisite courses.

Finally, the objectives of any course must be tempered to the workload and the degree of assistance given to teachers. An individual who is teaching, say, four different courses, doing most of his own grading and clerical work, taking part in administrative duties, and at the same time trying to do some individual research, can hardly direct his courses toward the same goals as an individual who is teaching several sections of just one course and who is provided with grading and clerical assistance.<sup>21</sup>

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<sup>21</sup>Donald M. Halley, "Materials and Methods of Teaching Business Finance," Journal of Finance, 5 (September, 1950), 270-271.

Halley then went on to develop ten different objectives that he thought would help a student to develop knowledge of business finance. Also, he developed thirteen different objectives to help students develop an understanding of and ability to apply principles and procedures.

In conclusion Halley writes:

The specific objectives and the content of courses in business or corporation finance would seem necessarily to be shaped by circumstances at each institution. However, it would also appear that in the beginning course, a knowledge of such things as sources of information, and their use, financial terminology, capital structures and financial instruments and institutions as well as the development of the student's ability to analyze financial problems and his recognition of the business as well as social significance of sound methods of meeting such problems could well be general objectives adaptable to all institutions.<sup>22</sup>

The second paper, in the series of five, dealt with course content and materials. Calkins in specifying what he would include in a course in business finance stated:

I would begin with an elementary discussion of financial statements and ratios to provide the basic tools for later discussion and amplification. After this introduction, I would plunge into promotion of a simple firm, with adequate reference to the Department of Commerce series on small business.

The second phase of the course could involve the assembly phase of promotion.

In the third phase of this course, I would cover current financial operating processes with emphasis on sources of credit and cash, yet cross-referencing at will to such topics as advertising and its effect on cash, to credit and collection policies, to insurance in business, to tax problems of earnings and their distribution, to purchasing, to wage, job, and process changes.

Expansion could be handled in the fourth part of the course, including new financing through debt securities.

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<sup>22</sup>Ibid., p. 274.

As an alternative to expansion, I would treat in the fifth and final part of the course the question of financial difficulties.<sup>23</sup>

Calkins devoted part of his paper to listing what he would include as materials and how he would test. He thought the course should include a series of integrated case problems for home or laboratory. He also felt that short case problems could be used in class to direct discussion and measure student comprehension of the main objective of the course. In addition he believed in a strong reliance on outside readings. For testing, he preferred to use subjective questions or problems in all examinations.

In conclusion Calkins writes:

I feel that this type of course would aid students in adapting themselves to later life, whatever be their walk. They would appreciate at least a little the businessmen's point of view, his need for conserving cash resources of a firm so as to avoid financial difficulties. The financial aspects of the business can be better integrated with the other business fields of production and distribution, and a more concrete approach given to both economic problems on an aggregative basis and accounting problems with economic implications. The teacher can widen the student approach particularly by cutting case problems from these other fields and showing the financial aspects or assumptions of such problems. All this will help to break down the compartmentalization which has crept into business study and action, will make the student more aware of the interdependence of people which is part of the democratic process and of the free enterprise system which all of us espouse and which we wish to defend against further socialization inroads.<sup>24</sup>

Another paper on the teaching of business finance was prepared by Hunt.<sup>25</sup> In his paper he develops the differences and the similarities between courses organized to suit objectives of a "general education"

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<sup>23</sup> Francis J. Calkins, "Materials and Methods of Teaching Business Finance," Journal of Finance, 5 (September, 1950), 275-279.

<sup>24</sup> Ibid., pp. 278-279.

<sup>25</sup> Pearson Hunt, "Materials and Methods of Teaching Business Finance," Journal of Finance, 5 (September, 1950), 280-284.

program and one which is designed to suit the objectives of an "administrative" program. He felt there was some degree of overlapping of interest, but there should be a difference in the objectives and content of courses taught in the two types of curricula.

To teach business finance for "general education", Hunt proposed two basic objectives: (1) inform students about the most important financial institutions and practices in the financial system, and (2) show that aggregates of economic significance are the sums of individual decisions.

Hunt felt that a definite overlapping existed in the materials needed and the methods used to teach the second objective to both "general education" students and "administrative" students. He believed that the teaching of decision-making could best be accomplished by the case study method.

To provide for the training of administrators, Hunt proposed a course of study with three basic objectives. The objectives consisted of (1) inform the student about the most important financial institutions and practices and to examine the effects of these characteristics upon the alternatives actually available in a variety of the more common financial situations, (2) develop the use of techniques such as accounting, financial analysis, and statistics and economic theory, (3) examine the institutional characteristics of various types of firms and the over-all economic structure, and make students aware that issues of social consequences are present in many problems which at first glance seem exclusively business in nature. Hunt also contended that the third objective contained a certain amount of overlapping with a course organized for general purposes. Hunt believed that a course taught with administrative goals should have more materials

of a general economic nature and further inquiries into matters of management behavior. In conclusion, Hunt conceded that the ideas he desired to develop were too many for just one course, but he felt that much of the traditional material could be omitted. In addition, he felt that many of the textbooks were too long and that much of the material now presented in some courses should be left to the advanced courses.

The fourth paper in this series was presented by Bosland.<sup>26</sup> Bosland discusses corporation finance in a liberal arts curriculum. Bosland stated:

The specific scope and content of a course in corporation finance in a liberal arts curriculum will vary with many factors, but the main lines of approach, I think, can be made more or less uniform. Essentially, such a course must serve as one of the few in which the student gains an appreciation of some of the problems of the individual enterprise as seen from management's point of view. The purpose of this approach is not primarily to provide vocational competence in financial management, but to dispel the misunderstanding and lack of knowledge that so frequently besets those who look at economic processes in such broad perspective that they see only the forest and never seek to understand the trees. We live in an age that is perplexed by many urgent economic problems, and the modern tendency is to emphasize the necessity to have some kind of overall policy with regard to their implications for intelligent citizenship. Our graduates have their thinking oriented so exclusively to abstract generalities that they never acquire more than a superficial acquaintance with the nature, problem, and outlook of the individual business concern, which is at the center of an individual enterprise universe. One of the more important functions of a course in corporation finance is to correct this lack of balance. And it may be one of the reasons why a large percentage of our liberal arts colleges provide for some work along these lines.<sup>27</sup>

Bosland argues that most finance courses would benefit by the infusion of more social perspective into the discussion of the financial problems of the individual business. Bosland thought this would bridge the gap

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<sup>26</sup>Chelcie C. Bosland, "Materials and Methods of Teaching Business Finance," Journal of Finance, 5 (September, 1950), 285-288.

<sup>27</sup>Ibid., p. 285.

existing between finance and other courses generally offered in a liberal arts curriculum. He recognized the problem of not knowing what a student had already taken, but he felt that the course should, as well as all other courses, be made flexible enough to fit into a mosaic made up of all course offerings. As a prerequisite he felt that money and banking and accounting should be required. Also, he believed that before a student could understand either business or social problems he should have some knowledge of government and public regulations. The course, according to Bosland, should also help bridge the gap between corporation finance and economic theory and help the student obtain a working knowledge of the business cycle. Finally, a course in finance should put some emphasis on the problems of small business.

The fifth paper of the series consisted of a summarization by Upton and some concluding remarks of his own. Upton, in providing his own analysis, writes:

On the basis of the whole discussion it seemed quite clear that any unanimity of opinion on the subject of teaching business finance is impossible because of two inescapable variables. On the one hand, there is a basic difference in the general educational objectives of different schools. The business finance course in a liberal arts college must accomplish a different objective from that in a school of business. On the other hand, the time allowed for covering the subject matter differs as between schools. Some require a full academic year, others two quarters, and still others only one semester. Although the general approach might remain the same despite differences in time allowed, content and materials used must vary substantially.

In spite of this almost inescapable chasm in the field, the discussion disclosed three points on which there seems to be rather general agreement and prospect for greater uniformity in approach. These are: (1) The need for reconciling the administrative and social approaches more than has been done in the past. They are not entirely separate and distinct in themselves but rather interdependent upon one another to a certain extent. (2) The desirability of increasing the attention given to the internal financial operation of business, particularly the problems of current finances. Even those following the traditional corporation

finance approach are sympathetic to this change. And (3) the need for increasing the extent to which cases and problems are used in support of basic text material. Surely an interchange of ideas, whether it be by round table discussion or other means, can be a furtherance of these common aims.<sup>28</sup>

In an article by Teal<sup>29</sup> a discussion is presented in an attempt to provide some of the reasons why college graduates are not seeking banking careers. His discussion centers around a survey he took of 50 business and economic graduates. First of all he found that fewer than 10 percent were interested in a banking career at the very start. This, he concluded, was due to the following; low salaries, conservative management, top salaries limited to a few of the top officers, promotion is too slow, banks are reluctant to give their employees responsibility, and promotion depends entirely upon seniority. He also believed that it was the bank's responsibility to dispel these misconceptions. He points out the student's general discontent with the business world. "Most of the students with whom I have talked feel that business must become more alert to the needs of humanity."<sup>30</sup> The author indicated that students were also concerned with the demands made of positions in business and industry. They felt that they did not have adequate time to spend with their families or to become involved in community projects.

Teal offered several ways in which the banking business could attract more graduates. Most of his ideas related to what is being done by many

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<sup>28</sup>Miller Upton, "Materials and Methods of Teaching Business Finance," Journal of Finance, 5 (September, 1950), 289-291.

<sup>29</sup>E. A. Teal, "Collegians View Banking as a Career," Banking, 62 (February, 1970), 45-46.

<sup>30</sup>Ibid., p. 46.

of the accounting firms. First, he felt that the banking firms should make more trips to college campuses to develop more interest. Second, he thought college deans should help develop programs so that college professors could work in banks to get first hand-experience. Third, he believed that banks could provide financial assistance for students desiring a banking career. This could be done by providing scholarships and fellowships. Fourth, the banks could help to train the students by providing internship programs. This he thought could be comparable to the programs provided by the accounting firms. Finally, he thought that schools should provide more courses in the banking area.

#### Summary

Chapter II reviewed the literature relevant to the present study. After exhaustive search of the literature there was no evidence of a related doctoral dissertation available. With the related literature in mind, the present research was proposed. Two questionnaires were used to obtain information concerning state college finance programs, and the needs of service finance institutions.

## CHAPTER III

### METHODS AND PROCEDURES

#### Introduction

Prior studies in finance education suffer from the same common limitations in that they do not specify and measure the needs and requirements of industry or the nature of business school curricula. A catalog survey only discloses course titles and descriptions and cannot disclose the essence of how finance is being taught. Studies have been restricted to the larger better known business schools. Perceptions of practitioners of finance must be obtained from a variety of finance institutions. The research design for the current study attempts to avoid such limitations.

To obtain information pertaining to finance education it was necessary to conduct an academic survey, and to obtain the thoughts and ideas of those people practicing finance it was necessary to conduct an industry survey. Information from both academia and industry was obtained by mailed questionnaires. The mailed questionnaires provided the researcher with the potential for a large sample size, and the data base for objective and statistical analysis.

#### Survey Sample

The first step in the survey was to compile a list of all the state colleges in the United States offering course work in business finance. This was accomplished by using The College Blue Book published by CCM

Information Corporation, and the Education Directory published by the United States Office of Education. After the list was compiled it was then necessary to place each school in its appropriate Federal Reserve District. After compiling one list for each of the Federal Reserve Districts, a random selection of ten schools was then made from each of the twelve districts. This was accomplished by using a table of random numbers from Elementary Business and Economics Statistics. This provided a randomly selected sample size of 120 state colleges in the United States offering course work in business finance.

The second step was to select an appropriate sample for the industry survey. Service oriented finance institutions were selected because of their regularity in corresponding with people. It was believed, for this reason, the possibility of getting a response to a questionnaire would be enhanced.

The sample of the commercial banks was compiled by using Moody's Bank and Finance Manual and the Rand McNally International Bank Directory. The sample of life insurance companies was compiled by using Moody's Bank and Finance Manual and the National Underwriters. The brokerage firm sample was taken from Finance, and more specifically the investment banker-broker issue. The mutual fund management company sample was compiled by using Moody's Bank and Finance Manual and Fundscope. An exhaustive effort was made to find the necessary information to compile a list of large consumer finance companies on the basis of assets. After corresponding with Moody's Financial Service in Dallas, Texas, it was decided, with their suggestion, that only the large consumer finances listed on the New York Stock Exchange be used. The list of consumer finance companies was compiled by using the Wall Street Journal.

### Questionnaire Development

The third step in the survey was to design a series of research questions to be mailed to both the state colleges and the service finance institutions. It was felt that the state college questionnaire should be designed so as to obtain information from four distinct areas (1) the finance program, (2) the finance faculty, (3) the finance teaching methods, and (4) student preparedness. It was believed that some of the questions should be factual and deal with such issues as the content and teaching methods used in finance courses. Other questions should be perceptual and deal with questions concerning the quality of the program. Using these basic ideas the first draft of the state college questionnaire was prepared. Most of the questions were objective in that they were either multiple choice, ranking, or short specific answers.

The business questionnaire was prepared in much the same manner. It likewise provided questions that required both factual and perceptual answers. The questionnaire was designed to obtain information from five distinct areas (1) job entrance requirements, (2) work performance, (3) educational background of employees, (4) educational improvement, and (5) company training program. The first business questionnaire draft also provided mostly objective type questions.

Each questionnaire was separate, but there were several questions on each which were identical. This provided the means for a comparison of the differences in attitudes and perceptions of the role and function of both industry and academia.

A total of four drafts of each questionnaire was prepared. Each revision provided an opportunity to revise questions and the questionnaire

format. It also provided an opportunity to add additional questions. After the fourth draft, the questionnaire was printed and prepared for the pilot study.

### The Pilot Study

The pilot study was conducted by using a sample consisting of twenty-four state colleges and twenty-four service finance institutions. Two state colleges and two service finance institutions from each of the twelve Federal Reserve Districts were selected for the sample. No consideration was given to the size of the businesses. None of the schools or businesses in the research sample were used in the pilot study.

On November 6, 1974, a copy of the questionnaire and a cover letter were mailed to the Chairman of the Business Division of each state college; and on that same date the business questionnaire, with a cover letter, was mailed to the Director of Personnel of each service finance institution. The cover letter explained the purpose of the questionnaire and asked for comments on clarity, in addition to their personal comments and suggestions on the quality of the questionnaire.

The state college pilot study response was 33.3 percent. Some of the respondents completed the questionnaire, and then commented on its clarity in addition to making suggestions of changes. One individual, who stated he had been in marketing research for five years, suggested methods which could be used to structure questions so they could be easily answered. He also suggested that the questionnaire be condensed or that the questionnaire be printed on both sides of the paper if condensation were not possible. This same individual thought the questionnaire was prepared sufficiently well to gather the necessary data. Many of the respondents suggested small changes

which could be made, and several expressed an interest in the results of the research. The questionnaire was then revised to take advantage of the suggestions and comments. The final version of the state college questionnaire consisted of forty-three questions.<sup>31</sup>

The service finance institution pilot study response was 41.6 percent. Many of the respondents used the same approach as did the state college respondents in that they filled out the questionnaire and then commented on its clarity and made comments and suggestions. Some of them also thought the questionnaire was too long to get a good response. Others thought it covered the subject well, but wanted to know why the study was restricted to only state colleges. The questionnaire was revised to take advantage of the suggestions and comments. The final version of the service finance institution questionnaire consisted of thirty questions.<sup>32</sup>

#### Questionnaire Distribution

On January 14, 1975, the revised state college questionnaire was mailed to the Chairman of the Business Division of the schools selected. On that same date the business questionnaire was mailed to the director of Personnel of each of the selected service finance institutions. Each questionnaire was accompanied by a cover letter explaining the purpose of the questionnaire.<sup>33</sup> The first mailing of the questionnaire was coded.

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<sup>31</sup>See Appendix C for a copy of the final version of the state college questionnaire.

<sup>32</sup>See Appendix D for a copy of the final version of the business questionnaire.

<sup>33</sup>See Appendix F for a copy of the state college questionnaire cover letter and the business questionnaire cover letter.

This provided a means of accounting for the schools and businesses responding on the first mailing.

On January 31, 1975, a follow-up letter was sent to both the state colleges and to the service finance institutions which at the time had not responded to the first mailing.<sup>34</sup>

On March 3, 1975, a follow-up questionnaire and cover letter were mailed to state colleges and businesses not responding to the first questionnaire. The follow-up questionnaire was sent to the Academic Dean of the college instead of the Chairman of the Business Division. The cover letter asked that the questionnaire be forwarded to the individual best qualified to complete it.<sup>35</sup> It was felt that the first questionnaire might have been ignored if the school were small and had no business division chairman. The business questionnaire was once again sent to the Director of Personnel. The number of returned and completed questionnaires is shown in table 1. The responses shown in table 1 represent only usable questionnaires.

Some of the business had consolidated with other businesses, and some had moved to other locations. This caused six of the questionnaires to be returned with insufficient addresses, or an indication that they were not forwardable. Many of the businesses did respond, but not by completing the questionnaire. Three of the businesses indicated they did not have the time nor the staff to complete the questionnaire. Four businesses stated they had been consolidated with other businesses and they were forwarding

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<sup>34</sup> See Appendixes G and H for copies of the follow-up letters.

<sup>35</sup> See Appendix I for a copy of the cover letter sent to the state colleges with the follow-up questionnaire.

TABLE 1

SAMPLE SIZE AND RESPONSES BY CATEGORY FOR INDUSTRY  
AND ACADEMIC QUESTIONNAIRE

Category	Sample Size	Responses	Percentages
Commercial Banks	60	34	56.67
Life Insurance Companies	60	28	46.67
Consumer Finance Companies	23	7	30.40
Brokerage Firms	60	25	41.67
Mutual Fund Management Companies	56	18	32.14
Sub Total	259	112	43.24
State Colleges	120	81	67.50
Total	379	193	50.92

the questionnaire to the main office for completion. Nine businesses replied by stating they did not feel the questionnaire was relevant to their operation or that they did not have available information. Two businesses responded by sending some information about their particular operation, but they did not complete the questionnaire. Three of the businesses gave company policy as their reason for not responding. One company reported that they responded only to governmental requests or someone who has official business with the company.<sup>36</sup> One company actually replied that they did not at present have any job openings, but they appreciated the job inquiry.<sup>37</sup>

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<sup>36</sup>See Appendix K for a copy of the letter.

<sup>37</sup>See Appendix L for a copy of the letter.

Seven of the state colleges responded by indicating they either no longer had a business program, or that the program was so limited they did not believe their response would be of any value.

The usable questionnaires were then categorized into two areas: (1) state colleges, and (2) service finance institutions. The state college questionnaires were then categorized by size: (1) 1,000-5,000, (2) 5,000-10,000, and (3) 10,000 and over. The questionnaires received from the service finance institutions were categorized by type of business: (1) commercial banks, (2) brokerage firms, (3) life insurance companies, (4) consumer finance companies, and (5) mutual fund management companies. The service finance institutions' responses were tabulated and analyzed. When possible the data was compiled using percentage ratings, and when not possible a discussion was presented.

The state college responses were tabulated and analyzed. When possible the data was tabulated using percentage ratings, and when not possible a discussion was presented.

The areas of similarity and differences were then observed, and the hypotheses were tested. A summary of the research was prepared, and, finally, conclusions and recommendations for further research were presented.

CHAPTER IV  
PRESENTATION AND ANALYSIS OF THE DATA  
FROM BUSINESS

Introduction

The answers from the 112 respondees to the business questionnaires are examined in this chapter. The data are presented in the sequence as indicated in chapter III, namely:

1. Job entrance requirements
2. Work experience
3. Educational background of employees
4. Educational improvement
5. Company training program

Many of the answers will be shown in tabular form, and the main conclusions of the open-ended questions are discussed. On several occasions the respondees did not provide an answer to every question in the questionnaire, but they did provide a comment. These comments, when appearing with some regularity, are discussed.

Job Entrance Requirements

The first task was to isolate the responses which involved the job entrance requirements for the service finance institutions' work force. The first two parts of question two help to provide this information. As indicated in table 20 of the appendix the mutual fund management companies

have the largest percentage of employees with college degrees. Some of the mutual fund management companies reported 100 percent of their employees as having college degrees. Close behind the mutual fund management companies were the brokerage firms with 50.8 percent having college degrees. Consumer finance companies with only 15.2 percent had the smallest percentage of college graduates. Those who did not respond to this question gave as their reasons: (1) inability to collect the information, and (2) too time consuming and expensive for them to provide the answer. To summarize part one of question two the mutual fund management companies had the largest percentage of employees holding college degrees, and the consumer finance companies had the smallest percentage with college degrees.

The second part of question two asked the respondees to report the percentage of their work force having state college finance majors. The 24.72 percent of the businesses not responding to this question did state they knew their employees included state college finance majors, but they could not accurately report the percentage. Table 21 of appendix M shows an analysis of the state college finance majors' participation in the service finance institutions' work force. As indicated, the brokerage firms lead with 18 percent of their employees having finance majors from state colleges. This is followed by the mutual fund management companies with 16.1 percent. The smallest percentage was the life insurance companies with only 3.7 percent, and this is particularly noticeable since they do report 26.4 percent of their employees holding college degrees.

Question three was placed in the questionnaire to determine the type of background service finance institution employers desire in their new employees. Several companies did not respond to any part of this question, but many of them qualified their reason for not replying. The comment most

often received was they sought their employees on the basis of need, and this determined the type of individual they employed.

The first part of question three asked the respondents their attitude toward employing college graduates. Table 22 of the appendix indicates that 83.30 percent of the mutual fund management respondents desired college graduates. In no case did these respondents indicate they would hire people without a college degree. The consumer finance companies' respondents indicated the greatest desire to hire the non-college graduate. Respondents for consumer finance companies reported by 42.90 percent that they did not necessarily desire college graduates. The life insurance companies' respondents also had a high preference for the college graduate. There were 82.10 percent of the life insurance companies' respondents reporting they desired the college graduate over the non-college graduate.

Table 23 of appendix M shows the willingness of employers to hire employees of similar businesses. The respondents for the consumer finance companies are 100 percent in agreement that this is an acceptable practice. Some 35.30 percent of the respondent for commercial banks were opposed to this practice. Also, the life insurance companies' respondents were somewhat reluctant to hire people from similar businesses. As is shown by the table, many businesses do follow the practice of hiring employees of similar businesses.

The last part of question three asked if businesses desired employees experienced in other types of business. The brokerage firms' respondents were the most receptive to this type of employee. As table 24 in the appendix shows, 56.10 percent of the brokerage firms' respondents replying reported they would hire people experienced in other types of business. This practice was the least popular with the life insurance companies.

Respondents for the life insurance companies reported by 35.70 percent that hiring people experienced in other types of business was not an acceptable practice.

Question four provided data on the employers' preferences to grade point averages when selecting a new employee. Many of the 40.3 percent of the respondents not answering this question did qualify their failure to not answer. The comment generally received was that they did not have any set grade point average requirement. Many employers reported that the grade point average required would probably be determined by the type of position they had to fill. Others reported that they gave no consideration to grade point averages when seeking an employee to fill a vacancy. In analyzing the data received, table 25 of appendix M shows that 2.50 and 2.75, respectively, are the most popular grade point average requirements. The mutual fund management companies had the highest grade point average requirement with 38.89 percent of them requiring a 3.0 or above grade point average.

The responses to question seven provide an analysis of the importance employers place on employee attitude toward the finance industry during the interview. Each respondent was asked to rate attitude importance on a scale of one to five. A one represented very important and a five represented not important. Table 26 of appendix M shows a compilation of these ratings. Of the total mutual fund management companies, 44.44 percent of their respondents viewed attitude toward the finance industry during the interview as a number one consideration. The brokerage firm respondents placed the least importance on this problem with only 20 percent of them rating it a one, and 4.0 percent rating it a five. Most of the categories rated the employees attitude toward the finance industry during the interview as average or higher in importance.

### Work Performance

The responses to the last part of question two provide an analysis of the finance industry's evaluation of the state college finance majors' work performance. The companies were again asked to evaluate their employees on a scale of one to five. The one represented the best rating and the five represented the poorest rating. There was a reluctance to answer this question, and 50.00 percent of those replying to the questionnaire did not respond. In addition, they did not provide any reason for their failure to respond. Table 27 of the appendix shows an analysis of the data which was revealed, and shows that the overall performance rating by those responding was better than average. The mutual fund management companies' respondents had 33.33 percent, of those answering the question, giving a one rating to the state college finance major. A significant point was that the mutual fund management companies and the commercial banks were the only categories also rating some of their state college finance majors below average. The life insurance respondents reported only 3.70 percent of their employees with state college finance majors, but they did provide them with a better than average rating on performance.

The responses to question five provide data on the service finance institutions' rating of the state college employee's awareness of career opportunities in the field of finance. Table 28 of appendix M shows the commercial banks are the most critical on this particular subject. A total of 29.41 percent of the commercial bank respondents thought their employees were below average in career opportunity awareness. The consumer finance respondents gave the largest percentage of one ratings. These companies' respondents thought their state college employees rated a one in awareness of career opportunities by 14.29 percent. The life insurance respondents,

as those for the commercial banks, gave a low rating to their employees. A total of 3.57 percent of the life insurance respondents rated their state college employees a five in career opportunity awareness.

Question six measures the respondents' opinion of the state college employee's awareness of problems in the finance industry. The service finance industry was critical on this particular subject. Table 29 of the appendix shows 24 percent of the brokerage firm respondents rated their state college employees below average in their awareness of problems in the finance industry. The commercial bank respondents were the second most critical on this particular question. An observation is that although the mutual fund management respondents were critical, they still had 16.67 percent replying--rating the state college employee a one in awareness of problems in the finance industry. The table also shows that the replies from the commercial banks were the only category not providing any one ratings. Another observation is that the brokerage firm respondents had 18 percent of their employees with state college finance majors, but rated them low in the awareness of problems in the finance industry.

Table 30 of appendix M shows an analysis of responses given to the question of how competent service finance institutions thought the state college employee was in learning the business. Respondees were again asked to rate on a one to five scale. The commercial bank respondents' reply was the only category rating the state college employee below average on this question. A total of 2.94 percent of these respondents gave a four rating, but 75.53 percent of them rated their employees a two or above on the scale. All of the other categories gave their state college employees average or above on their competency in learning the new business.

The responses to question thirteen provided data which permitted an analysis in four different areas. The first of these areas was an evaluation of the state college graduate's attitude. Each respondent was asked to evaluate on the basis of one to five. The one represented excellent, and the five was an evaluation of poor. Table 31 shows the commercial banks' respondents provided the best rating on this particular question. A total of 20.59 percent of the commercial banks' respondents rated the state college graduate excellent on attitude. The mutual fund management respondents were second with 16.67 percent providing a number one rating. No consumer finance respondents thought their state college graduates rated excellent in attitude. As the table indicated, most of the businesses gave a two or three rating.

The second part of question thirteen was an evaluation of the state college graduate's ability in vertical job mobility. The consumer finance and life insurance respondents provided the best rating on this particular question. Both of them had 14.29 percent of their respondents rating their state college graduates excellent on vertical job mobility. Again a majority of the respondents gave the state college graduate a two or three rating.

An evaluation of horizontal job mobility was the third part of question thirteen. The life insurance respondents provided their state college graduates the best rating of all the categories reporting. A total of 7.14 percent rated their state college graduates a one on horizontal job mobility. No brokerage firm or consumer finance respondent provided a one rating. The majority of all the categories again gave two and three ratings.

The data collected from the fourth part of question thirteen permits an evaluation of the state college graduates' ability to handle the behavioral problems of clients. The commercial bank and consumer finance respondents, the categories doing most of the money lending, did not provide a single one

rating on this particular question. In contrast to this, neither the commercial bank nor the consumer finance respondents provided any below-average ratings. The brokerage firm, life insurance company, and the mutual fund management company respondents did provide a small percentage of below-average ratings. The mutual fund management respondents provided the best rating with 11.11 percent rating them a one in this area.

#### Educational Background of Employees

The first part of the discussion reports the opinion of selected businesses on desired educational background of employees. Question eleven asked each category of business to rank in order of importance for educational background: (1) liberal arts, (2) business administration, (3) economics, (4) specialization in finance and investments, and (5) other. The responses of each category are presented in the analyses in table 32 of the appendix. A business administration background was the choice of 47.06 percent of the commercial bank respondents. They also had 35.29 percent favoring specialization in finance and investments. As a second choice 35.29 percent of these respondents chose economics, and 23.54 percent thought specialization in finance and investments should be number two. The least desired type of educational background for the commercial bank respondents was liberal arts.

The brokerage firm respondents ranked specialization in finance and investments as their number one choice. A total of 56.00 percent of them provided this ranking, and some 32.00 percent thought business administration should be number one. A total of 32.00 percent ranked both business administration and economics as their second choice for educational background. The liberal arts type of educational background was also the least desirable for the brokerage firm respondents.

The consumer finance respondents ranked business administration as their first choice with a total of 57.14 percent in agreement. Their second choice was economics, and the least desirable was liberal arts.

The mutual fund management companies' respondents ranked business administration and specialization in finance and investments number one for an educational background. Both the business administration and the specialization in finance and investments categories had 38.89 percent of the mutual fund management respondents ranking them as their first choice for an educational background.

The life insurance company respondents ranked business administration as their first choice for an educational background. A total of 67.86 percent of them chose business administration. In contrast to the other categories, 21.43 percent of the life insurance respondents thought liberal arts should be the second choice for an educational background. Although many of the life insurance respondents thought liberal arts should be second, as many as 32.15 percent of them ranked it fourth.

In summary, the consumer finance company, insurance company, and commercial bank respondents thought the business administration educational background the most desirable. The mutual fund management respondents were evenly divided between business administration and specialization in finance and investments, and the brokerage firms' respondents picked specialization in finance and investments as their number one choice. Every category had some reservations about the liberal arts background. Only one category, life insurance companies' respondents, gave liberal arts much consideration as an educational background.

Question twelve gave the service finance institutions an opportunity to compare educational qualities with non-educational qualities. The

businesses were asked to rank a major in finance, a major in business administration, personality, business experience, and any other area in the order of importance to be successful in a service finance institution. Table 33 in appendix M shows an analysis of the responses received. The commercial bank respondents had 32.35 percent of themselves ranking a major in finance as number one to be successful in a service finance institution. These respondents also had 29.41 percent ranking personality as the first choice. They also had 29.41 percent ranking business experience as their second choice, and 23.53 percent ranking personality as the second choice. Business experience was the commercial bank respondents' third choice, and a major in business administration was their fourth choice.

The brokerage firm respondents ranked personality as the most important quality to be successful in a service finance institution. Indicative of how strongly they feel that personality is important is the 44.00 percent of the respondents giving it a number one rating. The brokerage firm respondents also had 28.00 percent of them ranking business experience as number one, and 40.00 percent of them ranking it second. These respondents least favored category was business administration with 28.00 percent of them ranking it fourth.

The consumer finance companies' respondents made business experience and personality their number one and two choices. A total of 57.14 percent thought business experience should be number one, and 57.14 percent ranked personality as number two. Also, 42.86 percent felt business experience should be number two. These respondents ranked a major in finance as third, and a major in business administration as their fourth choice.

An observation regarding the mutual fund management companies' respondents was their opinion on the importance of personality. Fifty percent of

them ranked it fourth, and 27.78 percent ranked a major in business administration as number one. Their second choice was a major in finance.

As the table shows, the life insurance companies' respondents had no one item as their unanimous choice, but a major in business administration was preferable. Another observation is that they ranked a major in finance as their fourth choice.

Question ten was designed to elicit course area preferences. The data collected indicated a varying approach to course area preferences. Table 34 of the appendix presents the data collected from the respondents to question ten.

The commercial bank respondents ranked finance and investments as their number one choice of subjects. A total of 58.82 percent thought finance and investments should be number one, and 29.41 percent thought accounting should be number one. Accounting received 26.47 percent of the responses for second choice. The third choice of the commercial bank respondents was management followed by economics, mathematics and statistics, computer programming, and machine experience in that order.

The brokerage firms' respondents also ranked finance and investments as their number one choice. A total of 64.00 percent thought finance and investments was the most important subject matter area. Only 16.00 percent thought accounting was the most important. Forty percent of the brokerage firm respondents thought economics was the second most important subject area. The remaining choices of the respondents, in order, were accounting, mathematics and statistics, management, computer programming, and machine experience.

The consumer finance companies' respondents ranked management as their most important subject matter area. Their next preference was the area of

finance and investments, followed by economics. Mathematics and statistics were ranked fourth, followed by accounting, machine experience, and computer programming. The finance companies' respondents placed less importance on accounting than any other business category.

The mutual fund management companies' respondents ranked finance and investments as their most preferred subject matter area. A total of 55.56 percent of the mutual fund management respondents ranked finance and investments as number one, and 27.78 percent ranked accounting as their first choice.

A summary of all the business categories shows that finance and investments courses are the most preferred. This was followed in order by accounting, economics, and management. The least preferred areas, in order, were machine experience, computer programming, and mathematics and statistics.

Question eight asked the respondents to rank, in order of importance for an educational background, the following: (1) theory and research, (2) theory and application from business, (3) theory, and (4) any other they felt was important. In analyzing the responses it was discovered that many of the businesses only picked the one area they felt was most important and did not bother to rank them. No company offered more than three rankings on the choices they were offered. Table 35 in appendix M shows the number not responding to each category and the number not responding to the whole question. An analysis of the table shows the number one choice of all business categories was theory and application from business. The business category giving theory and application from business the highest priority was the life insurance companies' respondents with 85.71 percent of them ranking it number one. The category least concerned about theory and application from business, but still ranking it number one, was the

consumer finance companies' respondents. All of the categories ranked theory and research as their number two choice, and the third choice of all the respondents was theory.

An analysis of the table shows that some categories placed a small amount of emphasis on some of the areas. For example, not one mutual fund management respondent ranked theory or theory and research as a number one choice. No consumer finance respondent ranked theory and research as a number one choice. Also, the brokerage firms' respondents were not interested in theory as a number one choice.

#### Educational Improvement

The answers to questions fourteen through twenty-four report the educational improvements that businesses are presently accomplishing, and what they think would be desirable improvements.

The answers to question fourteen report the types of reading service finance institutions prefer their employees to do. An analysis of table 36 in the appendix shows that all the business categories' respondents, with the exception of the consumer finance respondents, chose industry survey articles as desired reading for their employees. The consumer finance respondents thought case studies were the most important. In every case the theoretical articles were the least desired. It is particularly noticeable that in question eight the business respondents ranked theory third as an educational background, and their ranking of theoretical articles in question fourteen as their least desirable reading for their employees conforms with that opinion.

When asked to rank their choice of journals for reading, the respondents from the commercial banks, consumer finance companies, and the life

insurance companies all ranked the Harvard Business Review as their first choice for reading. The respondents from the brokerage firms ranked both the Harvard Business Review and the Institutional Investor as their number one choices. The respondents of the mutual fund management companies picked the Institutional Investor as their first choice. As table 37 in the appendix shows there was no consistency in the second, third, or fourth choices. The respondents of the life insurance companies, mutual fund management companies, and the consumer finance companies all ranked the American Review as their last choice for reading. The respondents from the brokerage firms ranked the Journal of Finance last, and the commercial bank respondents chose the Institutional Investor last.

Table 2 provides an analysis of the number of businesses which have had a representative speak to a state college finance class during the last year.

TABLE 2  
BUSINESSES WHICH HAVE HAD A REPRESENTATIVE SPEAK TO A  
STATE COLLEGE FINANCE CLASS DURING THE LAST YEAR

Category	Yes %	No %	No Response %
Commercial Banks	85.29	8.82	5.88
Brokerage Firms	32.00	64.00	4.00
Consumer Finance Companies	14.29	28.57	57.14
Mutual Fund Management Companies	27.78	66.67	5.56
Life Insurance Companies	46.43	46.43	7.14

As the table indicates, consumer finance respondents were reluctant to answer the question, and they did not report their reason for not responding. The table also shows the commercial banks are the leaders in speaking to state college classes. A total of 85.29 percent of the commercial bank respondents reported they had spoken to a state college finance class during the past year. The life insurance company respondents were divided with 46.43 percent reporting they had spoken to a state college finance class, and the same percentage reporting they had not. The brokerage firms' and the mutual fund management companies' respondents had the lowest percentage of respondents reporting they had employees who had spoken to a state college finance class during the past year. The brokerage firms' respondents had 64.00 percent which had not spoken to a state college finance class, and 66.67 percent of the mutual fund management companies' respondents had not spoken to a state college finance class.

An analysis of the answers to question seventeen shows there was a wide range of participation in professional improvement conferences. The following analysis is an average of the business respondents reporting they attended business conferences and specialized institutes.

The mutual fund management company respondents reported attending 6.6 business conferences and 4.1 specialized institutes each year. The consumer finance company respondents reported they attend 3.25 business conferences and 1.25 specialized institutes each year. The respondents of the commercial banks reported they attended 54.25 business conferences and 8.63 specialized institutes each year. The respondees for the life insurance companies reported attending 15.76 business conferences a year and 7.94 specialized institutes each year. The brokerage firm respondents reported attending 4.58 business conferences a year and 2.17 specialized institutes

a year. Some of the comments received were that the number attended depended on the department the employee was working in or the type of job the employee had. Other comments received were that they attended so many that it would be impossible to report the number.

In question eighteen respondents were asked to report how much communication they have had with state colleges offering a major in finance. Table 3 gives an analysis of the responses received.

TABLE 3

SERVICE FINANCE INSTITUTION'S COMMUNICATION WITH  
STATE COLLEGES OFFERING FINANCE MAJORS

Category	Frequent %	Occasional %	None %	No Answer %
Commercial Banks	50.00	50.00	0.00	0.00
Mutual Fund Management Companies	0.00	55.56	38.89	5.56
Consumer Finance Companies	0.00	28.57	71.43	0.00
Brokerage Firms	8.00	32.00	56.00	4.00
Life Insurance Companies	17.85	67.86	10.71	3.56

As the table shows 50.00 percent of the respondents for the commercial banks reported they had frequent communications, and 50.55 percent had occasional communications. The mutual fund management company respondents either communicated occasionally or not at all. The consumer finance company respondents had 71.43 percent reporting they did not communicate at all with the state colleges. A total of 68.00 percent of the brokerage firms' respondents reported they did not communicate, and 67.86 percent of the life insurance respondents reported only occasionally communicating with the state colleges.

The responses to question twenty-two and twenty-four provide an analysis of the amount of involvement businesses have educationally with the state colleges. Table 4 illustrates the degree of involvement businesses have had with the cooperative work programs and summer employment.

TABLE 4

SERVICE FINANCE INSTITUTION'S INVOLVEMENT IN  
COOPERATIVE AND SUMMER WORK PROGRAMS

Category	Yes %	No %	No Response %
Commercial Banks	35.29	61.76	2.94
Mutual Fund Management Companies	22.22	77.78	0.00
Consumer Finance Companies	14.29	71.43	14.29
Brokerage Firms	16.00	84.00	0.00
Life Insurance Companies	21.43	78.57	0.00

As the table shows, the commercial banks are the leaders in the cooperative work programs and the summer employment practice, but even then only 35.29 percent reported any involvement. Each business category shows some involvement, but it was generally a minor amount.

In analyzing the data in table 5, it appears that most businesses do not encourage state college field trips to their institutions. As can be observed, a total of 55.88 percent of the commercial banks' and 46.43 percent of the life insurance companies' respondents reported that they did encourage field trips, but the remaining business categories were not too encouraging. For example, 77.78 percent of the mutual fund management companies did not encourage field trips.

TABLE 5

SERVICE FINANCE INSTITUTIONS ENCOURAGING  
FIELD TRIPS

Category	Yes %	No %	No Response %
Commercial Banks	55.88	38.24	5.88
Mutual Fund Management Companies	16.67	77.78	5.56
Consumer Finance Companies	14.29	57.14	28.57
Brokerage Firms	32.00	68.00	0.00
Life Insurance Companies	46.43	53.57	0.00

Table 6 shows the percentage of service finance institutions recruiting through state college placement offices.

TABLE 6

SERVICE FINANCE INSTITUTIONS RECRUITING THROUGH  
STATE COLLEGE PLACEMENT OFFICES

Category	Yes %	No %	No Response %
Commercial Banks	79.41	14.71	5.88
Mutual Fund Management Companies	16.67	83.33	0.00
Consumer Finance Companies	0.00	85.71	14.29
Brokerage Firms	12.00	88.00	0.00
Life Insurance Companies	67.86	32.14	0.00

As table 6 shows, the commercial banks and the life insurance companies are the leaders in the use of state college placement offices. As shown on table 21 of the appendix the brokerage firms were the leading employers of state college finance majors, but a total of 88.00 percent of them do not recruit through state college placement offices.

Question twenty, an open-ended question, gave the businessmen sampled an opportunity to indicate the type of emphasis they would like for state colleges to place in their finance education programs. The opinions of respondents from each business category were grouped and the results are reported in this section.

The commercial bank respondents had a variety of replies, but the one which consistently appeared was a need for a more practical approach. The following are some of the opinions of commercial bank employers emphasizing this point:

1. Good basic theoretical courses, then courses designed to indicate practical use in finance industry
2. Practical work experience outside of the classroom
3. Application in the real world
4. Programs for actual on-site experience
5. A more practical approach
6. Real work conditions
7. Common sense

Many of the respondents from commercial banks reported that English and communicative skills should receive more attention. One respondent expressed a desire to have more emphasis placed on the problems of small businesses and less on corporate problems. Another respondent thought more emphasis should be placed on organization behavior and psychology.

The respondents from the brokerage firms expressed many of the same ideas as the respondents from the commercial banks. They, too, placed a considerable amount of emphasis on the practical approach. Some of them expressed the opinion that more emphasis should be placed on the current problems and less time used in reviewing the past. Another opinion was that we should be interested in a better understanding of the relationship between the government, economy, and the investor. Some other points were that there should be more emphasis on reality, logical thinking, and that students needed more contact with people in business. Finally, there was concern expressed that a better understanding of economics was needed, and that there was a need for a summer internship program.

The dominate opinion expressed by the respondees for the consumer finance companies was that the state college finance programs needed to provide more practical experience.

The respondents from the mutual fund management companies expressed some of the same opinions. They, too, thought the practical side of finance should be taught. In addition, they advocated more emphasis on current problems and less emphasis on past problems. One response was that finance education should teach the relationship of the market to the political world and the economic world. Another response was that the practical application of accounting should be taught, and less time spent on accounting theory.

The respondents from the life insurance companies continue to support opinions in regard to a more practical approach. They, also, responded that a summer internship program would be desirable in developing a working background and providing business experience. They also had some opinions that were unique to the life insurance business. One comment

was that the finance education programs should place more emphasis on people management. Finance education programs should include an in-depth study of fixed income security analysis.

In summary, the representatives of businesses were in agreement that a more practical approach should be taken in the teaching of finance courses. The consensus of opinion was that an internship program would be desirable. Also, improvement is necessary in the communicative skills.

The final question giving the service finance institutions an opportunity to offer an evaluation was number nineteen. In this question business respondents were asked to give their opinion as to whether finance education leads, lags, or is current with industry practice. In table 7 a tabulation of the responses is reported.

TABLE 7  
IS FINANCE EDUCATION LEADING, LAGGING, OR CURRENT  
WITH INDUSTRY PRACTICE

Category	Leads %	Lags %	Current %	No Response %
Commercial Banks	5.88	50.00	44.12	2.94
Mutual Fund Management Companies	27.78	50.00	16.67	5.56
Consumer Finance Companies	0.00	14.29	28.57	57.15
Brokerage Firms	4.00	52.00	32.00	12.00
Life Insurance Companies	10.71	28.57	46.43	10.71

As shown in the table, the representatives from consumer finance companies displayed a reluctance to answer the question without offering a reason. A majority of the responses from the commercial banks, mutual

TABLE 8

## SUGGESTED FINANCE MAJOR PROGRAMS

Courses	Number of Courses					
	Commercial Banks	Brokerage Firms	Mutual Fund Management Companies	Consumer Finance Companies	Life Insurance Companies	Composite
Accounting	3.96	2.93	3.30	2.50	3.61	2.54
Marketing	1.46	1.67	1.40	1.50	1.28	1.46
Finance	5.21	3.73	5.20	3.00	4.89	4.41
Electronic Data Processing	1.46	1.07	1.30	.50	1.94	1.25
Business Law	1.42	1.13	1.60	1.50	1.50	1.43
Economics	3.00	2.47	3.10	1.50	3.00	2.69
Communications	2.79	2.60	1.70	2.00	3.11	2.60
Production Management	.46	.53	1.10	1.00	.78	.81
Personnel Management	1.13	.87	.50	1.50	.94	.99
Office Administration	.63	.67	.80	1.00	.83	.83
Transportation	.08	.33	.30	.50	.44	.33
Internship	.21	.73	.60	.50	.50	.51
Insurance	.41	.47	.50	1.00	1.94	.90
Business Ethics	.79	.93	.90	1.00	.72	.91
Real Estate	.79	.47	.70	.50	1.11	.71
Salesmanship	.88	1.33	.70	1.50	.61	1.00
Total	24.68	21.93	23.70	21.00	27.20	22.37

fund management companies, and the brokerage firms respondents indicated they thought finance education lagged behind industry practice. The respondents from the mutual fund management companies had the highest percentage indicating they thought finance education leads actual industry practice. The respondents from the life insurance companies had the highest percentage indicating they thought finance education was current with industry practice.

After having given the respondents from each business category an opportunity to evaluate the finance programs in the state colleges, they were then given an opportunity to report what they thought would be the ideal curriculum for a major in finance. Table 8 is a composite of the responses from all the service finance institution respondents by category, and then a composite of all the service finance categories.

The following is a discussion of the data in table 8. The ideal finance major for the commercial bank respondents would include an emphasis on finance, accounting, economics, and communication. It is apparent that the respondents of the life insurance companies place some importance in areas not emphasized by other types of service finance institutions. One area emphasized by the life insurance companies' respondents was real estate, and their emphasis on life insurance is to be expected. The respondents of the brokerage firms provided some additional comments on the ideal curriculum. One respondent from a brokerage firm replied by saying he thought the major depended on the area of specialization. Another stated they were not interested as much in course work as they were in prior work experience. Another commented he thought a good basic education and desire provided a better employee. The respondents from the consumer finance companies suggested the least amount of course work for a finance

major. The respondees from the consumer finance companies did put more emphasis on business ethics than did the other business category respondents. One of the consumer finance company respondents did comment he thought it would be difficult to provide a finance major with a concentration suitable for all areas of the service finance industry. The composite part of the table does demonstrate the most significant areas of study as reported by the respondents.

#### Company Training Program

This section of the chapter reports the responses received regarding the service finance institutions' training programs. In analyzing the responses it is apparent that the commercial banks have the largest participation in company training programs with 94.12 percent of the responding commercial bank employers having a training program in operation. The consumer finance companies are the next most involved with 42.86 percent of their respondents reporting they have training programs in operation. The remaining categories with their responding percentage of participation are: (1) the mutual fund management companies' respondents, 16.67 percent; (2) brokerage firms' respondents, 28.00 percent; (3) life insurance companies' respondents, 39.29 percent.

Question twenty-five asked the businesses' respondents to indicate if they trained their new employees on the job by observation with suggestions from the supervisor. In analyzing the data received it was discovered that 86.79 percent do follow this procedure. This conforms to earlier responses in which employers indicated that employees needed business experience.

Question twenty-six was concerned with the formal class training being given the new employees. The first part of the question asked if they do conduct formal classes. A total of 83.00 percent of the responses

indicated that they did conduct formal class training. When asked to indicate the number of hours each employee attended, the answers varied considerably. The respondents from the commercial banks reported they had formal class training programs ranging from 40 to 410 hours. Some respondents for the commercial banks reported the number of weeks they had formal classes. This ranged from three weeks to thirteen weeks. Several of the respondents for the commercial banks reported their formal class training time depended on the position for which the employee was training.

The participation of the mutual fund management companies in formal class training programs was almost nonexistent. One respondent reported they had three hours per month.

The replies from the respondents for the life insurance companies were much the same as the commercial banks in that there was a considerable amount of variation. One respondent reported they had 740 hours of formal classes. Generally the responses from the life insurance companies did not report as many hours as did the commercial banks. Also, like the commercial banks, they indicated that the number of hours would depend on the position held by the person being trained.

The respondents for the consumer finance companies did not specify any certain number of hours of training, but they did report the number of hours would depend on the individual.

The responses from the brokerage firms indicated they were the most involved in formal class training. Their number of hours, in most cases, was over 300. One respondent stated they had a four-month, full-time training program for account executives and ten hours minimum for everyone else. Several of the brokerage firm respondents reported they had programs that involved 700 hours of training.

Question twenty-six also asked the business respondents to report the time of day that the formal training classes were conducted. Most of the data received indicated that most businesses offer formal training programs during the working hours of the employees, but there were a few who held them both during and after working hours. For example, the commercial banks' respondents reported 65.38 percent holding classes only during working hours, and the remaining held them both during and after working hours. In no case did any bank hold formal classes only after working hours.

The respondents of the mutual fund management companies reported holding all of their classes during working hours.

All of the life insurance companies' respondents held their classes during working hours with the exception of one, and they held theirs both during and after working hours.

A total of 71.42 percent of the brokerage firms held their classes during working hours, and the remaining held them both during and after working hours.

The consumer finance company respondents were evenly divided between strictly working hours and a combination of working and after-working hours. An analysis of all categories reporting shows no case in which only after-working hours were used for formal training classes.

Parts (b) and (c) of question twenty-six provide an analysis of the type of teaching methods used during the formal training classes and what percentage of time is used with each method.

All of the respondents of the brokerage firms reporting indicated they used the lecture method of teaching, and they indicated this method is used an average of 50.00 percent of the time. Also, the brokerage firms

all reported using the case study method 36.43 percent of the time. Most of the brokerage firms divided their time evenly between the two methods.

The life insurance companies also were all involved in using the lecture method of teaching their formal training classes. Their percentage of time using this method averaged 50.00 percent. Some of the respondents reported they used the lecture method as much as 85.00 percent of the time while others reported using it only 10.00 percent of the time. In contrast to the lecture method, only 54.55 percent reported using the case study method, using it 35.71 percent of the time.

The respondents for the commercial banks reported using the lecture method of teaching 45.14 percent of the time. A total of 69.23 percent of the commercial banks use the lecture method. An analysis of the data shows that 88.45 percent of the commercial banks use the case study method, and they use this method 36.75 percent of the time.

The respondents for the mutual fund management companies reported using the case study method and no other method.

The respondents for the consumer finance companies also reported using the case study method, but they, like the mutual fund management companies, did not report the percentage of time.

The responses to question twenty-eight provided data to be used in determining whether the service finance institutions had classroom activities which emphasized the practical or the theoretical approach.

The respondents from the commercial banks reported emphasizing the practical approach an average of 80.42 percent of the time in their classroom activities. One respondent reported using the practical approach 100 percent of the time in classroom activities, and the lowest percentage of time used for the practical approach was 20.00 percent.

The respondents for the consumer finance companies reported using the practical approach 85.00 percent of the time in their classroom activities.

The respondees for the mutual fund management companies reported using the practical approach in 85.00 percent of their classroom activities. The respondents for the brokerage firms reported using the practical approach 70.00 percent of the time, and the life insurance companies' respondees reported 72.27 percent of their classroom activities were emphasizing the practical approach. Every respondent, but one, indicated the remainder of their time was used emphasizing the theoretical approach.

Question twenty-seven asked the service finance institutions to report where they held their formal class meetings. The respondents for the consumer finance companies, the mutual fund management companies, the brokerage firms, and the life insurance companies all reported having their formal classes on their own premises. The respondents for the commercial banks revealed that 25.93 percent of them held their class meetings on the premises and at other locations in conjunction with other service finance institutions. All of the remaining commercial bank respondents reported having classes only on their own premises.

Question twenty-nine asks each business respondent, that had a formal training program, to state briefly what he includes in his curriculum. The responses varied with the type of financial institution with which the respondent was employed.

The respondents from the commercial banks reported in most cases they had a basic content of subject matter to which they exposed all of their employees. Their basic program was referred to as bank orientation. The bank orientation program included bank organization and responsibility. There was also an emphasis on exposing each employee to his own management

techniques. After orienting each employee with the company operational procedures, most of the remaining training program helped to develop the employee personally. The idea here, as stated by one company official, was to marshall and develop winning traits like self-discipline, autonomy, awareness, fulfillment, and commitment for greater effectiveness in daily work and career building. Having received the basic bank orientation and some work in the area of human development, the employee was then placed into one of the following training areas:

1. Bank accounting
2. Cash flow
3. Short term financing
4. Long term financing
5. Leasing
6. Taxation
7. Corporate financial management
8. Real estate financing
9. Statement analysis
10. Working investments
11. Credit analysis
12. Making credit decisions
13. Customer relations
14. Data processing
15. Credit investigation
16. Sales training

Many of the commercial bank respondees reported their personnel were rotated from one job to another while they were also taking formal classes.

The respondents for the brokerage firms reported their main concern in most cases was to offer employees subjects which would prepare the trainees for the New York Stock Exchange Examinations. The other area was simply to provide them with courses so they could acquire enough knowledge to conduct

securities transactions. The respondents for the brokerage firms did not list any of the specific courses they taught in their formal classes.

The respondents for the consumer finance companies reported a concern for developing management techniques and knowledge of branch operations. Under these two broad areas they offered training in goal and profit setting, dealer sales, collection, and related areas of branch banking.

The respondents for the mutual fund management companies reported their formal training programs were very small. In response to question twenty-nine the only reply received was that their curriculum required on-the-job experience and outside readings.

The respondents from the life insurance companies reported following much the same training procedures as do the commercial banks. Their programs stress four different areas: (1) orientation, (2) organizational structure, (3) department functions, and (4) life insurance operations. One respondee reported that the company uses the American Management Association training package modified to its own use.

Question thirty asked the service finance institutions to discuss the method they use to develop the practical side of finance. A majority of the commercial banks replied they used on-the-job training, but some did modify this by offering other ideas. One employer stated that his company used the American Institute of Banking courses. One respondent reported having employees meet with various committees, meet with customers, and perform on-site investigations. Still another reported that they let some of their employees serve as administrative aides to professionals, and one stated that they used a combination of classroom experience and work experience. Every response was related to on-the-job training.

The respondents for the consumer finance companies did not reply to this question.

There were very few respondents for the mutual fund management companies, but the responses that were received stressed on-the-job training.

The brokerage firm respondents also reported they leaned toward on-the-job training. One employer reported he liked to give his trainees an exposure to current problems and the opportunity to make decisions. Another reported personal contact and instruction between employer and employee were the way for the employee to learn the practical side of finance. One reported the use of the case study method.

The respondents for the life insurance companies reported including audio-visual methods, bi-yearly reviews, and meetings as part of their way of developing the practical side of finance. They also included self-study courses in the areas of insurance, actuarial reporting, investments, and accounting.

#### Summary

This chapter reported the data received from the questionnaire sent to the service finance institutions. The responses were categorized into the five areas sampled, namely: (1) commercial banks, (2) mutual fund management companies, (3) brokerage firms, (4) consumer finance companies, and (5) life insurance companies. The data collected was divided into five main categories, namely: (1) job entrance requirements, (2) work experience, (3) educational background of employees, (4) educational improvement, and (5) company training programs. The responses were presented using percentage ratings; when this was not possible, a discussion was presented.

## CHAPTER V

### PRESENTATION AND ANALYSIS OF THE DATA FROM STATE COLLEGES

#### Introduction

The analysis of answers from the eighty-one respondees to the state college questionnaire are reported in this chapter. The data are presented in the sequence as indicated in chapter III, namely:

1. The finance program
2. The finance faculty
3. The finance teaching methods
4. Student preparedness

As in the analysis of the business data, many of the answers are reported in tabular form. The returned state college questionnaires did not contain as many comments as did the returned business questionnaires.

#### The Finance Program

The responses were categorized according to the size of the state college. Table 9 shows an analysis of the enrollment in the state colleges whose Business Division Chairmen responded.

Table 10 shows that the state colleges with enrollments of 10,000 and over have the largest percentage of their enrollment in the school of business. State colleges with enrollments of 1,000 to 5,000 students reported their school of business enrollments were 19.83 percent of their total

enrollment. The state colleges with enrollments of 5,000 to 10,000 students had the smallest percentage of their total enrollment in the school of business with 16.80 percent.

TABLE 9  
STATE COLLEGE ENROLLMENT ACCORDING TO SIZE

1,000 to 5,000 %	5,000 to 10,000 %	10,000 and over %
49.38	34.57	16.05

TABLE 10  
PERCENT OF ENROLLMENT IN THE SCHOOL OF BUSINESS

Size of School	Responses						
	Response	No Response	Average	High	Low	Median	Mode
1,000 to 5,000	90.00	10.00	19.83	40.00	5.00	20.00	20.00
5,000 to 10,000	89.29	10.71	16.80	30.00	4.00	20.00	20.00
10,000 and over	100.00	0.00	21.15	60.00	5.00	19.00	20.00

The responses from question three show that 74.39 percent of the respondees for the schools reporting used the semester method for measuring credit hours, and 25.61 percent used the quarterly method.

Table 11 shows the number of state colleges reporting which offer a major in finance and the number which do not.

As the table indicates, the state colleges with 1,000 to 5,000 enrollees have the least amount of participation in a finance major program.

The state colleges with over 10,000 students enrolled have the largest percentage of participants.

TABLE 11  
STATE COLLEGES OFFERING A FINANCE MAJOR

1,000 to 5,000		5,000 to 10,000		10,000 and over	
Yes	No	Yes	No	Yes	No
10	30	17	11	12	1

Questions five through ten related only to those state colleges offering a major in finance. The responses from the state college respondees operating on the quarterly basis were converted to semester hours. The first question of this group asks the state colleges to report the number of hours they require in their finance major programs.

The respondees from the state colleges with enrollments of 1,000 to 5,000 report the following course requirements: (1) 16.44 hours of finance, (2) 38.06 hours of business administration, (3) 5.45 hours of economics, and one school reported a four hour internship program. Thirty semester hours of finance was the highest finance course requirement, and 13.33 semester hours of finance was the lowest course requirement.

The respondees from the state colleges with 5,000 to 10,000 students enrolled report the following course requirements: (1) 14.76 hours of finance, (2) 38.25 hours of business administration, and (3) 10.85 hours of economics. The highest number of hours required in finance was twenty-four, and the lowest was nine hours. Some mention was made of additional work required in areas of computer science and business correspondence.

The respondents from the state colleges with over 10,000 students enrolled, operating on the semester basis, reported the following course requirements: (1) 17.91 hours of finance, (2) 24.03 hours of business administration, and (3) 7.65 hours of economics. The highest number of hours required in finance was twenty-four and the lowest was twelve. One school in this category reported requiring a computer programming course.

The responses to question six show that the schools with 1,000 to 5,000 enrollees reported 80 percent of their finance major programs in existence from three to ten years. The schools with 5,000 to 10,000 enrollees have 62.50 percent of their programs in existence for the same length of time as the previous category, but they also had 18.75 percent of their programs which were one to two years of age and the same percentage which were over ten years old. The schools with 10,000 and over students have the oldest programs with 58.33 percent of their programs being six years old or older.

The responses to question seven provide data on the length of time it has been since state college finance major programs have received a major revision. Every respondent from a school with 1,000 to 5,000 enrollees reported a major revision during the last two years. In the category with 5,000 to 10,000 students, respondents from two schools reported it had been six years since they had made a major revision, and one respondent reported they had made refinements and expansions, but they had not made any major revisions. The remainder of the respondents in this category reported a major revision during the last two years. In the category with 10,000 and over enrollees, most of the major revisions have been made during the last three years. One respondent reported it had been ten years since they had made a major revision, and another reported they had never made a major revision.

The responses to question eight provide data on the length of time since a follow-up study has been made on the finance graduates. In the category with 1,000 to 5,000 enrollees a total of 60 percent of the respondents had made a follow-up study during the last two years. The respondents for the category with 5,000 to 10,000 enrollees reported a follow-up study being done within the last two years by 50 percent in this category. In the category of schools with 10,000 and over enrollees, 37.50 percent of the respondents reported a study being done during the last two years and the same percentage reported it had been longer than ten years since they had made a study.

Questions nine and ten dealt with grade point requirements for the state college finance major programs. The responses to question nine provided data on the grade point average requirement for entrance into the state colleges' finance major programs. A total of 90 percent of the respondents reported requiring a 2.0 grade point average for entrance into their program. Only one school's respondent reported that they required a 2.75 grade point average requirement, the highest required.

The respondents to question ten reported the grade point average for retention in their finance major programs. All of the respondents reported requiring the same grade point average for retention in their finance major programs as they did for entrance.

Question twenty-seven was also directed only to those schools offering a major in finance. The responses provide data on the magnitude of their programs. In the category of schools with 1,000 to 5,000 students the average number of finance majors reported was 25.88 students. The largest number of finance majors in this category was sixty and the lowest was thirteen students. In the category of schools with 5,000 to 10,000 enrollees, the average

number of finance majors was 100, the highest was 250, with the lowest being twenty-seven students.

The state colleges not offering a major in finance generally do offer some courses in finance. The responses to question eleven provide data on the amount of course work in finance offered by the state colleges not offering a major in finance. The respondents from the state colleges in the category of schools with 1,000 to 5,000 enrollees reported offering an average of 13.36 hours in finance. The highest number of hours offered was twenty-four.

The respondents from the state colleges in the category with 5,000 to 10,000 students reported offering an average of 10.38 hours in finance. The highest amount offered was twenty-four hours. The one respondent from the state college with 10,000 and over students without a major in finance reported offering twelve hours in finance.

The academicians were asked, in question fifteen, to rank their order of importance for a graduate to be successful in a service finance institution from the following: (1) accounting, (2) computer programming, (3) economics, (4) finance and investments, and (5) mathematics and statistics.

The respondents from the schools with 1,000 to 5,000 enrollees reported that to be successful in a service finance institution students should have more exposure to finance and investment courses. A total of 47.50 percent of the respondents ranked finance and investments courses as the most important. A total of 37.50 percent of the respondents thought accounting was the most important and ranked it as number one. As the number two choice 35.00 percent of the respondents ranked finance and investment courses, and 35.00 percent chose accounting. A total of 30.00 percent of the respondents chose mathematics and statistics as their third choice. The number four

choice had 30.00 percent of the respondents choosing both economics and mathematics and statistics. Computer programming received the largest percentage for the respondents' last choice.

Question seventeen asks the respondents to report the emphasis they placed on specific course areas. The respondents from schools offering a major in finance placed their greatest emphasis on finance and investments. The emphasis in the accounting area was comparable in all categories. Economics was the response emphasized more in the schools with 5,000 to 10,000 and 10,000 and more students than in the schools with 1,000 to 5,000 enrollees. Mathematics and statistics were emphasized the most in the schools with 5,000 to 10,000 and 10,000 and over enrollees for respondents from schools not offering a major in finance. Management also received more emphasis in the schools not offering a major in finance.

The responses to question twenty provide data to determine the importance the academicians place on attending finance conferences as a requirement for graduation. The respondents were generally in agreement that it was least important. A total of 62.96 percent of the respondents rated it least important, and a total of 76.54 percent rated it below average in importance.

The responses to question thirty-four and forty-two provide data to determine the availability of reading material at the state colleges. Question thirty-four asks the respondents to estimate the number of volumes and periodicals available in the library. The average number of volumes and periodicals available is 909 with the highest number being 5,000 and the lowest being five. The majority of the schools reported having less than 1,000 volumes and periodicals available in the library.

When asked if they received house organs from financial institutions, 50.62 percent of the respondents reported they did. In reply to the number

they received the answers varied from two to thirty. Some stated they did not know how many they did receive. Most of the respondees reported they received from five to ten house organs from financial institutions. The following is a list of house organs which were named.

1. Federal Reserve Report
2. Financial Reports of various corporations
3. Economic reports from business schools
4. Chase-Manhattan Bank letter and other bank letters
5. Insurance Fact Book
6. New York Stock Exchange Fact Books
7. Wall Street Journal
8. FABCO Bulletin
9. Morgan Guaranty Trust
10. Manufacturer's Hanover
11. Studies from ABA
12. First Hawaiian

When asked to give their opinions as to whether they thought finance education leads, lags, or is current with industry practice, the responses varied with the size of school reporting. The smaller schools, the category with 1,000 to 5,000 enrollees, had 45 percent of the respondees report they thought finance education lags ind industry parctice. In contrast to this opinion the large schools, those with enrollments of 10,000 and over, had 53.85 percent report they thought finance education leads actual industry practice. The category with 5,000 to 10,000 enrollees had 35.71 percent of the respondents report they thought finance education leads actual industry practice.

Question forty-three asks the respondents to report the number of courses they would require if they were developing a finance major program. Table 12 is a composite of the data received from the respondees.

TABLE 12

## COMPOSITE FINANCE MAJOR

Course	Number of Courses
Finance	7.70
Accounting	4.22
Economics	2.91
Electronic Data Processing	1.82
Business Law	1.75
Marketing	1.68
Statistics	1.00
Business Writing	.95
Insurance	.95
Real Estate	.81
Internship	.75
Personnel Management	.75
Production Management	.75
Business Ethics	.62
Office Administration	.33
Salesmanship	.29
Transportation	.16
Total	28.34

Finance Faculty

This section of chapter V reports the makeup of the finance faculty, their work load, and their professional involvement. The responses

to the first question which pertained to the faculty provided data on the percentage of finance classes being taught by people with finance majors. Table 13 shows an analysis of the data received.

TABLE 13  
PERCENTAGE OF FINANCE CLASSES TAUGHT BY PEOPLE  
WITH FINANCE MAJORS

Category	Yes %	No %	No Answer %
1,000 to 5,000	43.90	51.22	4.88
5,000 to 10,000	59.26	37.04	3.70
10,000 and over	61.54	38.46	0.00

The responses to questions twenty-three and twenty-four provide data on the size of enrollment in both the elementary and advanced finance classes. The responses to question twenty-three show that the average class size for elementary finance classes is 32.29 students for schools with 1,000 to 5,000 enrollees. The largest class average size in this category was sixty and the smallest was fifteen.

The schools in the category with 5,000 to 10,000 enrollees had respondents reporting having a class average of 35.52 students for their elementary finance classes. The largest class size reported for this category was also sixty and the smallest was twenty.

The category of schools with 10,000 and over enrollees reported average class size in elementary finance to be 34.08 students. Their largest class size was seventy and the smallest was thirty.

In the advanced classes in finance, the respondents from the schools with 1,000 to 5,000 enrollees reported average class sizes of 19.68 students.

The largest average class size reported by the respondents was thirty-five students and the smallest reported was ten.

In the category with 5,000 to 10,000 enrollees the average class size reported was 25.81 students per class. The largest class was sixty students and the smallest was ten students.

In the category of 10,000 and over enrollees the average class size was reported at 23 students. The largest advanced class size in this category was thirty students and the smallest was twenty students.

Question twenty-five asks the respondees to report the number of classes taught by the finance faculty. Table 14 provides a compilation of the data reported.

TABLE 14  
TEACHING LOAD OF FINANCE FACULTY IN HOURS

Category	Teaching Load in Hours				
	Average	Median	Mode	High	Low
1,000 to 5,000	10.00	12	12	16	9
5,000 to 10,000	13.73	12	12	15	6
10,000 and over	9.35	12	12	15	6

As the data in table 14 shows, the state colleges in the category with 10,000 and over enrollees have the smallest teaching load per faculty member with 9.35 hours per member. The faculty in the category with 5,000 to 10,000 enrollees have the largest teaching load with 13.73 hours per faculty member.

Question twenty-six asks the respondents to report the full time equivalent faculty assigned to teach finance courses. The responses

received are illustrated for both the schools offering a major in finance, and the schools not offering a major in finance. Table 15 reports the data received from the schools offering a major in finance.

TABLE 15  
FULL-TIME EQUIVALENT FACULTY FOR SCHOOLS OFFERING  
A MAJOR IN FINANCE

Category	Full-Time Equivalent Faculty				
	Average	Median	Mode	High	Low
1,000 to 5,000	1.65	2	1	3	1
5,000 to 10,000	2.97	3	3	8	.1
10,000 and over	5.04	5	5	11	1

Table 16 illustrates the responses received from the respondents for schools not offering a major in finance.

TABLE 16  
FULL-TIME EQUIVALENT FACULTY FOR SCHOOLS NOT OFFERING  
A MAJOR IN FINANCE

Category	Full-Time Equivalent Faculty				
	Average	Median	Mode	High	Low
1,000 to 5,000	1.49	1	1	6	.25
5,000 to 10,000	1.72	3	3	8	1.00
10,000 and over	1.50	1.50	1.50	1.50	1.50

An analysis of the data reported in tables 15 and 16 shows that the state colleges with 1,000 to 5,000 enrollees and not offering a major in finance have the lowest full-time equivalent faculty teaching finance. The schools in the same category, but offering a major in finance, have 1.65 full-time equivalent faculty teaching finance. The category with 10,000 and over enrollees for schools which offer a major in finance has the largest full time equivalent faculty teaching finance with 5.04 faculty. The largest finance faculty was also in this group with eleven full-time equivalent faculty teaching finance.

Question twenty-eight was directed at only those schools offering a major in finance. The responses to the question reported the number of students each faculty member advises. The respondees from the state colleges with 1,000 to 5,000 enrollees report advising 23.86 students per faculty member. The highest number of advisees for a teacher in this category was thirty-five and the lowest was thirteen.

The respondees from the state colleges with 5,000 to 10,000 students reported an average of 23.82 students per faculty member, with the high being forty advisees and the low being ten.

The respondents from the state colleges with enrollments of 10,000 and over reported an average of 27 advisees per teacher, with the high being fifty students and the low being twelve.

Question twenty-nine was directed at the total sample. The respondents from each college were asked to report the number of course preparations each faculty member in finance had during the semester. A total of 61.10 percent of the respondents from the category of schools with 1,000 to 5,000 students reported they had three course preparations, 25.00 percent reported having two preparations, 8.34 percent reported having four preparations, and

5.56 percent of the respondees reported having only one course preparation per finance faculty member during the semester.

A total of 62.50 percent of the respondents from the schools with enrollments of 5,000 to 10,000 reported having three course preparations and 37.50 percent reported having two course preparations.

The respondents from the state colleges with 10,000 and over enrollees reported 84.70 percent of their faculties with two course preparations and 7.65 percent with four preparations.

Question thirty asks the respondees to report the number of finance courses they offer each academic year. The respondees from the state colleges with 1,000 to 5,000 students operating on the quarterly basis reported offering 4.63 courses per academic year. The highest number offered was sixteen and the lowest was one course offered. The state colleges in the same category, but operating on the quarterly basis, are offering an average of 5.75 courses per academic year, with the high being eleven and the low being three courses offered.

In the category for schools with 10,000 and over enrollees operating on the semester basis the respondees reported an average course offering of ten. The high for this category was thirteen and the low was five. The state colleges in this same category operating on the quarterly basis had their respondents report offering an average of 18.4 courses per academic year, with the high being sixty and the low being five.

The respondents were asked in question thirty-one to report the type of professional improvement conferences their faculty attended. The most popular type of professional improvement conferences reported was the business conference. The respondees reported their faculty attends an average of 2.24 business conferences a year. The highest number attended

was ten and the lowest was one. The educational conferences and the workshops were the next most popular professional improvement conferences attended with an average attendance of 2.10 of these each year. The highest number attended was five and the lowest was one conference attended.

Question thirty-two asks the respondents to report how often they communicated with a service finance institution. The respondents from the state colleges with 1,000 to 5,000 students reported 59.20 percent had occasional communication with service finance institutions. A total of 30.50 percent reported having frequent communication and 10.30 percent reported having no communication with service finance institutions.

The respondents from the state colleges with 5,000 to 10,000 students reported 47.80 percent of the state colleges in their category had occasional communication with service finance institutions and 52.20 percent had frequent communication.

The respondents for the category with 10,000 and over enrollees reported 63.60 percent of their schools had occasional communication with service finance institutions and 36.40 percent had frequent communication.

The respondents were asked in question thirty-three if they had invited an employee of a service finance institution to speak to their class during the last year. A total of 17.28 percent of all the respondents reported they had not.

#### Finance Teaching Methods

Question eleven asks the respondents the type of emphasis they stressed in their finance classes. An analysis of the responses received shows an overwhelming preference for theory and application from business as the most popular type of emphasis being used in teaching finance classes. A total of 85.96 percent of the respondents expressed a preference for this

type of emphasis in teaching finance. The second choice was theory and research and theory was the third choice.

When responding as to the method they felt to be most effective in teaching their introductory finance classes, the lecture method had a slight edge as the first choice, problem solving was a slight edge for second, audio-visual presentation was third, and field trips were fourth.

The responses received concerning other methods which are used are as follows:

1. Computer simulations
2. Discussion by class
3. Student involvement
4. Internships
5. Professional guest lecturers
6. Library projects
7. Specific handouts to supplement lecture

Many of the respondents indicated they used a combination of all the choices given. One respondent reported he was using an audio-tutorial method on a trial basis.

Question fourteen was directed at teaching methods used for advanced finance classes. The responses to this question indicated a preference for problem solving. A total of 64.40 percent of those responding chose problem solving as their choice for teaching advanced finance classes. The audio-visual presentations and field trips were reportedly as extensively used as they were in the introductory classes.

Question twenty-one was directed at the emphasis being placed in finance classes on attitude, vertical job mobility, horizontal job mobility, and behavioral problems of clients. Each respondent was asked to rate the

emphasis he placed on each of these areas on a scale of one to five. The one indicated most important and the five least important.

In analyzing the data received on attitude emphasis, the respondents from the state colleges with 1,000 to 5,000 students had 34.25 percent of them rating it most important. The category of schools with 10,000 and over enrollees had 30.76 percent of the respondents rating attitude as most important, and all three of the categories gave attitude a better than average rating in importance.

A total of 59.60 percent of those responding to this question rated vertical job mobility a three and 55.90 percent rated horizontal job mobility a three.

The behavioral problems of clients had a majority of the respondents rating it a two on emphasis with 27.10 percent rating it a three. In summary of the emphasis being placed on teaching, it appears that attitude is most important followed by behavioral problems of clients, vertical job mobility, and horizontal job mobility.

The responses to question thirty-five report the popularity of finance publications. The respondents ranked the Journal of Finance as their number one choice of publication. The Financial Analyst's Journal received many first place votes, but it was selected as the number two choice. The choice for third was quite close with the Institutional Investor having a slight edge. The fourth choice was the Harvard Business Review, and the last choice was the American Economic Review.

Question thirty-six asks the respondents from the state colleges to report the type of publication they prefer, and they were given four choices: (1) industry survey articles, (2) case studies, (3) empirical studies, and (4) theoretical articles.

The responses received indicate the most preferred types of publications are the case studies and empirical studies. These two were followed by industry survey articles, and the last choice was the theoretical type of articles.

The responses to question thirty-seven report the attitude of the respondees as to what they think is important to be successful in a service finance institutions. Table 17 reports the responses received.

TABLE 17  
IMPORTANT FOR SUCCESS IN A SERVICE FINANCE INSTITUTION

Category	Rating				
	1 %	2 %	3 %	4 %	5 %
Major in Finance	35.80	24.69	17.28	12.35	1.23
Major in Business Administration	22.22	27.16	18.51	16.05	1.23
Business Experience	8.64	28.40	34.57	24.69	0.00
Personality	20.99	17.28	17.28	28.40	1.23
Other or no response	12.35	2.47	12.37	18.51	96.31

As the table indicates the most popular choice for number one is a major in finance. Business experience received the most support for number two. Personality was the leading choice for fourth place.

The respondees were asked if they use management games, and if they did, were they computerized or manual. The responses to this question indicate that 23.40 percent of the respondees do use some type of management game. Some of them responded by reporting they used both manual and

computerized games. The following is a list of the names of the type of games they use. Some are manual and some are computerized.

1. Financism
2. Executive Game
3. Financial Management Decision Game
4. Stock Market Purchase
5. Investments
6. Instrat

Question number forty was an open-ended question asking the respondents to report what they think the service finance institutions would like for education to stress.

The question produced a variety of answers, but one general agreement. It was generally agreed that what industry wanted and needed was people with more practical knowledge. This was stated in a variety of ways such as: (1) more practical application and less mathematical models, (2) ability to think through practical problems, (b) be able to make computations of a basic nature, good work habits, and know terminology, and (4) more practice and less theory. There were also responses which pointed out a need for improvement in the ability to communicate. The following is a list of the ideas expressed by the respondents.

1. Knowledge of finance principles
2. Understanding of the interrelationships of financial institutions in the economy
3. Understanding of basic economic and financial relationships
4. Human relations
5. A more conservative approach
6. Less emphasis on financial management, and more on accounting and economics

7. More training in logical thinking and writing
8. Knowledge of the free enterprise system

The last question to be discussed on teaching methods related to the development of practical knowledge. The respondents were asked to report their participation in a cooperative finance work program. In analyzing the responses it was found that only 33.33 percent of the state colleges had such a cooperative work program in operation.

#### Student Preparedness

Question eighteen asks the respondents to report what degree of competency they judged their graduates to have toward gaining employment in the service finance field. Table 18 shows a report of the data received and analysis based on a one to five rating.

TABLE 18

#### COMPETENCY OF STATE COLLEGE FINANCE GRADUATES IN GAINING EMPLOYMENT IN THE SERVICE FINANCE FIELD

Category	Competency					
	1 %	2 %	3 %	4 %	5 %	No Answer
1,000 to 5,000	4.89	34.15	36.59	7.32	7.32	9.76
5,000 to 10,000	7.40	59.26	18.52	7.40	0.00	7.40
10,000 and over	23.08	38.46	23.08	7.69	0.00	7.69

A total of 36.59 percent of the state college respondents in the category with 1,000 to 5,000 enrollees rated their graduates a three in their ability to gain employment in the service finance field. A total of

75.63 percent of the respondees in this category rated their graduates a three or better, but 14.64 percent rated them below a three in their competency in gaining employment in the service finance field.

The respondees in the category of schools with 5,000 to 10,000 students gave their graduates a slightly better rating than the preceeding category. This category had 59.26 percent of the state college respondees rating their graduates a two, and 85.18 percent rating them a three or better. They also had only 7.04 percent rating their graduates below a three in their competency in gaining employment in the service field.

The respondents from the state colleges in the category with 10,000 and over enrollees gave their graduates the best rating of all the categories. A total of 84.62 percent of these respondees rated their graduates a three or better, and 23.08 percent rated their students most competent in gaining employment in the service finance field.

In the area of career opportunity awareness the respondents were asked to rate their students on a scale of one to five. Table 19 shows an analysis of the data received in response to question nineteen, which was concerned with student career opportunity awareness.

A total of 31.71 percent of the respondees from the state colleges with 1,000 to 5,000 students rated their students below a three in career opportunity awareness. The respondents in the category of schools with 5,000 to 10,000 enrollees rated their graduates slightly better by only having 18.52 percent rated below a three in career opportunity awareness. The respondents from the category with 10,000 and over enrollees had a total of 30.77 percent of the respondees rating their students below a three in career opportunity awareness.

TABLE 19

## STUDENT AWARENESS OF CAREER OPPORTUNITIES

Category	Student Awareness					
	1 %	2 %	3 %	4 %	5 %	No Answer %
1,000 to 5,000	7.32	26.83	26.83	24.39	7.32	7.32
5,000 to 10,000	11.11	22.22	37.04	18.52	0.00	11.11
10,000 and over	23.08	23.08	15.38	30.77	0.00	7.69

In summary of the two areas questioned, the state college respondees are not of the opinion their students are excelling in their ability to gain employment in the service finance field, and they report there is a slight weakness in their awareness of career opportunities in the service finance field.

Summary

This chapter reported the data received from the questionnaire sent to the state colleges. The responses were categorized according to the size of school reporting, namely: (1) 1,000 to 5,000 enrollees, (2) 5,000 to 10,000 enrollees, and (3) 10,000 and over enrollees. The data collected was divided into four main categories, namely: (1) the finance program, (2) the finance faculty, (3) the finance teaching methods, and (4) student preparedness. The responses were presented using percentage ratings, when this was not possible a discussion was presented.

## CHAPTER VI

### COMPARISON OF SELECTED DATA AND TESTING OF HYPOTHESES

#### Introduction

In order to ascertain the relevancy of preparation in finance education to actual practice in service finance institutions, it was necessary to compare the responses to selected questions from both the service finance institutions and the state colleges. Unless otherwise indicated, the same questions appeared in both the business and state college questionnaires.

#### Comparison of Selected Data

Both samples were asked what they felt was the ideal educational background for a service finance institution employee. There were varied opinions on the particular question. The respondents from the service finance institutions did not have a consensus on any one particular background. The respondents from the commercial banks, large consumer finance companies, and the life insurance companies all chose a business administration background as the most desirable educational background. The respondents from the brokerage firms chose specialization in finance and investments, and the mutual fund management company respondents were divided between a business administration major, and specialization in finance and investments. Although not all categories chose specialization in finance and investments as a first choice in educational preparation, there was still strong support for it from the respondents in all types of financial institutions.

The state college sample, like the service finance institution sample, did not have a consensus for an educational background. The respondees from the state colleges with 1,000 to 5,000 and 10,000 and over students indicated a business administration major as the most desirable educational background for employment in a service finance institution. The responses from state college respondents for those colleges with 5,000 to 10,000 enrollees indicated specialization in finance and investments as the most desirable preparation. Those respondents choosing a business administration background also had strong inclinations toward specialization in finance and investments.

In summary, there was more preference for a business administration educational background by both business and the state college respondents, with specialization in finance and investments as a close second. There was unanimous agreement by both samples that a liberal arts educational background was the least desirable educational background for employment in a service finance institution.

Both samples were asked to place in order of importance the following items: (1) a major in business administration, (2) a major in finance, (3) business experience, (4) personality, and (5) any other areas they felt were desirable attributes for an employee to have for success in a service finance institution.

The respondents from the mutual fund management companies and the life insurance companies ranked the major in business administration as the most important. The respondees from the commercial banks chose a major in finance. The respondees from the brokerage firms chose personality, and the large consumer finance company respondents chose business experience. The respondents from the commercial banks and the life insurance companies

ranked personality high, and the brokerage firm respondents ranked business experience as their second choice.

All respondents from the state colleges chose a major in finance as the most important item to be successful in a service finance institution. Business experience was ranked low by the respondents from state colleges. A business administration major was the second choice of the state colleges. In comparing the two samples it is evident there were some basic differences of opinion. First, there was a difference of opinion as to what is the most important type of educational background. The state college respondees supported a major in finance, and a majority of the business respondees supported a business administration major. Second, the business respondents were concerned about business experience, but the state colleges gave it very little consideration.

Both samples were asked to rank specific course areas they felt were important for employment in a service finance institution. There was one difference in the questions, that being the business respondents were asked to also rank the importance of machine experience, and the state college respondents were not asked to do so.

Every respondent from each category of the state colleges agreed that finance and investment courses were the most important course areas, but the business respondents did not confirm this. The respondents from the commercial banks, brokerage firms, and the mutual fund management companies did agree that finance and investment courses were the most important, but the life insurance companies' and the large consumer finance companies' respondents reported management was more important. All state college respondents chose accounting as the second most important course area, and the business respondents agreed with this choice. In observing the data

presented it is evident there is no agreement within each sample, or between the samples as to the importance of the remaining subject matter areas. Also, it is evident that the businesses' respondents tend to select the course areas they consider most beneficial to their own particular type of operation.

Both samples were asked to rank the importance of theory, theory and application from business, theory and research, and any other emphasis they felt necessary for an educational background. The state college and service finance institution respondents were in complete agreement on this question. They ranked them: (1) theory and application from business, (2) theory and research, and (3) theory.

Each sample was asked a question concerning the importance of attitude, vertical job mobility, horizontal job mobility, and behavioral problems of clients. The respondents were asked to rate the state college graduates in these areas and the state college respondents were asked to rate the emphasis they placed on each area .

On attitude, the respondents from the businesses rated the state college graduate as average or slightly above average. The state college respondents also indicated they placed average or slightly above average emphasis on attitude.

On vertical job mobility, a majority of the business respondents gave the state college graduate an average or slightly above average rating. The state college respondents also reported they placed average or slightly above average emphasis on vertical job mobility.

Several of the business respondents reported their state college graduates rated below average on horizontal job mobility, but the majority gave an average or slightly above average rating. The state college respondents

reported placing less emphasis on horizontal job mobility than they did on vertical job mobility.

On the question concerning behavioral problems of clients, the state colleges' respondents reported placing above average emphasis on this particular problem, but the businesses' respondents in many cases did not report the state college graduates handling behavioral problems of clients adequately.

The service finance institution and the state college respondents were asked to report the amount of communication they had with each other. In comparing the two samples' reports it is evident the commercial banks lead all other categories in communicating with state colleges. The life insurance companies reported limited communication, but the remaining categories only occasionally communicated with state college representatives or they did not communicate at all.

The state colleges' respondents in the categories with 1,000 to 5,000 and 10,000 and over enrollees reported communicating occasionally. The state college respondents from schools with 5,000 to 10,000 students reported communicating frequently. In comparing the two samples, the state colleges have a better communication record than do the businesses.

Each sample was asked to report on the type of reading preferred. The life insurance companies, large consumer finance companies, commercial banks, and the brokerage firms all selected the Harvard Business Review as their first choice for reading.

The state college respondents selected as their first choice for reading the Journal of Finance followed by the Financial Analyst's Journal, the Institutional Investor, Harvard Business Review, and the American Economic Review in that order. In comparing the two samples it is apparent no agreement exists.

Both samples were asked to report the type of reading material they preferred. The state college respondents ranked their reading preferences in this order: (1) industry survey articles, (2) case studies, (3) empirical studies, and (4) theoretical articles. There was no difference of opinion on this question, the business and state college respondents both ranked them in the same order of preference.

Service finance institution and state college respondents were both asked to compare finance education as to whether it leads, lags, or is current with industry practice. The answers to this question varied within each sample. The respondents from the state colleges with 5,000 to 10,000 students enrolled reported they thought finance education leads actual industry practice. The state college respondents from school with 1,000 to 5,000 students reported they thought finance education lags behind actual industry practice. The respondents from the commercial banks, mutual fund management companies, and the brokerage firms all reported they thought finance education lags behind actual industry practice. The large consumer finance companies did not have enough respondents answering this question to be counted. There were respondents from each business category reporting they thought finance education was current with industry practice, and very few reporting they thought finance education leads actual industry practice. In summary, it appears the people in education have a higher opinion of their finance education programs than do the people in the finance industry.

The respondents from service finance institutions were asked if they encouraged field trips to their institutions. The respondees for the commercial banks were the only business respondents having a majority reporting that they encouraged field trips.

In contrast, the state college respondents were asked to rank the importance of field trips in their teaching methods. The state college respondents ranked the use of field trips low as a method of teaching. They favored problem solving and the lecture methods of teaching.

Each sample was asked about what should be emphasized in the teaching of finance. There was an agreement between the respondents of both samples that the major problem was a lack of emphasis on the practical side of finance. They thought students should be exposed to the real world of finance and better trained to handle the various types of finance problems incurred on a day-to-day basis.

### Testing of Hypotheses

The hypotheses of this study were initially stated in chapter I. Each hypothesis was tested with the data collected on the completed, returned questionnaires. The results of the testing are reported below.

#### Results of Testing Hypothesis One

Hypothesis one stated that state college finance programs offer the course specialization needed for job entrance in service institution.

In order to test this hypothesis it was necessary to compare the finance specialization courses offered by state colleges with the finance specialization course background desired by the service finance institution respondents. After making this comparison it was evident that the state colleges offering a major in finance are providing the necessary finance specialization courses. Some of the state colleges not offering a major in finance do have a large concentration of courses in finance specialization. When this is the situation, these state colleges graduate people with adequate backgrounds for employment in the technical areas of the finance

industry. Many of the state colleges not offering a major in finance have a rather shallow concentration in finance and their graduates are probably qualified for entry only to the clerical types of positions in the finance industry.

#### Results of Testing Hypothesis Two

Hypothesis two stated that state college finance programs offer the students an opportunity to develop necessary communicative skills for service finance institution job performance.

In testing the second hypothesis, it was necessary to examine the opinions of the state college and service finance institution respondents when asked the type of background they thought was necessary for success in a service finance institution and to examine the emphasis each sample thought should be placed on specific course areas. Many of the service finance institution respondents commented on the need for employees with better communicative skills. The state college respondents did not offer an opinion on the need for better communicative skills. To further analyze this problem the state college and the service finance institution respondents agreed that the liberal arts background was the least desirable background for employment in a service finance institution. When asked the course requirements they would prefer for a major in finance, the service finance institution respondents specified more business writing and communication courses than did the state college respondents.

In summary, the service finance institutions' respondents believe the state college graduates need more training in communication than they are getting, and the state colleges are not providing adequate training in this area, nor do their respondents report an awareness of the fact that it is needed.

Results of Testing Hypothesis Three

Hypothesis three stated that state college finance programs provide an opportunity to develop application techniques by utilizing knowledge and skills of business.

To test this hypothesis the state college teaching methods for both introductory and advanced finance classes were examined. State college introductory finance classes are generally being taught by using the lecture and problem solving methods. The advanced finance classes were generally being taught by the same methods with more emphasis on problem solving than on the lecture method. The number of schools using management techniques was very small and the attitude toward field trips was very poor. Many state college respondents indicated different ways of utilizing the knowledge and skills of business, but there was no consistency. An examination was made of the cooperation service finance institution representatives give the state colleges. Many of the businesses' respondents indicated a desire to have people with more practical knowledge of finance, but a very small percentage are engaged in summer or cooperative work programs. Also, a very small percentage of the businesses' respondents reported encouraging field trips to their businesses and a rather small percentage of business representatives communicate with the state colleges.

After analyzing the information received from both the service finance institution and the state college respondents, it appears that in a few isolated cases the state college finance programs are providing students an opportunity to develop application techniques by utilizing the knowledge and skills of business, but the state college finance programs as a whole are not providing this opportunity.

#### Results of Testing Hypothesis Four

Hypothesis four stated that state college finance faculty do not understand the course needs of service finance institutions.

In testing hypothesis four the suggested finance majors of both the state colleges and the service finance institutions were compared. In the area of accounting the state colleges' respondents advocated more course work than did the service finance institutions. The state colleges' respondents also advocated more finance courses than did the service finance institutions. The service finance respondents felt more course work was needed in salesmanship and communications than did the state college respondents. One agreement which was particularly noticeable was the amount of internship suggested. Both samples recognized the need and value of both business experience and practical knowledge, but they did not put much emphasis on internship. After observing these differences of opinion there appears to be a gap between what the service finance institution employers think their employees should be trained in and what the state college faculty think they should be teaching their students.

#### Results of Testing Hypothesis Five

Hypothesis five states that state college finance programs develop student personalities satisfactorily for personnel management in service finance institutions.

In order to test this hypothesis a comparison of the attitudes of the service finance institutions' and the state colleges' respondents was made. The service finance institution respondents placed a high priority on the need for people with personality and the state college respondents, also, rated personality high. When asked what emphasis should be placed on teaching

finance courses, both the state college and the service finance institution respondents failed to mention the necessity of more training to develop personality. Only one state college respondent discussed the necessity of human relations. Both samples recognized the need for personality development, but neither sample gave any indication they were attempting to do anything about it. On the basis of the information received both the state college and the service finance institutions are not providing courses or techniques conducive to developing personalities.

#### Results of Testing Hypothesis Six

Hypothesis six stated that state college finance programs provide adequate training for job mobility in service finance institutions.

In order to test hypothesis six the service finance institutions' respondents were asked to evaluate their state college employees on both vertical and horizontal job mobility. The state college respondents were asked to indicate the emphasis they placed on both vertical and horizontal job mobility in their programs.

The service finance institutions' respondees generally provided an average or slightly above average rating of their state college employees on vertical job mobility. The state college respondents' emphasis on vertical job mobility was comparable to the rating provided by the service finance institutions. As in other ratings there were isolated situations where both the service finance institution respondents and the state college respondents reported adequate job performances and emphasis, but generally the service finance institution and the state college respondents reported inadequate job performance and emphasis on vertical job mobility. From the data collected it appears the state colleges are generally not providing proper training in vertical job mobility.

The service finance institution respondents were asked to evaluate the state college employees' ability in horizontal job mobility. Many of the service finance institution respondents rated their state college employees below average, but the majority rated them average or slightly above average. The state college respondents reported placing less emphasis on horizontal job mobility than they did on vertical job mobility. Again, the emphasis indicated by the state college respondents on horizontal job mobility is reflected in the service finance institutions' evaluations. From the reports received from both samples it can be concluded that the prospective employees from the state colleges are not receiving proper training in horizontal job mobility.

#### Results of Testing Hypothesis Seven

Hypothesis seven stated that the type of relationship existing between education and practice has resulted in a lack of understanding as to the type of reading material needed by both the personnel in the service finance institutions and the personnel in academia.

In order to test this hypothesis it was necessary to determine the desired reading of both samples. The state college and the service finance institution respondents were both asked to rank the type of reading material they preferred. The service finance institution respondents chose industry survey articles, case studies, empirical studies, and theoretical articles in that order. In comparing the samples' responses to this question it is evident there is a lack of agreement as to the most desirable type of reading material.

In addition, each sample was asked to rank their preferred publication. The majority of the business respondents chose the Harvard Business

Review and the Institutional Investor as their preferred publication. All of the business respondents ranked the American Economic Review as their last choice and the Journal of Finance, in most cases, was not popular. In contrast, the state college respondents chose as their first choice the Journal of Finance followed by the Financial Analyst's Journal. The Harvard Business Review was the fourth choice, and the state college respondents agreed with business that the American Economic Review was the least desirable. From an analysis of the data received in these two areas, it can be concluded there is a lack of agreement as to what constitutes the most desired reading in finance.

## CHAPTER VII

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The objectives of this study were to: (1) determine the nature of subject material taught in the finance courses at state colleges, (2) determine the desired educational background requirements for job entrance in financial institutions, (3) determine whether there is a lack of understanding between academia and practice, and (4) determine whether academia falls short of the requirements of service finance institutions.

The procedures used in the study were as follows: (1) a questionnaire was sent to ten randomly selected stated colleges in each of the twelve Federal Reserve Districts. This provided a sample size of 120. (2) A questionnaire was sent to the five largest, by total assets, life insurance companies, brokerage firms, and commercial banks in each of the twelve Federal Reserve Districts. (3) The same procedure was followed for the mutual fund management companies, but one district did not provide an adequate number of companies. All of the large consumer finance companies listed on the New York Stock Exchange were included in the sample. A total of 259 questionnaires were sent to the service finance institutions.

From the 120 questionnaires sent to the state colleges eighty-one usable questionnaires were returned. The eighty-one figure represents a 67.50 percent return. From the 259 questionnaires sent to the service

finance institutions 112 usable questionnaires were returned. The 112 figure represents a 43.24 percent return. (4) These responses were tabulated and analyzed to obtain a basis for recommendations relative to finance education in the state colleges and the needs of service finance institutions.

Although this study does not extrapolate the findings to the entire population of state colleges and service finance institutions, the size breakdown and geographic dispersion of the eighty-one state colleges and the 112 service finance institutions having respondents return the questionnaire suggest that one should be able to generalize the findings.

The researcher accomplished the four objectives of this study. The nature of the subject material taught in the finance courses in state colleges has been examined. The desired educational background requirements for job entrance in service finance institutions were investigated. A comparison was made between the opinions of both academicians and practitioners about the relationship between teaching and practice in finance, and an investigation as to whether academia falls short of the requirements of service finance institutions was made.

### Conclusions

The findings in this study caused the researcher to conclude that there were differences in opinion between the state college and the service finance institution respondents concerning the finance curricula and the desired requirements of the service finance institution employers. The magnitude of this difference of opinion was more apparent in some areas than in others. This researcher concluded that the academicians should periodically re-evaluate curricula, research activities, and the type of experiences in which industry is interested.

A lack of communication was reported between the state college and the service finance institution respondents. If the finance industry desires to have finance graduates with more practical knowledge, they need to have some degree of involvement in the training program. Both the service finance institutions and the state colleges need to work together and develop cooperative job programs and summer employment opportunities for prospective finance graduates. Their failure to communicate with one another is obviously detrimental to the development of the practical approach in finance education.

State college finance professors need to communicate with service finance institution representatives and actively solicit guest speakers from these businesses. This would give the finance students an opportunity to hear about the real world of finance and challenge students to ask provocative questions about the financial world.

Better lines of communication will help the state colleges understand the needs of the finance industry so they can do a better job of developing new techniques to expose students to a wider range of backgrounds.

Not all the differences of opinion can be resolved by better communication. For example, every finance professor should work to see that his students are fully aware of the career opportunities in the field of finance. This awareness in career opportunities should be developed as the student progresses through the major program rather than waiting until he is ready to graduate and then tell him what he is qualified to do.

Business Division Chairmen and finance professors should re-evaluate their finance major programs to see what emphasis is being placed on vertical and horizontal job mobility and make necessary adjustments for improvement. There should also be an examination of the amount of emphasis that is being

placed on human relations in the world of business and adjustments made if they are necessary.

Finance professors should have well planned and interesting lectures which contain items of a current nature. Also, they should strive to achieve a better balance between theory and practice in their teaching.

The practitioners should make an effort to obtain and understand research being done by the academicians. Also, the academicians should keep themselves current and understand the research being done by the practitioners.

State college representatives should be more aggressive in obtaining service finance institution interviewers for their prospective finance graduates. Many service finance institutions do not solicit the state college graduate, but they should be encouraged to do so.

It is obvious that the ideal finance major program for every type of service finance institution is not possible in any state college, but if these conclusions were corrected and implemented, it should result in a narrowing of the differences of opinion between academia and practice, and the businessmen in the service finance institutions should have a greater interest in the state college finance graduate.

#### Recommendations

The researcher is well aware that the findings of this study primarily establish the fact that some differences of opinion do exist between the finance programs of state college faculty respondents and the needs reported by service finance institution employers, but he is also aware that additional research is needed.

The suggestions for further research are:

1. A comparable study involving businesses which are not service oriented, but still need finance majors
2. A more in-depth study which would better determine the course structure needed for a finance major
3. A study to provide guidelines for developing the practical side of finance in the classroom
4. A follow-up study of graduates from state colleges with finance majors who are working in finance institutions

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## APPENDICES

## APPENDIX A

## PILOT STUDY QUESTIONNAIRE SENT TO STATE COLLEGES

Please return the completed questionnaire to:

Raymond Waltrip  
Northeastern Oklahoma State University  
Tahlequah, Oklahoma 74464

1. What is the enrollment of your institution? \_\_\_\_\_
2. What percent of the total enrollment is in the school of business? \_\_\_\_%
3. Indicate your method of measuring credit hours. Semester \_\_\_\_\_  
Quarter \_\_\_\_\_
4. Do you offer a major concentration in finance? Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, answer questions 5 through 10. If no, skip to question 11.

5. In your finance program how many hours do you require in
  - a. \_\_\_\_\_ Finance Courses
  - b. \_\_\_\_\_ Business Administration
  - c. \_\_\_\_\_ Economics (if not included in Business Administration)
  - d. \_\_\_\_\_ Other related courses (Please list courses and hours)

Hours	Courses	Hours	Courses
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

6. How long has your finance major been in existence?  
 \_\_\_\_ 1 to 2 years    \_\_\_\_ 3 to 5 years    \_\_\_\_ 6 to 10 years    \_\_\_\_ Longer
7. How long since your finance major has undergone a major revision? \_\_\_\_
8. How long since the last follow-up study on your graduates?  
 \_\_\_\_ 1 to 2 years    \_\_\_\_ 3 to 5 years    \_\_\_\_ 6 to 10 years    \_\_\_\_ Longer
9. What are your grade point average requirements for entrance into your finance program? (Based on a 4.0 scale)  
 \_\_\_\_ 2.0    \_\_\_\_ 2.25    \_\_\_\_ 2.5    \_\_\_\_ 2.75    \_\_\_\_ 3.0
10. What is your grade point average requirement for retention in your finance program?  
 \_\_\_\_ 2.0    \_\_\_\_ 2.25    \_\_\_\_ 2.5    \_\_\_\_ 2.75    \_\_\_\_ 3.0
11. If you do not offer a finance major how many credit hours of finance does your institution offer? \_\_\_\_\_ hours

12. In teaching your finance classes what emphasis do you stress?
- \_\_\_\_\_ Theory and Research
  - \_\_\_\_\_ Theory and application from business
  - \_\_\_\_\_ Theory
  - Other (Please explain) \_\_\_\_\_
13. Which method do you consider to be most effective in teaching your introductory finance courses? (Please rank in order of effectiveness 1 to 5, 1 most effective to 5 least effective.)
- \_\_\_\_\_ Lecture
  - \_\_\_\_\_ Audio-Visual Presentation
  - \_\_\_\_\_ Field Trips
  - \_\_\_\_\_ Problem Solving
  - \_\_\_\_\_ Other  
(Please specify) \_\_\_\_\_
14. Which method do you consider to be most effective in teaching your advanced finance courses? (Please rank in order of effectiveness 1 to 5, 1 most effective to 5 least effective.)
- \_\_\_\_\_ Lecture
  - \_\_\_\_\_ Audio-Visual Presentation
  - \_\_\_\_\_ Field Trips
  - \_\_\_\_\_ Problem Solving
  - \_\_\_\_\_ Other (Please specify)  
\_\_\_\_\_
15. Please rank the following course work in the order you consider important for a graduate to be successful in a service finance institution.
- \_\_\_\_\_ Accounting
  - \_\_\_\_\_ Computer Programming
  - \_\_\_\_\_ Economics
  - \_\_\_\_\_ Finance and Investments
  - \_\_\_\_\_ Mathematics and Statistics
16. Please rank the following academic areas in the order you consider important for students to be successful in a service finance institution.
- \_\_\_\_\_ Liberal Arts
  - \_\_\_\_\_ Business Administration
  - \_\_\_\_\_ Economics
  - \_\_\_\_\_ Specialization in Finance and Investments
17. In your program what emphasis do you place upon the following course work? (Please indicate number of hours.)
- |                  |                         |                  |                |
|------------------|-------------------------|------------------|----------------|
| _____ Accounting | _____ Economics         | _____ Management | _____ Computer |
| Programming      | Finance and Investments | Mathematics and  | Statistics     |
18. What degree of competency do you judge your students have toward gaining employment in the service finance field as they complete your program?
- Most competent    /   /   /   /   /   /   Least Competent  
                               1   2   3   4   5
19. What degree of awareness do your students have of career opportunities in the field of finance?
- Most aware    /   /   /   /   /   /   Least awareness  
                               1   2   3   4   5

20. Is the attending of finance conferences a requirement for students graduating from your program?

Most important      /  /  /  /  /      Least important  
                                  1    2    3    4    5

21. Rate the following problem areas as emphasized in finance course work.

Attitude                      Most important      /  /  /  /  /      Least important

1    2    3    4    5

Vertical Job Mobility        Most important      /  /  /  /  /      Least important

1    2    3    4    5

Horizontal Job Mobility     Most important      /  /  /  /  /      Least important

1    2    3    4    5

Behavioral Problems of

Clients

Most important      /  /  /  /  /      Least important

1    2    3    4    5

Others (Please list)

\_\_\_\_\_

22. Are all of your finance courses taught by people with finance majors?

Yes \_\_\_\_\_ No \_\_\_\_\_

23. Please give an estimate of your average class size in elementary finance courses. \_\_\_\_\_

24. Please give an estimate of your average class size in advanced finance courses. \_\_\_\_\_

25. What is your estimated class load per semester for finance faculty? \_\_\_\_\_

26. How many full time equivalent faculty are assigned to teach finance? \_\_\_\_\_

27. How many finance majors do you have? \_\_\_\_\_

28. How many majors does each finance faculty member advise? \_\_\_\_\_

29. How many preparations does each finance faculty have each term? \_\_\_\_\_

30. How many finance courses do you offer during the academic year? \_\_\_\_\_

31. How many professional improvement conferences are attended each year?

- a. \_\_\_\_\_ Business Conferences
- b. \_\_\_\_\_ Educational Conferences and Workshops
- c. \_\_\_\_\_ Specialized Institutes
- d. \_\_\_\_\_ Others (Please list)

32. How often does your institution communicate with the service finance industry?

- a. \_\_\_\_\_ Frequent
- b. \_\_\_\_\_ Occasionally
- c. \_\_\_\_\_ None

33. Have you invited employees of the service finance industry to speak at your school during the last academic year? Yes \_\_\_\_\_ No \_\_\_\_\_
34. What is the estimated number of volumes and periodicals applicable to finance in the library? \_\_\_\_\_ number of volumes
35. Please rank the following in the order of their importance for finance education.
- \_\_\_\_\_ American Economic Review
  - \_\_\_\_\_ Financial Analyst's Journal
  - \_\_\_\_\_ Harvard Business Review
  - \_\_\_\_\_ Institutional Investor
  - \_\_\_\_\_ Journal of Finance
36. Please rank in the order of your preference the type of publication you prefer.
- \_\_\_\_\_ Industry survey articles
  - \_\_\_\_\_ Case studies
  - \_\_\_\_\_ Empirical studies
  - \_\_\_\_\_ Theoretical articles
37. How would you rank the following in their importance for a graduate to be a successful employee in a service finance institution? (Please rank in order of importance 1 to 5, 1 most important to 5 least important.)
- \_\_\_\_\_ Major in Finance      \_\_\_\_\_ Major in Business Administration  
 \_\_\_\_\_ Business Experience      \_\_\_\_\_ Personality      \_\_\_\_\_ Other (Specify) \_\_\_\_\_
38. Do you think finance education
- \_\_\_\_\_ Leads actual industry practice
  - \_\_\_\_\_ Lags behind actual industry practice
  - \_\_\_\_\_ Is current with actual industry practice
39. Do you use management games in finance courses? Yes \_\_\_\_\_ No \_\_\_\_\_  
 If yes, are they manual \_\_\_\_\_ or computerized \_\_\_\_\_.  
 Please list the names of the games used.
1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
40. What emphasis do you think the service finance institutions would like for the educational institutions to stress?
41. Do you have a cooperative finance work experience program? Yes \_\_\_\_\_ No \_\_\_\_\_
42. Do you receive house organs from financial institutions? Yes \_\_\_\_\_ No \_\_\_\_\_  
 If yes, how many \_\_\_\_\_  
 Please list two or three. 1. \_\_\_\_\_  
 2. \_\_\_\_\_ 3. \_\_\_\_\_

43. If you were developing a finance major how many hours would you require in each area?

Number of Hours

Course

Accounting

Marketing

Finance

Electronic Data Processing

Business Law

Economics

Business Writing

Statistics

Production Management

Personnel Management

Office Administration

Transportation

Internship

Insurance

Business Ethics

Real Estate

Salesmanship

TOTAL

Please return the completed questionnaire to:

1. The type of service finance institution for which you are reporting.
  - a. \_\_\_\_\_ Commercial Bank
  - b. \_\_\_\_\_ Brokerage Firm
  - c. \_\_\_\_\_ Large Consumer Finance Company
  - d. \_\_\_\_\_ Mutual Fund Management Company
  - e. \_\_\_\_\_ Insurance Company
2. Do you have people in your employ with state college education background? Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, how many? \_\_\_\_\_
  - a. Do you have employees with finance majors who are graduates of state colleges? Yes \_\_\_\_\_ No \_\_\_\_\_
  - b. How would you rate their performance?  
Above average    /   /   /   /   /   /    Below average  
                        1   2   3   4   5
3. What type of background do you desire in a new employee?
  - a. College graduate? Yes \_\_\_\_\_ No \_\_\_\_\_
  - b. Employee of similar organization? Yes \_\_\_\_\_ No \_\_\_\_\_
  - c. Experience in other types of business? Yes \_\_\_\_\_ No \_\_\_\_\_
4. What grade point average do you require for employment?  
\_\_\_\_\_ 2.0        \_\_\_\_\_ 2.25        \_\_\_\_\_ 2.5        \_\_\_\_\_ 2.75        \_\_\_\_\_ 3.0
5. How would you rate the degrees of awareness in your state college employees have of the career opportunities in the field of finance?  
Very aware    /   /   /   /   /   /    Least aware  
                        1   2   3   4   5
6. How would you rate your state college employees knowledge of problems in the finance industry?  
Very aware    /   /   /   /   /   /    Least aware  
                        1   2   3   4   5
7. What consideration is given to the prospective employee's attitude toward the finance industry as indicated by personal interview?  
Very important    /   /   /   /   /   /    Not important  
                        1   2   3   4   5
8. Please rank the following in order of importance for educational background of your employees.  
\_\_\_\_ Theory and Research  
\_\_\_\_ Theory and application from business  
\_\_\_\_ Theory  
\_\_\_\_ Other (Please specify)

10. Please rank the following in order of importance for employment in your business.

11. Please rank in order of importance for educational background of your employees.

12. How would you rank the following in their order of importance for an employee to be successful in a service finance institution?

13. How would you rate your state college graduates ability in the following areas?

14. Please rank the following publications in the order in which you prefer your employees to read.

15. Please rank the following journals in their order of importance to a service finance institution.

American Economic Review  
Financial Analyst's Journal  
Harvard Business Review  
Institutional Investor  
Journal of Finance

16. Has any employee in your institution spoken to a state college finance class during the past year? Yes \_\_\_\_ No \_\_\_\_
17. How many professional improvement conferences do your employees attend each year?  
 \_\_\_\_ Business Conferences  
 \_\_\_\_ Specialized Institutes
18. What communication does your institution have with state colleges who prepare finance majors?  
 \_\_\_\_ Frequent communication  
 \_\_\_\_ Occasional communication  
 \_\_\_\_ No communication
19. Do you think finance education  
 \_\_\_\_ Lead actual industry practice  
 \_\_\_\_ Lags behind actual industry practice  
 \_\_\_\_ Is current with actual industry practice
20. What emphasis would you like for state colleges to stress in their finance education programs? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
21. If you were developing a finance major in a state college how many hours would you require in each of the following areas?
- | Number of Hours | Course                     |
|-----------------|----------------------------|
| _____           | Accounting                 |
| _____           | Marketing                  |
| _____           | Finance                    |
| _____           | Electronic Data Processing |
| _____           | Business Law               |
| _____           | Economics                  |
| _____           | Business Writing           |
| _____           | Production Management      |
| _____           | Personnel Management       |
| _____           | Office Administration      |
| _____           | Transportation             |
| _____           | Internship                 |
| _____           | Insurance                  |
| _____           | Business Ethics            |
| _____           | Real Estate                |
| _____           | Salesmanship               |
| _____           | TOTAL                      |
22. Do you offer a cooperative work program with a state college where finance majors can work part-time and/or during summer? Yes \_\_\_\_ No \_\_\_\_
23. Do you actively recruit through state college placement offices?  
 Yes \_\_\_\_ No \_\_\_\_
24. Do you encourage field trips by state college finance students to your institution? Yes \_\_\_\_ No \_\_\_\_

IF YOU DO NOT HAVE A TRAINING PROGRAM DO NOT ANSWER THE REMAINING QUESTIONS.

25. Are new employees trained on the job by observation with suggestions from the supervisor? Yes \_\_\_\_\_ No \_\_\_\_\_
26. Are new employees given formal class training? Yes \_\_\_\_\_ No \_\_\_\_\_
- a. If yes, how many hours? \_\_\_\_\_ hours
- b. Is the lecture method used? Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, what percent of the time? \_\_\_\_\_%
- c. Is the case method approach used in formal training? Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, what percent of classtime? \_\_\_\_\_%
- d. Formal classes are conducted:
1. during working hours. Yes \_\_\_\_\_ No \_\_\_\_\_
2. after working hours. Yes \_\_\_\_\_ No \_\_\_\_\_
27. Formal classes are conducted:
- a. \_\_\_\_\_ on premises
- b. \_\_\_\_\_ at other locations in conjunction with other service finance institutions
28. What percent of your formal classroom activities place emphasis upon
- a. The practical approach \_\_\_\_\_%
- b. The theoretical approach \_\_\_\_\_%
29. State briefly what is included in your curriculum.
30. What procedures do you use to aid your employees in developing the practical side of finance?

## APPENDIX C

## REVISED QUESTIONNAIRE MAILED TO 120 STATE COLLEGES

## STATE COLLEGE QUESTIONNAIRE

Please return the completed questionnaire to:

Raymond Waltrip  
Northeastern Oklahoma State University  
Tahlequah, OK 74464

1. What is the enrollment of your institution?  
( ) 1,000 to 5,000      ( ) 5,000 to 10,000      ( ) Over 10,000
2. What is the approximate percentage of the total enrollment in the school of business? \_\_\_\_\_%
3. Indicate your method of measuring credit hours. Semester \_\_\_\_\_  
Quarter \_\_\_\_\_
4. Do you offer a major concentration in finance? Yes \_\_\_\_\_ No \_\_\_\_\_  
If yes, answer questions 5 through 10. If no, skip to question 11.
5. In your finance program how many hours do you require in
  - a. \_\_\_\_\_ Finance Courses
  - b. \_\_\_\_\_ Business Administration
  - c. \_\_\_\_\_ Economics (If not included in Business Administration)
  - d. \_\_\_\_\_ Other related courses (please list courses and hours)

Hours	Courses	Hours	Courses
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
6. How long has your finance major been in existence?  
\_\_\_1 to 2 years      \_\_\_3 to 5 years      \_\_\_6 to 10 years      \_\_\_Longer
7. How long since your finance major has undergone a major revision?
8. How long since the last follow-up study on your graduates?  
\_\_\_1 to 2 years      \_\_\_3 to 5 years      \_\_\_6 to 10 years      \_\_\_Longer
9. What are your grade point average requirements for entrance into your finance program? (Based on a 4.0 scale)  
\_\_\_2.0      \_\_\_2.25      \_\_\_2.5      \_\_\_2.75      \_\_\_3.0
10. What is your grade point average requirement for retention in your finance program? (Based on a 4.0 scale)  
\_\_\_2.0      \_\_\_2.25      \_\_\_2.5      \_\_\_2.75      \_\_\_3.0
11. If you do not offer a finance major how many credit hours of finance does your institution offer? \_\_\_\_\_hours

12. In teaching your finance classes what emphasis do you stress?
- Theory and Research
  - Theory and application from business
  - Theory
  - Other (Please explain)
13. Which method do you consider to be most effective in teaching your introductory finance courses? (Please rank in order of effectiveness 1 to 5, 1 most effective to 5 least effective.)
- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | Lecture                                     |
| 1 | 2 | 3 | 4 | 5 | Audio-Visual Presentation                   |
| 1 | 2 | 3 | 4 | 5 | Field Trips                                 |
| 1 | 2 | 3 | 4 | 5 | Problem Solving                             |
| 1 | 2 | 3 | 4 | 5 | Other (Please specify) <input type="text"/> |
14. Which method do you consider to be most effective in teaching your advanced finance courses? (Please rank in order of effectiveness 1 to 5, 1 most effective to 5 least effective.)
- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | Lecture                                     |
| 1 | 2 | 3 | 4 | 5 | Audio-Visual Presentation                   |
| 1 | 2 | 3 | 4 | 5 | Field Trips                                 |
| 1 | 2 | 3 | 4 | 5 | Problem solving                             |
| 1 | 2 | 3 | 4 | 5 | Other (Please specify) <input type="text"/> |
15. Please rank the following course work in the order you consider important for a graduate to be successful in a service finance institution.
- Accounting
  - Computer Programming
  - Economics
  - Finance and Investments
  - Mathematics and Statistics
16. Please rank the following academic areas in the order you consider important for students to successful in a service institution.
- Liberal Arts
  - Business Administration
  - Economics
  - Specialization in Finance and Investments
17. In your program what emphasis do you place upon the following course work? (Please indicate number of hours.)
- |                                 |  |                                      |                               |
|---------------------------------|--|--------------------------------------|-------------------------------|
| <input type="text"/> Accounting | <input type="text"/> Economics               | <input type="text"/> Management      | <input type="text"/> Computer |
| Programming                     | <input type="text"/> Finance and Investments | <input type="text"/> Mathematics and |                               |
| Statistics                      |  |                                      |                               |
18. What degree of competency do you judge your students have toward gaining employment in the service finance field as they complete your program?
- |                |                      |                      |                      |                      |                      |                      |                 |
|----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------|
| Most competent | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | Least Competent |
|                | 1                    | 2                    | 3                    | 4                    | 5                    |                      |                 |
19. What degree of awareness do your students have of career opportunities in the field of finance?
- |            |                      |                      |                      |                      |                      |                      |                 |
|------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------|
| Most aware | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | Least Awareness |
|            | 1                    | 2                    | 3                    | 4                    | 5                    |                      |                 |

20. Is the attending of finance conferences a requirement for students graduating from your program?  
 Most important     /   /   /   /   /   /     Least Important  
                                  1   2   3   4   5
21. Rate the following problem areas as emphasized in finance course work.
- |                                |                |                       |                 |
|--------------------------------|----------------|-----------------------|-----------------|
| Attitude                       | Most Important | /   /   /   /   /   / | Least Important |
|                                |                | 1   2   3   4   5     |                 |
| Vertical Job Mobility          | Most Important | /   /   /   /   /   / | Least Important |
|                                |                | 1   2   3   4   5     |                 |
| Horizontal Job Mobility        | Most Important | /   /   /   /   /   / | Least Important |
|                                |                | 1   2   3   4   5     |                 |
| Behavioral Problems of Clients | Most Important | /   /   /   /   /   / | Least Important |
|                                |                | 1   2   3   4   5     |                 |
- Others (Please list)
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
22. Are all of your finance courses taught by people with finance majors?  
 Yes \_\_\_\_\_ No \_\_\_\_\_
23. Please give an estimate of your average class size in elementary finance courses. \_\_\_\_\_
24. Please give an estimate of your average class size in advanced finance courses. \_\_\_\_\_
25. What is your estimated class load per semester for finance faculty? \_\_\_\_\_
26. How many full time equivalent faculty are assigned to teach finance? \_\_\_\_\_
- IF YOU DO NOT HAVE A FINANCE MAJOR, SKIP QUESTIONS 27-28
27. How many finance majors do you have? \_\_\_\_\_
28. How many majors does each finance faculty member advise? \_\_\_\_\_
29. How many preparations does each finance faculty have each term? \_\_\_\_\_
30. How many finance courses do you offer during the academic year? \_\_\_\_\_
39. How many professional improvement conferences are attended each year
- \_\_\_\_\_ Business Conferences
  - \_\_\_\_\_ Educational Conferences and Workshops
  - \_\_\_\_\_ Specialized Institutes
  - \_\_\_\_\_ Others (Please list) \_\_\_\_\_
32. How often does your institution communicate with the service finance industry?
- \_\_\_\_\_ Frequent
  - \_\_\_\_\_ Occasionally
  - \_\_\_\_\_ None

33. Have you invited employees of the service finance industry to speak at your school during the last academic year? Yes \_\_\_\_ No \_\_\_\_
34. What is the estimated number of volumes and periodicals applicable to finance in the library? \_\_\_\_ number of volumes
35. Please rank the following in the order of their importance for finance education.
- \_\_\_\_ American Economic Review
  - \_\_\_\_ Financial Analyst's Journal
  - \_\_\_\_ Harvard Business Review
  - \_\_\_\_ Institutional Investor
  - \_\_\_\_ Journal of Finance
36. Please rank in the order of your preference the type of publication you prefer.
- \_\_\_\_ Industry survey articles
  - \_\_\_\_ Case studies
  - \_\_\_\_ Empirical studies
  - \_\_\_\_ Theoretical articles
37. How would you rank the following in their importance for a graduate to be a successful employee in a service finance institution? (Please rank in order of importance 1 to 5, 1 most important to 5 least important.)
- \_\_\_\_ Major in Finance      \_\_\_\_ Major in Business Administration  
 \_\_\_\_ Business Experience      \_\_\_\_ Personality      \_\_\_\_ Other (Specify)
38. Do you think finance education
- \_\_\_\_ Leads actual industry practice
  - \_\_\_\_ Lags behind actual industry practice
  - \_\_\_\_ Is current with actual industry practice
39. Do you use management games in finance courses? Yes \_\_\_\_ No \_\_\_\_  
 If yes, are they manual \_\_\_\_ or computerized \_\_\_\_.  
 Please list the names of the games used.
1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
40. What emphasis do you think the service finance institutions would like for the educational institutions to stress?
41. Do you have a cooperative finance work experience program? Yes \_\_\_\_ No \_\_\_\_
42. Do you receive house organs from financial institutions? Yes \_\_\_\_ No \_\_\_\_  
 If yes, how many \_\_\_\_\_  
 Please list two or three. 1. \_\_\_\_\_  
 2. \_\_\_\_\_ 3. \_\_\_\_\_

43. If you were developing a finance major how many courses would you require in each area?

No. of Courses

Course

Accounting

Marketing

Finance

Electronic Data Processing

Business Law

Economics

Business Writing

Statistics

Production Management

Personnel Management

Office Administration

Transportation

Internship

Insurance

Business Ethics

Real Estate

Salesmanship

Communications

TOTAL

## APPENDIX D

## REVISED QUESTIONNAIRE MAILED TO 259 SERVICE FINANCE INSTITUTIONS

## SERVICE FINANCE INSTITUTION QUESTIONNAIRE

Please return the completed questionnaire to:

Raymond Waltrip  
Northeastern Oklahoma State University  
Tahlequah, OK 74464

1. The type of service finance institution for which you are reporting.
  - a. ☐ Commercial Bank
  - b. ☐ Brokerage Firm
  - c. ☐ Consumer Finance Company
  - d. ☐ Mutual Fund Management Company
  - e. ☐ Life Insurance Company
2. Approximately what per cent of your employees have bachelor's degrees?
 

\_\_\_\_\_ %

  - a. Approximately what per cent of your employees have finance majors from state colleges? \_\_\_\_\_ %
  - b. How would you rate the performance of those with finance majors?
 

Above average      /  /  /  /  /  /      Below average

1    2    3    4    5
3. What type of background do you desire in a new employee?
  - a. College graduate? Yes ☐ No ☐
  - b. Employee of similar organization? Yes ☐ No ☐
  - c. Experience in other types of business? Yes ☐ No ☐
4. What grade point average do you require for employment? (Based on a 4.0 scale)
 

\_\_\_\_\_ 2.0      \_\_\_\_\_ 2.25      \_\_\_\_\_ 2.5      \_\_\_\_\_ 2.75      \_\_\_\_\_ 3.0
5. How would you rate the degrees of awareness your state college employees have of the career opportunities in the field of service finance.
 

Very aware      /  /  /  /  /  /      Least aware

1    2    3    4    5
6. How would you rate your state college employees knowledge of problems in the finance industry?
 

Very aware      /  /  /  /  /  /      Least aware

1    2    3    4    5
7. What consideration is given to the prospective employee's attitude toward the finance industry as indicated by personal interview?
 

Very important      /  /  /  /  /  /      Not important

1    2    3    4    5

8. Please rank the following in order of importance for educational background of your employees.
- Theory and Research
- Theory and application from business
- Theory
- Other (Please specify) \_\_\_\_\_
9. What degree of competency do you consider your new state college employees have in learning the business?
- Very competent      /  /  /  /  /      Incompetent
- 1   2   3   4   5
10. Please rank the following in order of importance for employment in your business.
- Accounting
- Computer Programming
- Economics
- Finance and Investments
- Management
- Mathematics and Statistics
- Machine Experience
11. Please rank in order of importance for educational background of your
- Liberal Arts
- Business Administration
- Economics
- Specialization in Finance and Investments
- Other (Please specify) \_\_\_\_\_
12. How would you rank the following in their order of importance for an employee to be successful in a service finance institution?
- Major in Finance
- Major in Business Administration
- Personality
- Other (Please specify) \_\_\_\_\_
13. How would you rate your state college graduates ability in the following areas?
- |                                |           |                          |      |
|--------------------------------|-----------|--------------------------|------|
| Behavioral Problems of Clients | Excellent | <u>  /  /  /  /  /  </u> | Poor |
|                                |           | 1   2   3   4   5        |      |
| Attitude                       | Excellent | <u>  /  /  /  /  /  </u> | Poor |
|                                |           | 1   2   3   4   5        |      |
| Vertical Job Mobility          | Excellent | <u>  /  /  /  /  /  </u> | Poor |
|                                |           | 1   2   3   4   5        |      |
| Horizontal Job Mobility        | Excellent | <u>  /  /  /  /  /  </u> | Poor |
|                                |           | 1   2   3   4   5        |      |
14. Please rank the following publications in the order in which you prefer your employees to read.
- Industry survey articles
- Case studies
- Empirical studies
- Theoretical articles

15. Please rank the following journals in their order of importance to a service finance institution.

☐ American Economic Review  
☐ Financial Analyst's Journal  
☐ Harvard Business Review  
☐ Institutional Investor  
☐ Journal of Finance

16. Has any employee in your institution spoken to a state college finance class during the past year? Yes ☐ No ☐

17. How many professional improvement conferences do your employees attend each year?

☐ Business Conferences  
☐ Specialized Institutes

18. What communication does your institution have with state colleges who prepare finance majors?

☐ Frequent communication  
☐ Occasional communication  
☐ No communication

19. Do you think finance education

a. ☐ Leads actual industry practice  
 b. ☐ Lags behind actual industry practice  
 c. ☐ Is current with actual industry practice

20. What emphasis would you like for state colleges to stress in their finance education programs? \_\_\_\_\_

21. If you were developing a finance major in a state college how many courses would you require in each of the following areas?

Number of Courses	Course
<input type="text"/>	Accounting
<input type="text"/>	Marketing
<input type="text"/>	Finance
<input type="text"/>	Electronic Data Processing
<input type="text"/>	Business Law
<input type="text"/>	Economics
<input type="text"/>	Business Writing
<input type="text"/>	Production Management
<input type="text"/>	Personnel Management
<input type="text"/>	Office Administration
<input type="text"/>	Transportation
<input type="text"/>	Internship
<input type="text"/>	Insurance
<input type="text"/>	Business Ethics
<input type="text"/>	Real Estate
<input type="text"/>	Salesmanship
<input type="text"/>	Communications
<input type="text"/>	TOTAL

22. Do you offer a cooperative work program with a state college where finance majors can work part-time and/or during summer? Yes \_\_\_\_ No \_\_\_\_
23. Do you actively recruit through state college placement offices?  
Yes \_\_\_\_ No \_\_\_\_
24. Do you encourage field trips by state college finance students to your institution? Yes \_\_\_\_ No \_\_\_\_

IF YOU DO NOT HAVE A TRAINING PROGRAM, DO NOT ANSWER THE REMAINING QUESTIONS.

25. Are new employees trained on the job by observation with suggestions from the supervisor? Yes \_\_\_\_ No \_\_\_\_
26. Are new employees given formal class training? Yes \_\_\_\_ No \_\_\_\_
- a. If yes, how many hours? \_\_\_\_ hours
- b. Is the lecture method used? Yes \_\_\_\_ No \_\_\_\_ If yes, what per cent of the time? \_\_\_\_%
- c. Is the case method approach used in formal training? Yes \_\_\_\_ No \_\_\_\_ If yes, what percent of classtime? \_\_\_\_%
- c. Formal classes are conducted:
- (1) during working hours Yes \_\_\_\_ No \_\_\_\_
- (2) after working hours Yes \_\_\_\_ No \_\_\_\_
27. Formal classes are conducted:
- a. \_\_\_\_ On premises
- b. \_\_\_\_ At other locations in conjunction with other service finance institutions
28. What per cent of your formal classroom activities place emphasis upon
- a. the practical approach \_\_\_\_%
- b. the theoretical approach \_\_\_\_%
29. State briefly what is included in your curriculum.
30. What procedures do you use to aid your employees in developing the practical side of finance?

APPENDIX E

COVER LETTER ACCOMPANYING PILOT STUDY QUESTIONNAIRE TO  
STATE COLLEGES AND SERVICE FINANCE INSTITUTIONS

Northeastern Oklahoma State University  
Tahlequah, Oklahoma 74464

Dear Sir:

What could I write to get you to help me?

I have decided the best approach would be for me to tell you the truth. First of all I am doing a research project on finance education for a doctoral dissertation, and I imagine your first reaction is to throw the letter into the wastebasket. Before you do that, I wish you would take just a few seconds to look at the topic. I am sure you will agree finance education is a very important and neglected part of business.

Now I am making a pilot study to determine the strengths and weaknesses of the enclosed questionnaire. The way you can help me is to evaluate the questionnaire as to its clarity. Please write your comments on the questionnaire, and return in the enclosed envelope as soon as possible. Do not fill out the questionnaire.

I will be grateful for your comments and suggestions on the questionnaire.

Sincerely,

Raymond Waltrip

Enclosures: questionnaire  
envelope

APPENDIX F

COVER LETTER ACCOMPANYING REVISED QUESTIONNAIRE TO STATE COLLEGES  
AND SERVICE FINANCE INSTITUTIONS

Northeastern Oklahoma State University  
Tahlequah, Oklahoma 74464

Dear Sir:

What could I write to get you to help me?

I have decided the best approach would be for me to tell you the truth. First of all, I am doing a research project on finance education for a doctoral dissertation, and I imagine your first reaction is to throw the letter into the wastebasket. Before you do that, I wish you would take just a few seconds to look at the topic. I am sure you will agree finance education is a very important and neglected part of business.

Now I am making a study comparing the finance programs of state colleges with the needs of business. The way you can help me is to complete the enclosed questionnaire, and return it in the enclosed envelope as soon as possible.

I am sure there will be some questions for which you will not have available information, but I will be grateful for any information you may send me.

Sincerely,

Raymond Waltrip

Enclosure: questionnaire

APPENDIX G

FOLLOW-UP LETTER SENT TO STATE COLLEGES WITH REVISED QUESTIONNAIRE

Northeastern Oklahoma State University  
Tahlequah, Oklahoma 74464

Dear Sir:

On January 14, 1975, I mailed you a questionnaire pertaining to finance education. Your response to this questionnaire is of the utmost importance to me, without it I will have difficulty completing the study I have started. I believe this study will be beneficial to both business and education.

It is my sincere hope that you will find time during your busy work schedule to complete this questionnaire and return it as expeditiously as possible. Your reply will be held in strict confidence, and I will be forever grateful for your help.

If you have already responded you have my sincere thanks.

Sincerely,

Raymond Waltrip

APPENDIX H

FOLLOW-UP LETTER SENT TO SERVICE FINANCE INSTITUTION WITH  
REVISED QUESTIONNAIRE

Northeastern Oklahoma State University  
Tahlequah, Oklahoma 74464

Dear Sir:

On January 14, 1975, I mailed you a questionnaire pertaining to finance education. Your response to this questionnaire is of the utmost importance to me, without it I will have difficulty completing the study I have started. I believe this study will be beneficial to both business and education.

It is my sincere hope that you will find time during your busy work schedule to complete this questionnaire and return it as expeditiously as possible. Your reply will be held in strict confidence, and I will be forever grateful for your help.

If you have already responded you have my sincere thanks.

Sincerely,

Raymond Waltrip

APPENDIX I

SECOND FOLLOW UP LETTER SENT TO STATE COLLEGES WITH  
REVISED QUESTIONNAIRE

Northeastern Oklahoma State University  
Tahlequah, Oklahoma 74464

Dear Sir:

On January 14, 1975 I mailed a questionnaire on finance education to your school. I addressed the questionnaire to the Chairman of the Business Division, however, I have since determined that you may not have responded because of the lack of a business division. Also, the questionnaire may have given the appearance of being difficult to complete. Actually, it requires very few specific answers and most of the questions require answers of personal opinion.

The dissertation I am working on should be valuable to both education and industry when completed. Any information concerning your business course offerings will be of value.

You will please find enclosed another copy of the questionnaire. I hope you will complete it or forward it to someone who will. I desperately need your help and I will be sincerely grateful for your time and effort.

Sincerely,

Raymond Waltrip

Enclosure: questionnaire

APPENDIX J

SECOND FOLLOW-UP LETTER SENT TO SERVICE FINANCE  
INSTITUTIONS WITH REVISED QUESTIONNAIRE

Northeastern Oklahoma State University  
Tahlequah, Oklahoma 74464

Dear Sir:

On January 14, 1975, I mailed you a questionnaire pertaining to finance education. I have anxiously awaited your response, but have not received it at this time.

The questionnaire may have given the appearance that it was difficult to complete, however, I believe you will find it requires very few specific answers. Actually, most of the questions require answers that are personal opinion.

The dissertation I am working on should provide finance education and industry some valuable information when completed. The completion will depend on the responses I receive and I desperately need your response.

You will please find enclosed another copy of the questionnaire. I hope you can find time to complete it and return it to me. I will be sincerely grateful for your time and help.

Sincerely,

Raymond Waltrip

Enclosure: questionnaire

## APPENDIX K

## REPLY RECEIVED FROM ONE SERVICE FINANCE INSTITUTION

Mr. Raymond Waltrip  
Business Division  
Northeastern Oklahoma State University  
Tahlequah, Oklahoma 74464

Dear Mr. Waltrip

Your questionnaire was referred to me since I have the responsibility for the administration of Home Office Manpower Planning and Development activities.

As you might expect, we here at \_\_\_\_\_ receive numerous requests from a variety of people who would like us to complete questionnaires, visit us, etc. Because of the great amount of time that would be consumed by our key people, it is the general policy of the Company to limit such assistance to those people who have some governmental status and those who have some official company business to discuss with our people.

As a result of this general policy, I am unable to furnish you the information you requested. Please accept my best wishes for success in this research.

Yours truly

APPENDIX L

REPLY RECEIVED FROM ONE SERVICE FINANCE INSTITUTION

Mr. Raymond Waltrip  
Business Division  
Northeastern Oklahoma State University  
Tahlequah, Oklahoma 74464

Dear Mr. Waltrip

Thank you very much for your inquiry regarding the possibility of employment with \_\_\_\_\_.

We have reviewed your resume in the light of our current needs. Unfortunately, we cannot be encouraging for at the moment we are not actively recruiting additional staff with your qualifications.

Once again, thank you for your interest in First Pennsylvania Bank and we wish you the best of luck in your career endeavors.

Cordially

Employment Manager

APPENDIX M  
TABLES PERTINENT TO THE TEXT

TABLE 20  
PERCENTAGE OF EMPLOYEES WITH BACHELOR'S DEGREES  
BY CATEGORY

Category	Employees having Bachelor's Degrees					
	Average %	High %	Low %	Median %	Mode %	No Response %
Commercial Banks	25.90	70.00	6.00	20.00	17.50	20.60
Brokerage Firms	50.80	90.00	10.00	50.00	50.00	8.00
Consumer Finance Companies	15.20	32.00	5.00	14.00	5.00	28.60
Mutual Fund Management Companies	53.72	100.00	20.00	50.00	50.00	0.00
Insurance Companies	26.40	85.00	10.00	21.25	20.00	21.40

TABLE 21

PERCENTAGE OF EMPLOYEES WITH STATE COLLEGE FINANCE MAJORS  
BY CATEGORY

Category	Employees with State College Finance Majors					
	Average %	High %	Low %	Median %	Mode %	No Response %
Commercial Banks	12.36	90.00	1.00	5.00	5.00	35.30
Brokerage Firms	18.00	50.00	0.00	10.00	17.50	24.00
Consumer Finance Companies	5.00	9.00	3.00	4.15	0.00	42.90
Mutual Fund Management Companies	16.10	90.00	0.00	10.00	5.00	0.00
Insurance Companies	3.70	20.00	0.00	1.50	1.00	21.40

TABLE 22

TYPE OF BACKGROUND DESIRED FOR NEW EMPLOYEES  
BY CATEGORY

Category	College Graduate		
	Yes %	No %	No Response %
Commercial Banks	58.80	5.90	35.30
Brokerage Firms	68.00	16.00	16.00
Consumer Finance Companies	42.90	42.90	14.30
Mutual Fund Management Companies	83.30	0.00	16.70
Insurance Companies	82.10	10.70	7.10

TABLE 23

TYPE OF BACKGROUND DESIRED FOR NEW EMPLOYEES  
BY CATEGORY

Category	Employees of Similar Business		
	Yes %	No %	No Response %
Commercial Banks	61.80	35.30	2.90
Brokerage Firms	68.00	12.00	20.00
Consumer Finance Companies	100.00	0.00	0.00
Mutual Fund Management Companies	72.20	16.70	11.10
Insurance Companies	57.10	21.40	21.40

TABLE 24  
TYPE OF BACKGROUND DESIRED FOR NEW EMPLOYEES  
BY CATEGORY

Category	Experience in Other Types of Business		
	Yes %	No %	No Response %
Commercial Banks	44.10	5.90	50.00
Brokerage Firms	56.10	16.00	28.00
Consumer Finance Companies	42.90	14.39	42.90
Mutual Fund Management Companies	44.40	33.30	22.20
Insurance Companies	39.30	35.70	25.00

TABLE 25

TYPE OF GRADE POINT DESIRABLE FOR NEW EMPLOYEES  
BY CATEGORY

Category	Grade Point Desirable for New Employees					
	2.0 %	2.25 %	2.50 %	2.75 %	3.0 %	No Response %
Commercial Banks	17.65	8.82	8.82	11.76	2.94	50.00
Brokerage Firms	12.00	4.00	28.00	4.00	12.00	40.00
Consumer Finance Companies	14.29	0.00	14.29	14.29	0.00	57.14
Mutual Fund Management Companies	5.56	0.00	11.11	22.22	38.89	22.22
Insurance Companies	14.29	3.57	21.43	21.43	7.14	32.14

TABLE 26

CONSIDERATION GIVEN TOWARD PROSPECTIVE EMPLOYEE'S ATTITUDE  
TOWARD FINANCE INDUSTRY DURING INTERVIEW BY CATEGORY

Category	Consideration Given to Attitude					
	1 %	2 %	3 %	4 %	5 %	No Response %
Commercial Banks	38.23	41.18	14.71	2.94	0.00	2.94
Brokerage Firms	20.00	40.00	32.00	0.00	4.00	4.00
Consumer Finance Companies	42.86	28.57	28.57	0.00	0.00	0.00
Mutual Fund Management Companies	44.44	22.22	16.67	0.00	0.00	16.67
Insurance Companies	21.43	42.86	21.43	3.57	0.00	10.71

TABLE 27

## PERFORMANCE OF STATE COLLEGE FINANCE MAJORS BY CATEGORY

Category	1 %	2 %	3 %	4 %	5 %	No Response %
Commercial Banks	3.70	66.70	25.91	3.70	0.00	79.41
Brokerage Firms	8.00	36.00	36.00	0.00	0.00	20.00
Consumer Finance Companies	14.29	14.29	28.57	0.00	0.00	42.85
Mutual Fund Management Companies	33.33	16.67	16.67	5.56	0.00	27.78
Insurance Companies	3.60	42.85	21.43	0.00	0.00	32.14

Percentages calculated on number answering the question.

TABLE 28

EMPLOYEE AWARENESS OF FINANCE CAREER OPPORTUNITIES  
BY CATEGORY

Category	Employee Awareness					
	1 %	2 %	3 %	4 %	5 %	No Response %
Commercial Banks	2.94	23.52	32.35	29.41	0.00	11.76
Brokerage Firms	4.00	12.00	52.00	12.00	0.00	20.00
Consumer Finance Companies	14.29	28.57	14.29	0.00	0.00	42.86
Mutual Fund Management Companies	11.11	16.67	27.78	11.11	0.00	33.33
Insurance Companies	10.71	21.43	28.57	17.86	3.57	17.86

TABLE 29  
EMPLOYEE AWARENESS OF PROBLEMS IN FINANCE  
BY CATEGORY

Category	Employee Awareness					
	1 %	2 %	3 %	4 %	5 %	No Response %
Commercial Banks	0.00	23.52	44.12	20.59	2.94	8.82
Brokerage Firms	8.00	12.00	36.00	12.00	12.00	20.00
Consumer Finance Companies	14.29	0.00	28.57	14.29	0.00	42.86
Mutual Fund Management Companies	16.67	22.22	33.33	0.00	0.00	27.78
Insurance Companies	7.14	25.00	35.71	10.71	0.00	21.43

TABLE 30

COMPETENCY OF NEW STATE COLLEGE EMPLOYEES IN LEARNING  
THE BUSINESS BY CATEGORY

Category	Competency					
	1 %	2 %	3 %	4 %	5 %	No Response %
Commercial Banks	23.53	50.00	14.71	2.94	0.00	8.82
Brokerage Firms	8.00	28.00	52.00	0.00	0.00	12.00
Consumer Finance Companies	14.29	42.86	0.00	0.00	0.00	42.86
Mutual Fund Management Companies	11.11	33.33	22.22	0.00	0.00	33.33
Insurance Companies	21.43	35.71	32.14	0.00	0.00	10.71

TABLE 31

EVALUATION OF EMPLOYEE'S ATTITUDE, VERTICAL JOB MOBILITY  
HORIZONTAL JOB MOBILITY, BEHAVIORAL PROBLEMS OF CLIENTS

Category	1 %	2 %	3 %	4 %	5 %	No Response %
			Attitude			
Commercial Banks	20.59	44.11	17.65	0.00	2.94	14.71
Brokerage Firms	4.00	32.00	48.00	0.00	0.00	16.00
Consumer Finance Companies	0.00	42.86	14.29	0.00	0.00	42.86
Mutual Fund Management Companies	10.71	46.43	17.86	3.57	0.00	21.43
			Vertical Job Mobility			
Commercial Banks	5.88	44.12	32.35	2.94	0.00	14.71
Brokerage Firms	0.00	32.00	52.00	0.00	0.00	16.00
Consumer Finance Companies	14.29	28.57	14.29	0.00	0.00	42.86
Mutual Fund Management Companies	11.11	33.33	27.78	0.00	0.00	27.78
Insurance Companies	14.29	25.00	35.71	3.57	0.00	21.43
			Horizontal Job Mobility			
Commercial Banks	5.88	52.94	23.53	2.94	0.00	14.71
Brokerage Firms	0.00	28.00	52.00	4.00	0.00	16.00
Consumer Finance Companies	0.00	28.57	28.57	0.00	0.00	42.86
Mutual Fund Management Companies	5.56	27.78	33.33	0.00	5.56	27.78
Insurance Companies	7.14	39.29	28.57	3.57	0.00	21.43

TABLE 31 - Continued

Category	1 %	2 %	3 %	4 %	5 %	No Response %
		Behavioral Problems of Clients				
Commercial Banks	0.00	50.00	35.29	0.00	0.00	14.71
Brokerage Firms	8.00	12.00	56.00	4.00	0.00	20.00
Consumer Finance Companies	0.00	14.29	42.86	0.00	0.00	42.86
Mutual Fund Management Companies	11.11	22.22	33.33	5.56	0.00	27.78
Insurance Companies	7.14	32.15	35.71	3.57	0.00	21.43

TABLE 32

DESIRED EDUCATIONAL BACKGROUND FOR EMPLOYEES  
BY CATEGORY

Category	Educational Background	1 %	2 %	3 %	4 %	5 %	No Response %
Commercial Banks	Liberal Arts	8.82	5.88	11.76	44.12	2.94	26.48
	Business Administration	47.06	20.58	14.71	2.94	0.00	14.71
	Economics	2.94	35.29	26.47	11.76	0.00	23.54
	Specialization in Finance and Investments	35.29	23.54	14.71	5.88	0.00	20.58
	Other	5.88	0.00	2.94	0.00	2.94	91.18
Brokerage Firms	Liberal Arts	0.00	16.00	8.00	60.00	0.00	16.00
	Business Administration	32.00	32.00	28.00	8.00	0.00	0.00
	Economics	8.00	32.00	44.00	4.00	0.00	12.00
	Specialization in Finance and Investments	56.00	12.00	12.00	12.00	0.00	8.00
	Other	0.00	0.00	0.00	0.00	8.00	92.00
Consumer Finance Companies	Liberal Arts	0.00	14.29	0.00	28.57	0.00	57.14
	Business Administration	57.14	14.29	0.00	0.00	0.00	28.57
	Economics	0.00	28.57	28.57	0.00	0.00	71.42
	Specialization in Finance and Investments	56.00	12.00	12.00	12.00	0.00	8.00
	Other	14.29	0.00	0.00	0.00	0.00	85.71

TABLE 32 - Continued

Category	Educational Background	1 %	2 %	3 %	4 %	5 %	No Response %
Mutual Fund Man- agement Companies	Liberal Arts	0.00	0.00	11.11	61.11	0.00	27.78
	Business Administration	38.89	16.67	38.89	5.56	0.00	11.11
	Economics	16.67	44.44	22.22	5.56	0.00	11.11
	Specialization in Fi- nance and Investments	38.89	33.33	22.22	0.00	0.00	5.56
	Other	5.56	0.00	0.00	0.00	5.56	88.88
Insurance Companies	Liberal Arts	3.57	21.43	27.78	32.15	14.29	10.71
	Business Administration	67.86	17.86	3.57	0.00	0.00	10.71
	Economics	0.00	17.86	42.86	21.43	3.57	14.28
	Specialization in Fi- nance and Investments	7.14	17.86	25.00	25.00	3.57	21.43
	Other	14.29	10.71	0.00	3.57	10.71	60.72

TABLE 33

BACKGROUND NECESSARY TO BE SUCCESSFUL IN A SERVICE  
FINANCE INSTITUTION BY CATEGORY

Category	Desired Background	1 %	2 %	3 %	4 %	5 %	No Response %
Commercial Banks	Major in Finance	32.35	20.59	17.65	8.82	2.94	17.65
	Major in Business Administration	17.65	17.65	20.59	23.53	2.94	17.64
	Personality	29.41	23.53	14.71	17.65	0.00	14.70
	Business Experience	5.88	29.41	25.47	17.65	0.00	21.59
	Other	17.65	0.00	0.00	0.00	2.94	79.41
Brokerage Firms	Major in Finance	16.00	28.00	24.00	24.00	4.00	4.00
	Major in Business Administration	8.00	12.00	48.00	28.00	0.00	4.00
	Personality	44.00	12.00	16.00	20.00	0.00	8.00
	Business Experience	28.00	40.00	8.00	16.00	4.00	4.00
	Other	4.00	0.00	0.00	0.00	12.00	84.00
Consumer Finance Companies	Major in Finance	14.29	14.29	28.57	28.57	0.00	14.28
	Major in Business Administration	14.29	0.00	42.86	28.57	0.00	14.28
	Personality	14.29	57.14	14.29	14.29	0.00	0.00
	Business Experience	57.14	42.85	0.00	0.00	0.00	0.00
	Other	14.29	0.00	0.00	0.00	0.00	85.71

TABLE 33 - Continued

Category	Desired Background	1 %	2 %	3 %	4 %	5 %	No Response %
Mutual Fund Man- agement Companies	Major in Finance	16.67	44.44	11.11	11.11	0.00	16.67
	Major in Business Ad- ministration	27.78	27.78	27.78	11.11	0.00	5.55
	Personality	16.67	0.00	5.56	50.00	5.56	22.21
	Other	16.67	0.00	0.00	0.00	0.00	83.33
Insurance Companies	Major in Finance	17.86	14.29	10.71	28.57	10.71	17.86
	Major in Business Ad- ministration	28.57	25.00	21.43	25.00	0.00	0.00
	Personality	17.86	25.00	25.00	14.29	7.14	10.71
	Business Experience	14.29	25.00	32.14	17.86	3.57	7.14
	Other	14.29	3.57	3.57	3.57	3.57	71.43

TABLE 34

COURSE WORK IMPORTANCE FOR EMPLOYMENT IN A SERVICE  
FINANCE INSTITUTION BY CATEGORY

Category	Course Work Area	1 %	2 %	3 %	4 %	5 %	6 %	7 %	No Response %
Commercial Banks	Accounting	29.41	26.47	14.71	11.76	0.00	0.00	0.00	14.71
	Computer Programming	0.00	5.88	0.00	0.00	29.41	41.12	0.00	23.59
	Economics	2.94	14.71	27.47	32.35	2.94	5.88	0.00	14.71
	Finance and Investments	58.82	11.76	5.88	5.88	0.00	0.00	0.00	17.66
	Management	0.00	20.58	20.41	20.58	8.82	0.00	0.00	20.61
	Mathematics and Statistics	0.00	2.94	2.94	8.82	35.29	23.53	5.88	20.06
	Machine Experience	0.00	0.00	2.94	0.00	0.00	2.94	70.59	23.53
Brokerage Firms	Accounting	16.00	16.00	32.00	20.00	8.00	0.00	0.00	8.00
	Computer Programming	0.00	0.00	0.00	8.00	8.00	28.00	32.00	24.00
	Economics	12.00	40.00	24.00	4.00	8.00	4.00	0.00	8.00
	Finance and Investments	64.00	12.00	12.00	8.00	0.00	0.00	0.00	4.00
	Management	12.00	8.00	16.00	12.00	20.00	8.00	0.00	24.00
	Mathematics and Statistics	0.00	8.00	8.00	32.00	28.00	8.00	0.00	16.00
	Machine Experience	0.00	4.00	0.00	4.00	4.00	24.00	40.00	24.00

TABLE 34 - Continued

Category	Course Work Area	1 %	2 %	3 %	4 %	5 %	6 %	7 %	No Response %
Consumer Finance Companies	Accounting	14.29	28.57	0.00	0.00	28.57	0.00	0.00	28.57
	Computer Programming	0.00	0.00	0.00	14.29	14.29	0.00	28.57	42.85
	Economics	0.00	0.00	57.14	14.29	0.00	0.00	0.00	28.57
	Finance and Investments	14.29	42.86	14.29	0.00	0.00	0.00	14.29	14.27
	Management	57.14	14.29	14.29	0.00	0.00	0.00	0.00	14.28
	Mathematics and Statistics	0.00	0.00	0.00	42.86	14.29	14.29	0.00	28.56
	Machine Experience	0.00	0.00	0.00	0.00	0.00	42.86	14.29	42.85
Mutual Fund Man- agement Companies	Accounting	27.78	5.56	27.78	22.22	0.00	0.00	0.00	16.66
	Computer Programming	0.00	0.00	11.11	5.56	11.11	27.78	11.11	33.33
	Economics	0.00	38.89	16.67	22.22	0.00	0.00	0.00	22.22
	Finance and Investments	55.56	27.78	0.00	0.00	5.56	0.00	0.00	11.10
	Management	11.11	11.11	11.11	11.11	11.11	11.11	5.56	27.78
	Mathematics and Statistics	0.00	0.00	11.11	11.11	33.33	16.67	0.00	27.78
	Machine Experience	0.00	0.00	0.00	0.00	11.11	11.11	55.56	22.22

TABLE 34 - Continued

Category	Course Work Area	1 %	2 %	3 %	4 %	5 %	6 %	7 %	No Response %
Insurance Companies	Accounting	10.71	21.43	28.57	3.57	7.14	7.14	0.00	21.44
	Computer Programming	10.71	14.29	17.86	14.29	3.57	14.29	0.00	24.99
	Economics	3.57	10.71	10.71	10.71	10.71	17.86	7.14	28.59
	Finance and Investments	17.86	0.00	17.86	10.71	21.43	7.14	0.00	25.00
	Management	28.57	10.71	0.00	14.29	17.86	3.57	3.57	21.43
	Mathematics and Statistics	7.14	25.00	10.71	17.86	10.71	3.57	0.00	25.01
	Machine Experience	0.00	0.00	0.00	3.57	0.00	14.29	53.57	28.57

TABLE 35

IMPORTANCE FOR EDUCATIONAL BACKGROUND FOR SERVICE  
FINANCE INSTITUTION EMPLOYMENT BY CATEGORY

Background	Category	1 %	2 %	3 %	No Ranking %
Theory and Research	Commercial Banks	5.88	38.24	23.53	32.35
	Brokerage Firms	8.00	48.00	4.00	40.00
	Consumer Finance Companies	0.00	28.57	0.00	71.43
	Mutual Fund Manage- ment Companies	0.00	55.56	5.56	38.88
	Insurance Companies	3.56	67.86	10.71	17.87
Theory-Application from Business	Commercial Banks	70.59	17.65	0.00	11.76
	Brokerage Firms	64.29	8.00	0.00	27.71
	Consumer Finance Companies	57.14	0.00	0.00	42.86
	Mutual Fund Manage- ment Companies	77.78	0.00	0.00	22.22
	Insurance Companies	85.71	3.56	3.56	7.17
Theory	Commercial Banks	11.76	5.88	52.94	29.42
	Brokerage Firms	0.00	4.00	52.00	44.00
	Consumer Finance Companies	14.29	0.00	28.57	57.14
	Mutual Fund Manage- ment Companies	0.00	0.00	55.56	44.44
	Insurance Companies	0.00	10.71	71.43	17.85
Other	Commercial Banks	2.94	8.82	0.00	88.24
	Brokerage Firms	0.00	0.00	0.00	100.00
	Consumer Finance Companies	0.00	0.00	0.00	100.00
	Mutual Fund Manage- ment Companies	16.67	0.00	0.00	83.33
	Insurance Companies	7.14	0.00	0.00	92.86

TABLE 36

TYPES OF PUBLICATIONS SERVICE FINANCE INSTITUTIONS  
DESIRE EMPLOYEES TO READ BY CATEGORY

Category	Type of Publication	1 %	2 %	3 %	4 %	5 %	No Response %
Commercial Banks	Industry Survey Articles	41.18	20.59	2.94	11.76	0.00	23.53
	Case Studies	35.29	26.47	5.88	8.82	0.00	23.54
	Empirical Studies	5.88	11.76	38.24	17.65	0.00	26.47
	Theoretical Articles	2.94	17.65	26.47	32.35	0.00	20.59
Brokerage Firms	Industry Survey Articles	60.00	20.00	0.00	4.00	0.00	16.00
	Case Studies	20.00	32.00	16.00	12.00	0.00	20.00
	Empirical Studies	4.00	20.00	44.00	12.00	.00	20.00
	Theoretical Articles	0.00	8.00	20.00	52.00	0.00	20.00
Consumer Finance Companies	Industry Survey Articles	28.57	14.29	28.57	0.00	0.00	28.57
	Case Studies	42.86	28.57	0.00	0.00	0.00	28.57
	Empirical Studies	0.00	28.57	14.29	14.29	0.00	42.85
	Theoretical Articles	0.00	0.00	28.57	28.57	0.00	42.86
Mutual Fund Management Companies	Industry Survey Articles	66.67	22.22	5.56	0.00	0.00	5.55
	Case Studies	16.67	38.89	11.11	5.56	0.00	27.77
	Empirical Studies	11.11	22.22	22.22	22.22	0.00	22.23
	Theoretical Articles	0.00	16.67	27.78	38.89	0.00	17.66

TABLE 36 - Continued

Category	Type of Publication	1 %	2 %	3 %	4 %	5 %	No Response %
Insurance Companies	Industry Survey Articles	53.57	25.00	3.57	3.57	0.00	14.29
	Case Studies	25.00	35.71	10.71	14.29	0.00	14.29
	Empirical Studies	3.57	25.00	42.86	14.29	0.00	14.28
	Theoretical Articles	3.57	3.57	25.00	53.57	0.00	14.29

TABLE 37

FINANCE JOURNALS IN ORDER OF IMPORTANCE TO SERVICE  
FINANCE INSTITUTIONS BY CATEGORY

Category	Name of Journal	1 %	2 %	3 %	4 %	5 %	No Response %
Commercial Banks	American Economic Review	5.88	11.76	23.53	11.76	5.88	41.19
	Financial Analyst's Journal	14.71	11.76	14.71	11.76	0.00	47.06
	Harvard Business Review	20.59	17.65	11.76	11.76	0.00	38.24
	Institutional Investor	0.00	2.94	8.82	11.76	35.29	41.19
	Journal of Finance	17.65	20.59	8.82	5.88	8.82	38.24
Brokerage Firms	American Economic Review	8.00	8.00	12.00	16.00	16.00	40.00
	Financial Analyst's Journal	20.00	12.00	20.00	4.00	8.00	36.00
	Harvard Business Review	8.00	24.00	0.00	28.00	4.00	36.00
	Institutional Investor	20.00	8.00	24.00	8.00	8.00	32.00
	Journal of Finance	12.00	12.00	8.00	4.00	24.00	40.00
Consumer Finance Companies	American Economic Review	5.88	11.76	23.53	11.76	5.88	41.19
	Financial Analyst's Journal	14.71	11.76	14.71	11.76	0.00	47.06
	Harvard Business Review	20.59	17.65	11.76	11.76	0.00	38.24
	Institutional Investor	0.00	2.94	8.82	11.76	5.29	41.19
	Journal of Finance	17.65	20.59	8.82	5.88	8.82	38.24

TABLE 37 - Continued

Category	Name of Journal	1 1 %	2 %	3 %	4 %	5 %	No Response %
Mutual Fund Manage- ment Companies	American Economic Review	11.11	5.56	11.11	16.67	38.89	16.67
	Financial Analyst's Journal	27.78	27.78	16.67	11.11	5.56	1 11.10
	Harvard Business Review	16.67	22.22	22.22	22.22	0.00	16.67
	Institutional Investor	33.33	16.67	5.56	22.22	11.11	11.11
	Journal of Finance	16.67	16.67	27.78	5.56	22.22	11.10
Insurance Companies	American Economic Review	0.00	14.29	3.57	17.86	28.57	35.71
	Financial Analyst's Journal	14.29	3.57	25.00	10.71	10.71	35.72
	Harvard Business Review	32.14	10.71	7.14	14.29	3.57	32.15
	Institutional Investor	17.86	10.71	25.00	7.14	3.57	35.72
	Journal of Finance	3.57	25.00	10.71	10.71	14.29	35.72