A SURVEY OF CASH MANAGEMENT PRACTICES IN THE FOOD SERVICE AND LODGING INDUSTRY

by

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(ABSTRACT)

A descriptive survey was sent to 434 food service and lodging companies May, June, and August of 1983. The objective of this survey was to investigate and assess current cash management practices. A response rate of 21.89% was received.

After the surveys were returned, results were analyzed in two ways: by frequency distribution tables and hypotheses testing. The frequency distribution tables described the results of the data. Hypotheses testing described the relationship between the independent variables, which are; the percent of assets held as cash, dollar value of net corproate assets, and level of revenue, and the dependent variables, which are prescriptive cash management techniques.

Survey results concluded that the larger the firm, as measured by asset base and level of revenue, the more sophisticated it's cash management practices. Larger firms, as measured by asset base and level of revenue, more often follow prescriptive cash management practices than smaller firms.

Based on the conclusions of the Survey of Cash Management, it is recommended that small firms follow theoretical cash management practices.

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Chapter I

Introduction

Cash flow is an important management concern in the food service and lodging industry. This is apparent from a review of the trade literature which is frequently reporting on the financial difficulties of rapidly growing food service and lodging organizations as well as more mature and aging ones (Restaurants and Institutions, 1981, 1982). A multitude of factors can contribute to financial difficulties and include but are not limited to the following: floating interest rates, undercapitalization, the early 1980's recession, or ineffective use of cash resources. This thesis will focus on assessing and investigating cash management practices in the foodservice and lodging industry. Effective cash management procedures in the food service and lodging industry are vital to sustain availability and safekeeping of corporate funds. (Kaplan, 1980)

Not much is known about the cash management practices of the food service and lodging industry. As a result, it is the purpose of this research project to investigate and assess the cash management practices used by foodservice and lodging corporations.

Background

Cash flow constraints and rapid growth strategies have created many problems for expanding food service and lodging organizations. Near the top of the problem list are negative cash flow and related

financial difficulties. For example, in the early to mid 1970's, Sambo's experienced a rapid expansion period, opening stores at a feverish pace. On November 11, 1977, Wall Street Journal analysts wrote: "Sambo's financial condition currently appears to be extremely healthy," (Wall Street Journal, 1977) only to retract that statement four years later by reporting that Sambo's was filing "for Chapter 11 protection under federal bankruptcy laws." (Restaurants and Institutions, 1982).

Cash flow constraints are requiring food service and lodging corporations to close unprofitable and marginal units which are exhausting the organizations' cash flow. For instance, Denny's Inc. "closed nearly 100 unprofitable stores in the new 885-unit Winchell Donut chain" (Dawsen, 1982) allowing $5.2 million write-off for the closing charges against earnings in 1980. The food service and lodging industry must make sure that each unit makes a positive contribution to cash flow.

Statement of Problem

Effective cash management is critical to an operation's survival in the food service and lodging industry. The most efficient cash management methods must be defined and used so that cash management

problems may be rectified. Food service and lodging managers may find themselves facing the following dilemma:

1. How can the cash of the operation be more effectively managed?
2. Should more assets be held as cash?
3. What is the relationship between the asset base of the corporation and the various facets of cash management?
4. What is the relationship between the sales volume of the firm and cash management decisions?

These questions need to be answered to help the food service manager make good cash management decisions.

Justification for Research

As will become evident in the review of literature, very little has been written about cash management in the food service and lodging industry. Some general theoretical cash management recommendations are available since many prescriptive practices have been written for the manufacturing industry, but none for the food service and lodging industry. Therefore, the purpose of this research is to assess cash management practices of major food service and lodging organizations and see how they compare with the current prescriptive practices suggested for other industries and to see if cash management practices differ among firms based upon the independent variables of: revenue, percent of assets held as cash, and asset base.

In the process of gathering information to meet the objectives of this research project, fifty-two hypotheses were tested. Each hypotheses tested an independent variable to determine it's effect on the dependent variables.

The fifty-two hypotheses are listed in Tables 1, 2, and 3.

TABLE 1

HYPOTHESIS TESTING -- PERCENT OF ASSETS HELD AS CASH

There is no relationship between the percent of assets held as cash and . . .	
Hypothesis I	the department of the firm having the major responsibility for cash management.
Hypothesis IV	the person having the major responsibility for cash management decisions.
Hypothesis VII	the frequency with which the firm assesses its cash management banking arrangements.
Hypothesis X	the frequency with which the firm revises its cash budget.
Hypothesis XIII	the amount of time in advance that cash flows are forecast.
Hypothesis XVI	the amount of time in advance that the firm plans its cash budget.
Hypothesis XIX	the method(s) used to forecast sales.
Hypothesis XXII	the management level of the firm which prepares cash budgets.
Hypothesis XXV	whether cash budgets are prepared for each division and/or service concept.
Hypothesis XXVIII	the method used to forecast cash needs.
Hypothesis XXXI	whether the firm holds a cash safety stock.
Hypothesis XXXIV	the percent of cash balance held as a safety stock.
Hypothesis XXXVII	the characteristics of net cash flows over a six month period.
Hypothesis XXXVIII	the importance of cash management policies.
Hypothesis XXXXI	the methods used to accelerate the collection of accounts receivables.
Hypothesis XXXXIV	the methods for delaying cash disbursements.
Hypothesis XXXXVII	the type of float system.
Hypothesis L	the average length of the float.

TABLE 2

HYPOTHESIS TESTING -- SIZE AND CLASSFICIATION OF THE ORGANIZATION

There is no relationship between the size and classification of the organization and . . .	
Hypothesis II	the department of the firm having the major responsibility for cash management.
Hypothesis V	the person holding the major responsibility for cash management decisions within the firm.
Hypothesis VIII	the frequency with which the firm assesses its cash management banking arrangements.
Hypothesis XI	the frequency with which the firm revises its cash budget.
Hypothesis XIV	the amount of time in advance that cash flows are forecast.
Hypothesis XVII	the amount of time in advance that the firm plans its cash budget.
Hypothesis XX	the method(s) used to forecast sales.
Hypothesis XXIII	the management level of the firm which prepares cash budgets.
Hypothesis XXVI	whether cash budgets are prepared for each division and/or concept.
Hypothesis XXIX	the method used to forecast cash needs.
Hypothesis XXXII	whether the firm holds a cash safety stock.
Hypothesis XXXV	the percent of cash balance held as a safety stock.
Hypothesis XXXIX	the importance of cash management policies.
Hypothesis XXXXII	the methods used to accelerate the collection of accounts receivable.
Hypothesis XXXXV	methods for delaying cash disbursements.
Hypothesis XXXXVIII	the type of float system.
Hypothesis LI	the average length of the float.

TABLE 3

HYPOTHESIS TESTING -- SALES VOLUME

There is no relationship between the sales volume of the firm and . . .	
Hypothesis III	the department having major responsibility for cash management.
Hypothesis VI	the person holding the major responsibility for cash management decisions within the firm.
Hypothesis IX	the frequency with which the firm assesses its cash management banking arrangements.
Hypothesis XII	the frequency with which the firm revises its cash budget.
Hypothesis XV	the amount of time in advance that cash flows are forecast.
Hypothesis XVIII	the amount of time in advance that the firm plans its cash budget.
Hypothesis XXI	the method(s) used to forecast sales.
Hypothesis XXIV	the management level of the firm which prepares cash budgets.
Hypothesis XXVII	whether cash budgets are prepared for each division and/or service level.
Hypothesis XXX	the method used to forecast cash needs.
Hypothesis XXXIII	whether the firm holds a cash safety stock.
Hypothesis XXXVI	percent of cash balance held as safety stock.
Hypothesis XXXX	the importance of cash management policies.
Hypothesis XXXXIII	the most preferred methods used to accelerate accounts receivable collections.
Hypothesis XXXXVI	the methods used for delaying cash disbursements.
Hypothesis IL	the type of float system.
Hypothesis LII	the average length of the float.

Summary

In this chapter, an introduction to cash management practices in the food service and lodging industry, the background of cash management practices in the food service industry, a statement of the problems relating to the management of cash in the food service and lodging industry, and a justification for research have been presented.

Chapter II

Review of Literature

A review of literature on related cash management practices of the food service and lodging industry produced no literature helpful to this research. Food service and lodging trade and professional literature offers mostly prescriptive information about general cash management practices but does not discuss the use of cash management practices. Research assessing cash management practices has been conducted in other industries (Gitman, Moses, and White, 1979). The review of literature will be in three parts. The first part will review the theoretical and prescriptive approaches to cash management offered by leading scholars and practitioners. The second part will contain a review of a study reporting the use of theoretical and prescriptive approaches. The third part is Table 4 which is a summary of the theoretical and prescriptive techniques, the author of the proponent, and the date of publication. Table 4 was used to prepare the Survey of Cash Management.

Section One-Theoretical and Prescriptive Approaches to Cash Management

The first part of the review of literature will focus on a discussion of cash management works that deal with the following topics:

-assessment of current cash management practices

-person responsible for the cash management department

-cash management systems

-cash acceleration and disbursement

-the float

-bank deposits

-sales projections

-cash flows forecasting and synchronization

-manipulation of cash flows

-timely access to information

-cash management practices of small and large firms

Food service and lodging corporations have experienced financial problems that may have been avoided if cash management techniques had been pursued (Kaplan, 1980 and Godick, 1980). Industry management has not pursued an aggressive cash management policy as characterized by its failure to devise and make use of cash budgets and negligence in following other theoretical cash management practices. Coltman concluded that the hospitality enterprise must realize that "the more effective the cash management of the firm, the more surplus cash will be available for investments and increased profits." (Coltman, 1979).

The food service and lodging industry manager must administer cash well to provide a return on investment and additional profits. These theoretical statements, as prescribed by Coltman, are essential for success.

To ensure that food service and lodging corporations operate their cash management departments efficiently and according to theoretical cash management techniques, companies must determine their current program's effectiveness. Before altering the cash management system, they should determine, "the effectiveness and efficiency of

the present organizational structure, the adequacy of treasury and corporate-wide policies and procedures, a review of the present monitoring and management information system within the treasury to measure the effectiveness of the implemented process and an assessment of the work steps being preformed by those responsible for daily control of cash." (Bonocure, 1980). The diagnostic assessment should analyze the entire cash management cycle highlighting the areas needing improvement. Indications of inferior cash management procedures include: high bank balances, non-interest bearing funds, short-term borrowing to cover immediate cash needs while surpluses are occurring in other company accounts, lockbox transfers not occurring on a timely bases, and bank overdrafts while there are excess funds in other accounts (Bonocure, 1980 and March, 1979). Therefore, an assessment of cash management practices may ensure cash is managed effectively by the cash management department.

As important as the diagnostic review of the organizational structure of the cash management function, is the individual responsible for the cash management function. Many firms have designated a cash manager or corporate treasurer to direct the cash management function that may be part of the accounting or finance department. The cash management function includes the forecasting of cash flows, estimating cash needs, investing excess cash and borrowing cash when needed. The cash manager or corporate treasurer is responsible for the following: increasing cash flow, monitoring receivables, directing investments to minimize borrowing requirements, and investing the organizations funds (Gale and Branch, 1980 and

March, 1979). So that the cash manager or corporate treasurer may operate the department effectively, the objectives of the cash management system must be understood.

March says that cash management systems should help the cash manager or corporate treasurer when:

1. "planning the companies cash flow and liquidity needs to support investment strategies or credit requirements;
2. managing the receipts and disbursements function so that cash needs can be more accurately identified and
3. establishing communication facilities for transfer and consolidation of resources." (March, 1979).

To aid the cash manager or corporate treasurer in managing cash effectively, a cash budget should be developed. "The usefulness of the cash budget is predicated on the accuracy of the collection and disbursement forecasts." (Mathur and Luisada, 1980). Cash budgets, essential to good cash management can not be prepared accurately if collections and disbursement flows are inaccurate. Not only are the collection and disbursement forecasts important, but the co-ordination of receivables and disbursements are also important.

To co-ordinate the collection of receivables, methods such as the lockbox, the cash concentration system, depository transfer checks, pre-authorized checks, or the point-of-sale system may accelerate cash flow. The lockbox allows firms to receive payments at a lockbox number controlled by the bank that deposits cash into corporate bank accounts. This improves short-term cash flow by speeding up collections, and uses the float to reduce compensating balances by

transferring funds in a timely manner. The cash concentration system allows local banks to collect funds while actual information about the deposit is reported to a central source. Depository transfer checks clear banks in the same manner as regular checks, but they clear the Federal Reserve faster. Pre-authorized checks draw funds from the customers checking account. The point-of-sale system collects cash at the time of the sale (Gale and Branch, 1980, March, 1979 and Kaplan, 1980). Cash collection acceleration allows firms to manage cash in the most profitable manner.

Disbursement management allows cash payments to arrive at the collection sight on their due date and is considered the least significant factor in efficient cash management. Disbursement methods are based upon one of two strategies: a centralized or decentralized approach. Centralized disbursements, such as zero-balanced accounts and payable through drafts allow the departments to send payment authorizations to one central location and emphasize fund concentration at a central source. Zero-balance accounts allow the firms to write checks on bank accounts with no balance. These checks that are written are presented to the bank and a debit balance accumulates which is offset by a charge to the master corporate bank account. Payables through drafts are presented to the company for payment rather that drawing on the firm's bank. Decentralized disbursements, such as remote disbursing, allow checks to be written at numerous locations and drawn for payments on distant banks, which uses the float (March, 1979). Either approach to cash disbursement recognizes efficient cash management.

Not only are the above-mentioned methods of accelerating payments of accounts receivables and slowing the payments of disbursements essential to good cash management, but the float may be helpful in effective cash management by accelerating receivables or slowing disbursements. March suggests that one of the cash management systems objectives is to reduce the receivables float and Lordan says that "cash management seeks to generate funds by minimizing the float associated with the collection of corporate receivables and by maximizing the float associated with corporate payables." (Lordan, 1980).

As important to cash management as the float, are bank deposits. Bank deposits should be made daily. To manage cash more efficiently, "no more cash should be left in the bank than required to avoid a service charge." (Godlick, 1980). This means that there should be no more cash in the bank account than required as a compensating balance and for predictable transaction needs. The cash manager should arrange to invest the idle cash immediately. Idle cash is a non-productive asset and costly to corporate profits (Godick, 1980). Not only should cash be deposited daily and invested immediately, but quick accurate sales projections are needed to prepare cash budgets.

Accurate sales projections are needed to prepare cash budgets. Edmunds states that sales projections should be based on historical experience and broken down into two categories, credit or cash. These sales projections should be done weekly or monthly. So that sales projections may be used effectively, management should carefully review them (Edmunds, 1979).

As important as accurate sales forecasts, are cash flows forecasts. Cash flows forecasting must be accurate to be used as a source of management information. This forecasting data covers different time spans, such as short specific planning or control periods, annual accounting periods or longer periods (Godick, 1980).

The data provided to management from the cash flows forecasting should allow them to review the financial viewpoint of each corporate function to see that cash flow and liquidity positions are synchronized. Relative information about resource flows is of practical use in planning and controlling resources, but accurate cash forecasting allows management to think about available funds and impending cash requirements (Godick, 1980).

Not only does the synchronization of cash flows help management in planning and controlling resources, but it also gives them an opportunity to manipulate cash flow. Organizations must realize that "cash flow can be manipulated and can serve as an effective tool in business strategies." (Gale and Branch). Cash flow is predictable, manageable and necessary for the single business unit to grow, modernize, and finance daily operations.

As important as the synchronization and manipulation of cash flows is the timely access to cash management information. Cash management staff must require immediate availability of financial information to make reliable financial decisions about investment of excess funds or borrowing of funds for a short-term period.

Computerization of cash management information gives the cash manager of small and large firms availability to financial data so that cash management can be most effective.

Effective cash management practices are important to small as well as large corporations. Large businesses may be adapting theoretical practices to the cash management function but, this may not be a well-defined practice in smaller businesses. This is apparent by Fielitz's statement that "managers of small businesses seldom come in contact with the persons possessing the necessary financial skills to give them adequate advice on cash flow problems." (Fielitz). He says that small businesses are managed by people lacking financial management expertise. Small business managers may not be familiar with the cash flow planning concept that instills the discipline of the cash budget and is vital to the survival of the business. Since the small business is inclined to lack cash and is characterized by a very high failure rate, the cash budget is essential. Even though cash budget preparation may require relatively few manhours to prepare, small firms that are unaccustomed to cash management procedures do not spend the time required to synchronize cash flows. Fielitz recommends the small businessman divide cash flows into a short cycle of one year or less and a long cycle of greater than one year. Dividing the cash flows into long and short cycles would aid in cash budget preparation (Fielitz, 1978). Thus, cash budgeting and cash management are of great importance to both small and large firms.

Section one of the review of literature tells about prescriptive and theoretical cash management practices. Section two tells about a study done by Gitman, Moses, and White on the cash management of Fortune 1000 firms.

Section Two-Study Reporting the Extent Usage of Theoretical Prescriptive Cash Management Practices

Gitman, Moses, and White conclude that, of 150 companies at both ends of the Fortune 1000 firms, companies that followed theoretical cash management practices displayed a higher level of success in the financial management of their operation. Eighty percent of those companies surveyed had a centralized finance function unrelated to the organization's physical size. Respondents to the study, of which 90% were manufacturing organizations, indicated that they follow several theoretical cash management practices. As theoretical cash management practices suggest, Gitman, Moses, and White found that most firms possess a knowledge of fundamental cash management strategies but pay most attention to receivable collections and the least amount of attention to disbursements. They also found that smaller firms, as measured by level of revenue, place more emphasis on accounts receivable collections and inventory control and less emphasis on minimizing bank balances and slowing payments of accounts receivable than larger firms.

Respondents to the study indicated that delaying cash disbursements is less important than the collection of accounts receivable. Since the acceleration of accounts receivable is the most important cash management function, firms stated that the accounts

receivable collections are accelerated most often by the lockbox method in the top 150 firms surveyed. The concentration banking system is the second most preferred method to accelerate accounts receivable by the responding firms.

Not only did the top 150 firms report that they preferred the lockbox method to accelerate accounts receivable, but respondents also indicated that a higher percentage of larger firms,as measured by sales, use advance systems for the collection of accounts receivable. For example, all large firms, as measured by revenue, and 76% of small firms use a lockbox. Survey respondents indicate that 73% of large firms, as measured by sales, and 44% of small firms use concentration banking to accelerate accounts receivables. Respondents indicated that the speeding of the accounts receivables is more important than the slowing of disbursements.

Not only is the receivables collection method important to effective cash management, but the method used to delay cash disbursements is also important to cash management. Gitman, Moses, and White indicate that smaller firms, as measured by level of revenue, are less likely to use sophisticated techniques to slow payments. Thus, 78.6% of large firms and 61% of small firms indicated that they used the centralized payables method to slow disbursements. Disbursement management is necessary for good cash management, as well as using banking services effectively.

The banking services that are most often used by larger companies, as measured by sales, are the zero-balanced accounts.

Smaller companies, as measured by sales, used the short-term investing type of banking services.

Gitman, Moses, and White report that large and small firms, as measured by sales, use the float similarly. In this study, both sized firms indicated that they prefer the check clearing float method.

In their concluding remarks, Gitman, Moses, and White state that firms using sophisticated cash management techniques were large organizations that used cash more rapidly than small firms and concluded that corporations following suggested theoretical cash management practices utilized resources in a more efficient manner than those companies that did not follow theoretical cash management practices. Research indicates that the failure of some organizations may be attributed to the lack of sophisticated cash management techniques and the high cost of implementing certain theoretical developments. Corporations may not view these strategies as feasible since initial costs involved to implement these strategies are relatively expensive.

Section two of the review of literature describes the actual cash management practices of 300 of the Fortune 1000 firms. Section III of the review of literature includes Table 4 that summarizes the use of theoretical and prescriptive cash management techniques.

Section Three-Theoretical and Prescriptive Cash Management Techniques

Section three includes Table 4 that summarizes the use of theoretical and prescriptive cash management techniques, the author of the proponent, and the date of publication. Table 4 was used to prepare the Survey of Cash Management.

TABLE 4

USE OF THEORETICAL AND PRESCRIPTIVE
CASH MANAGEMENT PRACTICES

THEORETICAL AND PRESCRIPTIVE TECHNIQUE	AUTHOR OF PROPONENT	DATE OF PUBLICATION
Major Responsibility for Cash Management	March Gitman, Moses & White Kaplan	July/August 1979 Spring 1979 September 1980
Title of Person Making Major Cash Management Decisions	March Kaplan Fieltz	July/August 1979 September 1980 July 1978
Assessment of Cash Management Procedures	Bonocure	May 1980
Revision of Cash Budget	Coltman	1979
Forecasting of Cash Flows	March Leitch, Barrack & McKinley	July/August 1979 October 1980
Planning of Cash Budget	Coltman	1979
Sales Forecasting for Cash Budget	Edmunds	January/February 1979
Cash Needs Forecasting for Cash Budget	Mathur & Luisada	July/August 1980
Safety Stock Above Cash Required for Compensating Balances	Godick	September 1980
Characterization of Cash Flows	Gale & Branch	July/August 1981
Banking Services Utilized	Gitman, Moses & White March Lordan	Spring 1979 July/August 1979 May 1980
Importance of Cash Management Policies	Gitman, Moses & White	Spring 1979

TABLE 4 - Continued

THEORETICAL AND PRESCRIPTIVE TECHNIQUE	AUTHOR OF PROPONENT	DATE OF PUBLICATION
Method to Accelerate Collection of Accounts Receivable	Oakley	June 1980
	March	July/August 1979
	Mathur & Luisada	July/August 1980
	Gitman, Moses & White	Spring 1979
	Lordan	May 1980
	Kaplan	September 1980
Methods to Delay Cash Disbursements	Oakley	May 1980
	March	July/August 1979
	Gitman, Moses & White	Spring 1979
	Lordan	May 1980
Type of Float Used	Gitman, Moses & White	Spring 1979
	Lordan	May 1980
Level of Management Preparing Cash Budgets	March	July/August 1979

Summary

This chapter, divided into three sections, contains a review of literature. Section one describes theoretical cash management practices, section two describes prescriptive cash management practices, and section three includes Table 4 that summarizes the use of theoretical and prescriptive cash management practices.

In the following chapter, the methodology of this study will be discussed.

Chapter III

Methodology

Methods

The purpose of this study is to investigate and assess cash management practices in the food service and lodging industry. This research was conducted by the descriptive survey method that allows the researcher to get an exact measurement of results. A questionnaire, was designed to collect relevant data.

After the questionnaire was prepared, a sample of 434 food service and lodging companies was chosen from the International Food Service Manufacturer's Association and the Financial Officer's League of the National Restaurant Association mailing lists. After selecting the sample, data collection procedures were begun.

A detailed description of data collection and analysis will follow in subsequent sections.

Sample Design

Since the purpose of this study is to investigate and assess cash management procedures, Table 4 presents a summary of theoretical and prescriptive cash management practices. Based on the content of Table 4, the Survey of Cash Management was designed. It uses open and close-ended questions. Table 5 contains a summary of each question on the Survey of Cash Management and indicates the cash management technique that the question is seeking to measure. Questions 1 thru 3, 5 thru 22, and 25 were to be used as independent variables, each question measuring a different cash management technique. Questions

4, 23, and 24 were designed to be used as independent variables so that data could be analyzed by the size and classification of the firm. The Survey of Cash Management Practices that was designed and used is shown in Appendix A.

Sample Selection

The sample of 434 food service and lodging corporations was chosen from the International Food Service Manufacturer's Association and the Financial Officer's League of the National Restaurant Association. Some corporations that are part of the sample are solely engaged in the food service and lodging industry and others are diversified firms with food service and lodging subsidiaries.

Data Collection

After the sample was selected, data collection began. On May 13, 1983 a copy of the survey (Appendix A) and an introductory letter (Appendix B) explaining the nature and the importance of the study was mailed from the Center for Research in the Hospitality Service Industry in Blacksburg, Virginia. The introductory letter assured the participants of confidentiality.

On June 20, 1983, a second mailing was made to non-respondents and included a copy of the Survey of Cash Management Practices (Appendix A) and follow-up letter. (Appendix C)

After the second mailing, on August 5, 1983, an introductory letter and a third mailing was launched to non-respondents of the previous surveys. A copy of the same survey and introductory letter was sent to non-respondents. (Appendix D)

TABLE 5

THE CASH MANAGEMENT TECHNIQUE MEASURED BY EACH QUESTION ON THE SURVEY OF CASH MANAGEMENT

TECHNIQUE	QUESTION
Cash Management Function	What department of your firm has the major responsibility for cash management?
Cash Manager	What is the title of the person holding the major responsibility for cash management decisions within your firm?
Determination of Current State-of-the-Art Management Practices	How often does your firm assess its cash management practices?
To Determine Size and Classification of Organization	Please specify the dollar value of your net corporate assets on your last balance sheet date.
Determination of Sales Volume	Please specify your annual sales from food and lodging operations in fiscal year 1982.
Quick Assets	What percent of your firm's total assets are held as cash?
Cash Budget	How often does your firm revise its cash budget?
Cash Flows Forecasting	How far in advance are cash flows forecast?
Cash Budgets	How far in advance does your firm plan its cash budget?
Cash Budgets	When preparing cash budgets, which method(s) is used to forecast sales?
Cash Budgets	When preparing cash budgets, how are cash needs forecast?
Safety Stock	Does your firm hold a safety stock of cash above the amount required for compensating balances and predicatable transaction needs?
Percent of Cash Which Could Be Invested	What percentage of cash balances (on the average) are generally attributable to this safety stock?
Predictability of Cash Flows	How would you characterize your net cash flows over a six month period? (Please check)

TABLE 5 - Continued

TECHNIQUE	QUESTION
The Importance of Acceleration and Payment Methods	Check below those banking services you are currently using.
The Importance of Cash Management Policies	Please rank the following cash management policies as to their importance.
Collection of Accounts Receivables	Please rank, by order of frequency used, the methods to accelerate the collection of accounts receivable.
Cash Disbursements	Please rank, by order of frequency used, the following methods for delaying cash disbursements.
Float System	Which type of float system does your firm use?
Length of Float	What is the length of your float?
Information System Available	What type of computerized information system does your firm use to monitor cash balances?
Cash Budget	At what level are cash budgets prepared?
Cash Budget	Are cash budgets prepared for each division and/or service concept?
Bank Deposits	Please indicate the frequency with which bank deposits are made.
Executive Responding to Survey	Please specify your formal corporate title.

Data Analysis and Presentation

After the data was collected, the Statistical Analysis System (SAS), available through VPI&SU Time-sharing, was used to analyze raw data. A program was written by two VPI&SU graduate students to perform all necessary mathematical calculations needed to analyze responses.

The raw data for questions 1 thru 3 and 5 thru 22 is presented by frequency distribution tables. The statistical program tallies the number of responses by category. The frequency distributions analyze responses by each of the three independent variables. So that the independent variable, the percent of assets held as cash, could be statistically analyzed, it is broken down into two categories:

-none at all

-over .1%

So that the frequency distribution results could be analyzed, the independent variable, the dollar value of net corporate assets, is divided into five categories. The dollar value of net corporate assets, as given by respondents in response to the survey question, "please state the dollar value of your net corproate assets on your last balance sheet _____ dated _____," is included in one of the five categories. The categories are as follows:

-$20,000 to $1,139,999

-$1,140,000 to $2,249,999

-$2,250,000 to $15,999,999

-$16,000,000 to $203,324,999

-$203,325,000 to $1,000,000,000

So that the frequency distribution results could be analyzed, the independent variable, level of revenue, is divided into five categories. The level of revenue, as given in response to the survey question, "please specify your annual sales from food and lodging operations in fiscual year 1982 _____," is included in one of the five categories. The categories areas follows:

-$750,000 to $2,229,999

-$2,230,000 to $3,708,999

-$3,709,000 to $6,364,999

-$6,365,000 to $199,999,999

-$200,000,000 to $1,100,000,000

In addition to presenting data by frequency distribution tables, hypotheses testing was done for questions 1 thru 3, 5 thru 14, 16 and 17, and 19 thru 21. No hypotheses testing was done for questions 4, 15, 18, 23, 24, and 25. Questions 4, 23, and 24 are independent variables and question 25 is an open-ended question. In chapter one, fifty-two hypotheses are listed in Tables 1, 2, and 3. They indicate the effect of a dependent variable upon one of the three independent variables which are: percent of assets held as cash, the dollar value of net corporate assets, and the level of revenue.

Survey Analysis

The computer program tested the fifty-two hypotheses that indicate the differences between independent and dependent variables. Five statistical tests used the computer program to analyze the relationships between the independent variables and dependent variables. These statistical tests are: the Chi Square test, the

Gamma test, the Kruskal-Wallis test, the Test for the Linear Contrast on the Mean Ranks, and the Wilcoxon-2 Sample test. These statistical tests, that are preformed with a confidence or alpha level of < .05, provide a p value for each of the fifty-two hypotheses. A p value > .05 indicates that the null hypothesis fails to be rejected. The statistical tests, as they are used in this study, are discussed in the following paragraphs.

The Chi Square test makes inferences about results and compares the actual results with the expected results. In this study, it compares the percent of total assets held as cash to the appropriate unordered dependent variables on the basis of chance.

The Gamma test shows the association of two ordered categories which, in this project, are the percent of assets held as cash and the dependent variable linked with the appropriate ordered category.

ANOVA tests use two independent variables, which are the asset base and the level of revenue, to break down, identify, and test statistically significant variances coming from different sources of variation. This study uses the following ANOVA tests: the Test for the Linear Contrast on the Mean Ranks and the Kruskal-Wallis test. The Test for the Linear Contrast on the Mean Ranks does not use the overall F test for analysis, but allows the researcher to judge linear and quadratic trends. The Kruskal-Wallis test pools scores from all groups, arranges the groups in order of size, ranks the groups, and finds a rank sum of each group. The Wilcoxon-2 Sample test serves as a check for the Kruskal-Wallis test and checks to see that items are ranked in order among the set of differences.

Summary

In this chapter, the methodology of the research was discussed. The survey design, sample selection, the data collection, the data analysis and presentation, and survey analysis were presented.

In the next chapter, the survey results will be presented by frequency distribution tables and hypotheses testing.

CHAPTER IV

Results

The main purpose of this study is to assess and investigate cash management procedures in the food service and lodging firms and determine the extent that some cash management practices are preferred over others.

The data for this study were collected between May and August 1983 through questionnaires sent to food service and lodging organizations.

In this chapter, the information provided by respondents is presented and analyzed. First the response rate is reported and then a brief discussion on survey design is addressed. Frequency distribution tables and hypothesis testing results are presented and an explanation is provided.

Response Rate of the Survey

In this study questionnaires were sent to 434 food service and lodging corporations. Ninety five firms returned the survey, representing a 21.89% response rate.

Survey Design

Questionnaires were sent to food service and lodging firms. Each survey was coded for easy identification and processing upon return.

There were 25 questions on the survey. In it, three questions (Q-23, Q-24, and Q-25) were independent variables. Questions 1 through 22 provided an insight into the cash management practices of the firm. See Appendix A for the questionnaire.

Survey Results

Based upon the 95 responses received, the survey results were grouped into two sections. The first section represents an analysis of frequency distribution tables. Section two represents an analysis of the hypotheses tested results.

Section One-Frequency Distributions

Departments Having the Major Responsibility for Cash Management

Tables 6, 7, and 8 represent the results associated with the department of the firm having the major responsibility for cash management.

Table 6 shows that the major responsibility for cash management, as measured by the percent of assets held as cash, is at the corporate level. Table 7 indicates that, as measured by asset base, 37.0% of responding firms hold the accounting department responsible for cash management while 6.8% of the total responding firms, with asset bases of $203,325,000 to $1,000,000,000, assign cash management tasks to the finance department. Table 7 shows that 15.1% of the total respondents with an asset base of $20,000 to $1,139,999 and 5.5% of the total respondents with an asset base of $203,325,000 to 1,000,000 assign the cash management responsibilities to the corporate level. Table 8 shows that cash management responsibility, as measured by sales volume, is divided equally between the corporate level and the accounting department at all sales volume levels.

Person Having the Major Responsibility for Cash Management

Tables 9, 10, and 11 represent the results associated with the person having the major responsibility for cash management decisions within the firm.

Table 9 shows that 32.3% of respondents indicate that the president makes the majority of cash management decisions, as measured by quick assets. Table 10 indicates that 31.6% of the total respondents, as measured by asset base, assign the comptroller the

TABLE 6

NUMBER AND PERCENTAGE OF DEPARTMENTS WITH MAJOR RESPONSIBILITY FOR CASH MANAGEMENT AND PERCENT OF TOTAL ASSETS HELD AS CASH

Percent of Total Assets Held as Cash	Departments									
	Corporate Level		Finance		Accounting		Operations		Total Respondents	
	N	%	N	%	N	%	N	%	N	%
None at all	16	18.1	15	17.0	20	22.7	5	5.6	56	63.6
Over .1%	19	21.6	1	1.1	9	10.2	3	3.4	32	36.4
Total	35	39.7	16	18.2	29	32.9	8	9.1	88	100.0

TABLE 7

NUMBER AND PERCENTAGE OF DEPARTMENTS HAVING THE MAJOR RESPONSIBILITY FOR CASH MANAGEMENT BY ASSET BASE

Asset Base	Departments									
	Corporate Level		Finance		Accounting		Operations		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%
$ 20 to 1,139	11	15.1	2	2.7	10	13.7	6	8.2	29	39.7
1,140 to 2,249	1	1.3	...	...	4	5.5	...	...	5	6.8
2,250 to 15,999	5	6.8	4	5.5	10	13.7	1	1.3	20	27.4
16,000 to 203,324	4	5.5	3	4.1	2	2.7	...	...	9	12.3
$203,325 to 1,000,000	4	5.5	5	6.8	1	1.4	...	...	10	13.7
Total	25	34.3	14	19.1	27	37.0	7	9.6	73	100.0

TABLE 8

NUMBER AND PERCENTAGE OF DEPARTMENTS HAVING THE MAJOR RESPONSIBILITY FOR CASH MANAGEMENT BY LEVEL OF REVENUE

Level of Revenue	Departments									
	Corporate Level		Finance		Accounting		Operations		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%
$ 750 to 2,229	11	14.5	1	1.3	4	5.3	5	6.6	21	27.6
2,230 to 3,708	5	6.6	1	1.3	3	3.9	1	1.3	10	13.2
3,709 to 6,364	1	1.3	1	1.3	10	13.2	...	...	12	15.8
6,365 to 199,999	8	10.5	4	5.3	9	11.8	...	...	21	27.6
$200,000 to 1,100,000	2	2.6	8	10.5	1	1.3	1	1.3	12	15.8
Total	27	35.5	15	19.7	27	35.5	7	9.2	76	100.0

TABLE 9

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE TITLE OF THE PERSON HOLDING THE MAJOR RESPONSIBILITY FOR CASH MANAGEMENT DECISIONS WITHIN THE FIRM AND THE PERCENTAGE OF TOTAL ASSETS HELD AS CASH

Percent of Total Assets Held as Cash	Title of the Person Holding the Major Responsibility for Cash Management Decisions Within the Firm									
	President		Treasurer		Comptroller		Other		Total	
	N	%	N	%	N	%	N	%	N	%
None at all	13	14.0	20	21.5	19	20.4	7	7.5	59	63.4
Over .1%	17	18.3	4	4.3	9	9.6	4	4.3	34	36.6
Total	30	32.3	24	25.8	28	30.1	11	11.8	93	100.0

TABLE 10

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE TITLE OF THE PERSON HOLDING THE MAJOR RESPONSIBILITY FOR CASH MANAGEMENT DECISIONS WITHIN THE FIRM AND THE ASSET BASE

	Title of the Person Holding the Major Responsibility for Cash Management Decisions Within the Firm									
Asset Base	President		Treasurer		Comptroller		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%
$ 20 to 1,139	15	18.9	4	5.1	6	7.6	4	5.1	29	36.7
1,140 to 2,249	4	5.1	...	...	4	5.1	...	...	8	10.1
2,250 to 15,999	3	3.8	6	7.6	11	13.9	1	1.3	21	26.6
16,000 to 203,334	1	1.3	5	6.3	4	5.1	3	3.8	13	16.5
$203,335 to 1,000,000	1	1.3	5	6.3	...	...	2	2.5	8	10.1
Total	24	30.4	20	25.3	25	31.6	10	12.7	79	100.0

TABLE 11

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE TITLE OF THE PERSON HOLDING THE MAJOR RESPONSIBILITY FOR CASH MANAGEMENT WITHIN THE FIRM AND LEVEL OF REVENUE

Level of Revenue	Title of Person Having the Major Responsibility of Cash Management Within the Firm									
	President		Treasurer		Comptroller		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%
$ 750 to 2,329	17	20.9	4	4.9	1	1.2	4	4.9	26	32.1
2,330 to 3,708	6	7.4	...	...	4	4.9	...	...	10	12.3
3,709 to 5,364	1	1.2	4	4.9	7	8.6	1	1.2	13	16.1
6,365 to 199,999	2	2.5	12	14.8	13	16.0	1	1.2	28	34.6
$200,000 to 1,100,000	1	1.2	...	...	...	...	3	3.7	4	4.9
Total	27	33.3	20	24.7	25	30.9	9	11.1	81	100.0

major responsibility for cash management. Table 10 also shows that 27.8% of total respondents, with an asset base of $20,000 to $15,999,999, assign cash management responsibilities to the president. Thus, 13.9% of the total responding firms, with an asset base of $2,250,000 to $15,999,999 assign cash management responsibilities to the comptroller and the treasurer is responsible for cash management decisions in 12.6% of the total responding firms with an asset base of $16,000,000 to $1,000,000,000. Table 11 shows that 30.9% of firms, as measured by revenue, assign the majority of cash management responsibilities to the comptroller.

Cash Management Banking Arrangements

The results designed to determine the frequency with which the firm assesses its cash banking arrangements are presented in Tables 12, 13, and 14.

As measured by quick assets, 27.2% of the total respondents indicate that they assess cash management banking arrangements quarterly and 27.2% of respondents indicate that they assess them semi-annually. (Table 12) Table 13 shows that 28.3% of firms assess cash management banking arrangements semi-annually. Respondents, with an asset base of $20,000 to $1,139,999, indicate that cash management banking arrangements are evaluated by 10.3% of total respondents semi-annually and that 10.3% of total respondents do not actively evaluate cash management banking arrangements. Table 14 indicates that 13.6% of the total respondents with sales between $750,000 and $3,708,999 assess their cash management banking arrangements quarterly. 13.6% of total responding companies with annual revenues

TABLE 12

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE FREQUENCY OF ASSESSING CASH MANAGEMENT BANKING ARRANGEMENTS AND THE PERCENT OF TOTAL ASSETS HELD AS CASH

Percent of Total Assets Held as Cash	Frequency of Assessing Cash Management Banking Arrangements											
	Daily		Weekly		Quarterly		Semi-Annually		Activity Not Performed		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None at all	12	13.0	9	9.8	16	17.4	17	18.5	5	5.4	59	64.1
.1% and above	7	7.6	2	2.2	9	9.8	8	8.7	7	7.6	33	35.9
Total	19	20.6	11	12.0	25	27.2	25	27.2	12	13.0	92	100.0

TABLE 13

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE FREQUENCY OF ASSESSING CASH MANAGEMENT BANKING ARRANGEMENTS AND THE ASSET BASE

Asset Base	Frequency of Assessing Cash Management Banking Arrangements											
	Daily		Weekly		Quarterly		Semi-Annually		Activity Not Performed		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%	N	%
$ 20 to 1,139	5	6.4	1	1.3	7	9.0	8	10.3	8	10.3	29	37.2
1,140 to 2,249	1	1.3	...	...	2	2.6	3	3.9	1	1.3	7	9.0
2,250 to 15,999 . . .	4	5.1	6	7.7	6	7.7	2	2.6	2	2.6	20	25.6
16,000 to 203,324 . .	1	1.3	3	3.9	2	2.6	5	6.4	...	...	11	14.1
$203,325 to 1,000,000 .	4	5.1	...	...	3	3.9	4	5.1	...	...	11	14.1
Total	15	19.2	10	12.8	20	25.6	22	28.3	11	14.1	78	100.0

TABLE 14

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE FREQUENCY OF ASSESSING CASH MANAGEMENT BANKING ARRANGEMENTS AND THE LEVEL OF REVENUE

Level of Revenue	Frequency of Assessing Cash Management Banking Arrangements											
	Daily		Weekly		Quarterly		Semi-Annually		Activity Not Performed		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%	N	%
$ 750 to 2,329	3	3.7	1	1.2	8	9.9	6	7.4	7	8.6	25	30.9
2,330 to 3,708	1	1.2	...	...	3	3.7	4	4.9	2	2.5	10	12.4
3,709 to 6,364	2	2.5	3	3.7	2	2.5	3	3.7	2	2.5	12	14.8
6,365 to 199,999 . . .	8	9.9	6	7.4	4	4.9	6	7.4	...	...	24	29.6
$200,000 to 1,100,000 .	3	3.7	...	...	4	4.9	3	3.7	...	...	10	12.3
Total	17	21.0	10	12.3	21	25.9	22	27.2	11	13.6	81	100.0

of $6,365,000 to 1,100,000,000 evaluate their arrangements daily. Semi-annual cash management banking arrangements are done by 27.2% of respondents.

Frequency with which the Firm Revises its Cash Budget

Tables 15, 16, and 17 indicate the frequency with which the firm revises its cash budget.

Table 15 indicates that monthly revision of the cash budget is performed by 34.4% of respondents, as measured by quick assets. Table 16 shows that 34.4% of the firms revise their cash budget monthly and 10.1% of total responding firms with an asset base of $20,000 to $1,139,999 revise their cash budget either monthly or quarterly. Table 17 indicates that 35.4% of respondents, as measured by revenue, revise cash budgets monthly.

Amount of Time in Advance Cash Flows are Forecast

Tables 18, 19, and 20 represent the results of the question designed to ascertain the amount of time in advance that cash flows are forecast. Table 18 shows that, as measured by the percent of assets held as cash, cash flows are forecast one quarter in advance by 24.5% of respondents. According to Table 19, as measured by asset base, 22.8% of firms indicate they forecast cash flows one quarter in advance. Table 20 shows that 12.2% of total responding firms with sales of $750,000 to $2,239,999 forecast cash flows one month in advance and 23.2% of respondents prepare cash flows one quarter in advance.

TABLE 15

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE TOTAL ASSETS HELD AS CASH AND THE FREQUENCY WHICH A FIRM REVISES ITS CASH BUDGET

Percent of Total Assets Held as Cash	Frequency Which a Firm Revises Its Cash Budget													
	Daily		Weekly		Monthly		Quarterly		Semi-Annually		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
None at all	9	9.7	7	7.5	18	19.4	12	12.9	8	8.6	6	6.5	60	64.5
.1% and above	1	1.1	4	4.3	14	15.0	8	8.6	...	...	6	6.5	33	35.5
Total	10	10.8	11	11.8	32	34.4	20	21.5	8	8.6	12	12.9	93	100.0

TABLE 16

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE FREQUENCY OF ASSESSING CASH MANAGEMENT BANKING ARRANGEMENTS AND THE ASSET BASE

Asset Base	Frequency Which a Firm Revises Its Cash Budget													
	Daily		Weekly		Monthly		Quarterly		Semi-Annually		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%	N	%	N	%
$ 20 to 1,139	4	5.1	4	5.1	8	10.1	8	10.1	...	...	6	7.6	30	38.0
1,140 to 2,249	...	...	...	...	2	2.5	...	...	3	3.8	2	2.5	7	8.8
2,250 to 15,999	...	...	1	1.3	12	15.2	4	5.1	3	3.8	...	...	20	25.3
16,000 to 203,324	1	1.3	2	2.5	2	2.5	3	3.8	3	3.8	1	1.3	12	15.2
$203,325 to 1,000,000	2	2.5	1	1.3	3	3.8	3	3.8	...	...	1	1.3	10	12.7
Total	7	8.9	8	10.1	27	34.2	18	22.8	9	11.4	10	12.7	79	100.0

TABLE 17

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE FREQUENCY WHICH A FIRM REVISES ITS CASH BUDGET

Level of Revenue	Frequency Which a Firm Revises Its Cash Budget													
	Daily		Weekly		Monthly		Quarterly		Semi-Annually		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%	N	%	N	%
$ 750 to 2,329	2	2.4	2	2.4	9	11.0	7	8.5	1	1.2	4	4.9	25	30.5
2,330 to 3,708	...	...	1	1.2	2	2.4	3	3.7	1	1.2	3	3.7	10	12.2
3,709 to 6,364	1	1.2	1	1.2	3	3.7	4	4.9	2	2.4	1	1.2	12	14.6
6,365 to 199,999 . . .	2	2.4	3	3.7	12	14.6	1	1.2	4	4.9	2	2.4	24	29.3
$200,000 to 1,100,000 .	2	2.4	1	1.2	3	3.7	3	3.7	1	1.2	1	1.2	11	13.4
Total	7	8.5	8	9.8	29	35.4	18	21.9	9	11.0	11	13.4	82	100.0

TABLE 18

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE PERCENT OF ASSETS HELD AS CASH AND THE PERIOD IN ADVANCE THAT CASH FLOWS ARE FORECAST

Percent of Total Assets Held as Cash	Period in Advance that Cash Flows are Forecast															
	Daily		Weekly		Monthly		Quarterly		Semi-Annually		Annually		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
None at all	10	10.6	...	...	13	13.8	10	10.6	...	...	27	28.7	...	...	60	63.8
.1% and above	7	7.4	...	...	5	5.3	13	13.8	...	...	9	9.6	...	...	34	36.2
Total	17	18.1	...	...	18	19.1	23	24.5	...	...	36	38.3	...	...	94	100.0

TABLE 19

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND THE PERIOD IN ADVANCE THAT CASH FLOWS ARE FORECAST

Asset Base	Period in Advance that Cash Flows are Forecast															
	Daily		Weekly		Monthly		Quarterly		Semi-Annually		Annually		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
$ 20 to 1,139	8	10.1	...	...	8	10.1	6	7.6	...	...	7	8.9	...	...	29	36.7
1,140 to 2,249	1	1.3	...	...	1	1.3	2	2.5	...	...	4	5.0	...	...	8	10.1
2,250 to 15,999	1	1.3	...	...	5	6.3	6	7.6	...	...	7	8.9	...	...	9	24.1
16,000 to 203,324	3	3.8	...	...	2	2.5	1	1.3	...	...	7	8.9	...	...	13	16.4
$203,325 to 1,000,000	...	...	...	...	...	...	3	3.8	...	...	7	8.9	...	...	10	12.7
Total	13	16.5	...	...	16	20.3	18	22.8	...	...	32	40.5	...	...	79	100.0

TABLE 20

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE PERIOD IN ADVANCE THAT CASH FLOWS ARE FORECAST

Level of Revenue	Period in Advance that Cash Flows are Forecast															
	Daily		Weekly		Monthly		Quarterly		Semi-Annually		Annually		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
$ 750 to 2,329	6	7.3	...	...	10	12.2	5	6.1	...	...	4	4.9	...	...	25	30.5
2,330 to 3,708	1	1.2	...	...	...	...	3	3.7	...	...	6	7.3	...	...	10	12.2
3,709 to 6,364	2	2.4	...	...	4	4.9	3	3.7	...	...	3	3.7	...	...	12	14.6
6,365 to 199,999	5	6.1	...	...	2	2.4	6	7.3	...	...	12	14.6	...	...	25	30.5
$200,000 to 1,100,000	...	...	...	...	...	...	2	2.4	...	...	8	9.8	...	...	10	12.2
Total	14	17.1	...	...	16	19.5	19	23.2	...	...	33	40.2	...	...	82	100.0

Period in Advance that the Firm Plans its Cash Budget

Tables 21, 22, and 23 represent the results designed to determine the period in advance that a firm plans its cash budget.

Table 21 shows that 87.3% of corporations, as measured by the percent of assets held as cash, prepare cash budgets for a period equal to or less than one year in advance. Table 22 shows that 23.6% of total responding firms, with an asset base of $20,000 to $1,139,999, plan their cash budgets less than one year in advance and 18% of the total responding firms with asset bases of $16,000 to $1,000,000,000, plan their cash budgets one year in advance. Table 23 shows that 20% of the total respondents with sales between $750,000 and $2,329,999 plan their cash budgets less than one year in advance and 26.7% of total responding companies with sales between $6,365,000 and $1,100,000,000 plan their cash budgets one year in advance.

Method of Forecasting Sales

Tables 24, 25, and 26 represent the results of the questions designed to determine the method of forecasting sales used in preparing the cash budget.

Table 24 shows that 50.6% of respondents use estimates from historical data to forecast sales. Table 25 indicates that 7.4% of total respondents, with an asset base of $203,325,000 to $1,000,000,000 use sales estimates from the company sales force to forecast sales. Table 26 indicates that 16.9% of total respondents, with annual sales between $750,000 and $2,329,999, use estimates from historical data to forecast sales and 19.9% of total respondents, with

TABLE 21

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN TOTAL ASSETS HELD AS CASH AND THE PERIOD IN ADVANCE THAT THE FIRM PLANS ITS CASH BUDGET

Percent of Total Assets Held as Cash	Period in Advance that the Firm Plans Its Cash Budget							
	Less than One Year		One Year		More than One Year		Total	
	N	%	N	%	N	%	N	%
None at all	21	24.1	29	33.3	6	6.9	56	64.4
.1% and above	12	13.8	14	16.1	5	5.8	31	35.6
Total	33	37.9	43	49.4	11	12.7	87	100.0

TABLE 22

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND THE PERIOD IN ADVANCE THAT THE FIRM PLANS ITS CASH BUDGET

Asset Base	Period in Advance that the Firm Plans Its Cash Budget							
	Less than One Year		One Year		More than One Year		Total	
$ in Thousands	N	%	N	%	N	%	N	%
$ 20 to 1,139	17	23.6	9	12.5	1	1.4	27	37.5
1,140 to 2,249	1	1.4	2	2.8	3	4.2	6	8.3
2,250 to 15,999	3	4.2	13	18.0	3	4.2	19	26.4
16,000 to 203,324	2	2.8	8	11.1	1	1.4	11	15.3
$203,325 to 1,000,000	3	4.2	5	6.9	1	1.4	9	12.5
Total	26	36.1	37	51.4	9	12.5	72	100.0

TABLE 23

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE PERIOD IN ADVANCE THAT THE FIRM PLANS ITS CASH BUDGET

Level of Revenue	Period in Advance that the Firm Plans Its Cash Budget							
	Less than One Year		One Year		More than One Year		Total	
$ in Thousands	N	%	N	%	N	%	N	%
$ 750 to 2,329	15	20.0	6	8.0	2	2.7	23	30.7
2,330 to 3,708	2	2.7	6	8.0	1	1.3	9	12.0
3,709 to 6,364	4	5.3	7	9.3	...	...	11	14.7
6,365 to 199,999	4	5.3	15	20.0	4	5.3	23	30.7
$200,000 to 1,100,000	3	4.0	5	6.7	1	1.3	9	12.0
Total	28	37.3	39	52.0	8	10.7	75	100.1

TABLE 24

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE PERCENT OF TOTAL ASSETS HELD AS CASH AND THE METHOD USED TO FORECAST CASH SALES

Percent of Total Assets Held as Cash	Method Used to Forecast Cash Sales							
	Sales Estimates from Company Sales Force		Estimates from Historical Data		Upper Management's Opinion		Total	
in Thousands	N	%	N	%	N	%	N	%
None at all	17	21.5	24	30.4	7	8.9	48	60.8
.1% and above	9	11.4	16	20.2	6	7.6	31	39.2
Total	26	32.9	40	50.6	13	16.5	79	100.0

TABLE 25

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND THE METHOD USED TO FORECAST CASH SALES

Asset Base	Method Used to Forecast Cash Sales: Sales Estimates from Company Sales Force		Estimates from Historical Data		Upper Management's Opinion		Total	
$ in Thousands	N	%	N	%	N	%	N	%
$ 20 to 1,139	9	13.2	11	16.2	6	8.8	26	38.2
1,140 to 2,249	2	2.9	3	4.4	1	1.5	6	8.8
2,250 to 15,999	3	4.4	12	17.6	3	4.4	18	26.5
16,000 to 203,324	4	5.9	4	5.9	2	2.9	10	14.7
$203,325 to 1,000,000	5	7.4	3	4.4	...	...	8	11.8
Total	23	33.8	33	48.5	12	17.7	68	100.0

TABLE 26

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE METHOD USED TO FORECAST SALES

Level of Revenue	Method Used to Forecast Sales							
	Sales Estimates from Company Sales Force		Estimates from Historical Data		Upper Management's Opinion		Total	
$ in Thousands	N	%	N	%	N	%	N	%
$ 750 to 2,329	7	9.8	12	16.9	4	5.6	23	32.4
2,330 to 3,708	2	2.8	5	7.0	2	2.8	9	12.7
3,709 to 6,364	1	1.4	5	7.0	2	4.2	9	12.7
6,365 to 199,999	8	11.4	11	15.5	3	4.2	22	31.0
$200,000 to 1,100,000	6	8.5	1	1.4	1	1.4	8	11.3
Total	24	33.8	34	47.9	13	18.3	71	100.0

sales between $6,365,000 and $1,100,000,000, use sales estimates from the company sales force to forecast sales.

Management Level Preparing Cash Budgets

Tables 27, 28, and 29 represent the results of the questions designed to determine the management level preparing cash budgets.

Table 27 shows that 70.3% of total respondents, as measured by the percent of assets held as cash, indicate that the corporate level of management prepares cash budgets. Table 28 shows that 65.8% of respondents, as measured by the percent of assets held as cash, prepare cash budgets at the corporate level. Table 29 indicates that, as measured by level of revenue, 67.1% of respondents, prepare cash budgets at the corporate level.

Whether Cash Budgets are Prepared for Each Service Concept and/or Division

Tables 30, 31, and 32 represent the results of the questions designed to determine whether cash budgets are prepared for each service concept and/or division.

Table 30 shows that 52.3% of respondents, as measured by the percent of assets held as cash, prepare cash budgets for each service concept and/or division. As Table 31 shows, 41.7% of total respondents, with an asset base between $20,000 and $15,999,999 prepare a cash budget for each service concept and/or division and 16.6% of the total responding firms, with an asset base between $16,000,000 and $1,000,000,000, do not prepare cash budgets for each service concept and/or division. Table 32 shows that 26.7% of total respondents, with annual sales between $750,000 and $6,364,999

TABLE 27

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE PERCENT OF TOTAL ASSETS HELD AS CASH AND THE MANAGEMENT LEVEL PREPARING CASH BUDGETS

Percent of Total Assets Held as Cash	Management Level Preparing Cash Budgets							
	Corporate		Division		Other		Total	
	N	%	N	%	N	%	N	%
None at all	39	42.8	12	13.2	8	8.8	59	64.8
.1% and above	25	27.5	6	6.6	1	1.1	32	35.2
Total	64	70.3	18	19.8	9	9.9	91	100.0

TABLE 28

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND THE MANAGEMENT LEVEL PREPARING CASH BUDGETS

	Management Level Preparing Cash Budgets							
Asset Base	Corporate		Division		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%
$ 20 to 1,139	18	23.7	4	5.3	6	7.9	28	36.8
1,140 to 2,249	4	5.3	2	2.6	...	...	6	7.9
2,250 to 15,000	13	17.1	5	6.6	3	3.9	21	27.6
16,000 to 203,324	7	9.2	4	5.3	...	...	11	14.5
$203,325 to 1,000,000	8	10.5	2	2.6	...	...	10	13.2
Total	50	65.8	17	22.4	9	11.8	76	100.0

TABLE 29

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE MANAGEMENT LEVEL PREPARING CASH BUDGETS

Level of Revenue	Management Level Preparing Cash Budgets							
	Corporate		Division		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%
$ 750 to 2,329	15	19.0	4	5.1	5	6.3	24	30.4
2,330 to 3,708	6	7.6	1	1.3	1	1.3	8	10.1
3,709 to 6,364	7	8.9	2	2.5	3	3.8	12	15.2
6,365 to 199,999	18	22.8	6	7.6	...	...	24	30.4
$200,000 to 1,100,000	7	8.9	4	5.1	...	...	11	13.9
Total	53	67.1	17	21.5	9	11.4	79	100.0

TABLE 30

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE PERCENT OF TOTAL ASSETS HELD AS CASH AND THE FACTOR OF CASH BUDGET PREPARATION FOR EACH DIVISION AND/OR SERVICE CONCEPT

Percent of Total Assets Held as Cash	Cash Budgets Prepared for Each Service Concept and/or Division					
	Yes		No		Total	
	N	%	N	%	N	%
None at all	26	30.2	30	34.9	56	65.1
.1% and above	19	22.1	11	12.8	30	34.9
Total	45	52.3	41	47.7	86	100.0

TABLE 31

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND THE FACTOR OF CASH BUDGET PREPARATION FOR EACH DIVISION AND/OR SERVICE CONCEPT

	Cash Budgets Prepared for Each Service Concept and/or Division					
Asset Base	Yes		No		Total	
$ in Thousands	N	%	N	%	N	%
$ 20 to 1,139	12	16.7	12	16.7	24	33.3
1,400 to 2,249	5	6.9	1	1.4	6	8.3
2,250 to 15,999	13	18.1	7	9.7	20	27.8
16,000 to 203,324	6	8.3	6	8.3	12	16.7
$203,325 to 1,000,000	4	5.6	6	8.3	10	13.9
Total	40	55.6	32	44.4	72	100.0

TABLE 32

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE FACTOR OF CASH BUDGET PREPARATION FOR EACH DIVISION AND/OR SERVICE CONCEPT

Level of Revenue	Cash Budgets Prepared for Each Service Concept and/or Division					
	Yes		No		Total	
$ in Thousands	N	%	N	%	N	%
$ 750 to 2,329	12	16.0	9	12.0	21	28.0
2,330 to 3,708	5	6.7	3	4.0	8	10.7
3,709 to 6,364	4	5.3	8	10.7	12	16.0
6,365 to 199,999	14	18.7	9	12.0	23	30.7
$200,000 to 1,100,000	5	6.7	6	8.0	11	14.6
Total	40	53.3	35	46.7	75	100.0

indicate that they do not prepare a cash budget for each division and/or service concept. A separate cash budget for each division and/or service concept is prepared by 25.4% of total respondents with annual sales between $6,365,000 and $1,100,000,000.

Cash Needs Forecasting Method

Tables 33, 34, and 35 represent the results of the questions used to determine the cash needs forecasting method.

Table 33 indicates that 46.4% of respondents, as measured by the percent of assets held as cash, use the percent of sales method to forecast cash needs. Table 34 shows that as measured by asset base, 49.3% of firms use the percent of sales method to forecast cash needs. Table 35 indicates that 23% of the total respondents with annual sales between $750,000 and $2,329,999, use the percent of sales method to forecast cash needs and 18.9% of total respondents with annual sales between $6,365,000 and $1,100,000,000 use other techniques to forecast cash needs.

Safety Stock

Tables 36, 37, and 38 represent the results of the questions designed to determine whether the firm is holding a safety stock over the required compensating balance and predictable transaction needs.

Table 36 indicates that 52.7% of responding firms do not hold a safety stock over the amount required for compensating balances and predictable transaction needs. Table 37 shows that 26.6% of total respondents, with an asset base between $20,000 and $2,249,999 hold a safety stock above the required compensating balance and predictable transaction needs and 17.8% of total respondents, with an asset base

TABLE 33

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE TOTAL ASSETS HELD AS CASH AND THE CASH NEEDS FORECASTING METHOD

Percent of Total Assets Held as Cash	Methods Used to Forecast Cash Needs							
	Percent of of Sales		Consensus of Executive Opinion		Other Techniques		Total	
	N	%	N	%	N	%	N	%
None at all	24	28.6	17	20.2	15	17.9	56	66.7
.1% and above	15	17.9	10	11.9	3	3.6	28	33.3
Total	39	46.4	27	32.1	18	21.5	84	100.0

TABLE 34

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN
THE ASSET BASE AND THE CASH NEEDS
FORECASTING METHOD

Asset Base	Methods Used to Forecast Cash Needs							
	Percent of Sales		Consensus of Executive Opinion		Other Techniques		Total	
$ in Thousands	N	%	N	%	N	%	N	%
$ 20 to 1,139	16	22.5	4	5.6	6	8.5	26	36.6
1,140 to 2,249	3	4.2	1	1.4	2	2.8	6	8.4
2,250 to 15,999	8	11.3	4	5.6	7	9.9	19	26.8
16,000 to 203,324	4	5.6	3	4.2	4	5.6	11	15.5
$203,325 to 1,000,000	4	5.6	2	2.8	3	4.2	9	12.7
Total	35	49.3	14	19.7	22	31.0	71	100.0

TABLE 35

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE CASH NEEDS FORECASTING METHOD

Level of Revenue	Methods Used to Forecast Cash Needs							
	Percent of of Sales		Consensus of Executive Opinion		Other Techniques		Total	
$ in Thousands	N	%	N	%	N	%	N	%
$ 750 to 2,329	17	23.0	4	5.4	3	4.0	24	32.4
2,330 to 3,708	3	4.0	2	2.7	1	1.3	6	8.1
3,709 to 6,364	4	5.4	4	5.4	4	5.4	12	16.2
6,365 to 199,999	9	12.2	3	4.0	11	14.9	23	31.1
$200,000 to 1,100,000	3	4.0	3	4.0	3	4.0	9	12.2
Total	36	48.7	16	21.6	22	29.7	74	100.0

TABLE 36

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE TOTAL ASSETS HELD AS CASH AND SAFETY STOCK

Percent of Total Assets Held as Cash	Firms Holding a Safety Stock					
	Yes		No		Total	
	N	%	N	%	N	%
None at all	21	22.6	39	41.9	60	64.5
Over .1%	23	24.7	10	10.8	33	35.5
Total	44	47.3	49	52.7	93	100.0

TABLE 37

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND FIRMS HOLDING A SAFETY STOCK

Asset Base	Firms Holding a Safety Stock					
	Yes		No		Total	
$ in Thousands	N	%	N	%	N	%
$ 20 to 1,139	17	21.5	13	16.5	30	38.0
1,140 to 2,249	4	5.1	3	3.8	7	8.9
2,250 to 15,999	9	11.4	11	13.9	20	25.3
16,000 to 203,324	6	7.6	7	8.9	13	16.4
$203,325 to 1,000,000	2	2.5	7	8.9	9	11.4
Total	38	48.1	41	51.9	79	100.0

TABLE 38

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND FIRMS HOLDING A SAFETY STOCK

Level of Revenue	Firms Holding a Safety Stock					
	Yes		No		Total	
$ in Thousands	N	%	N	%	N	%
$ 750 to 2,329	16	19.5	9	11.0	25	30.5
2,330 to 3,708	5	6.1	5	6.1	10	12.2
3,709 to 6,364	3	3.7	9	11.0	12	14.6
6,365 to 199,999	10	12.2	14	17.1	24	29.3
$200,000 to 1,100,000	5	6.1	6	7.3	11	13.4
Total	39	47.6	43	52.4	82	100.0

between $16,000,000 and $1,000,000,000 do not hold a safety stock. Table 38 shows that 25.6% of total respondents, with annual sales between $750,000 and $3,708,999, hold a safety stock above the required compensating balances and predictable transaction needs and 35.4% of total respondents, with annual sales between $3,709,000 and $1,100,000,000 do not hold a safety stock above the required compensating balance and predictable transaction needs.

Percentage of Cash Held as Safety Stock

Tables 39, 40, and 41 represent the results designed to determine the percentage of cash held as safety stock.

Table 39 shows that 48.1% of total respondents hold a safety stock below 5% of cash. Table 40 shows that 17.8% of total respondents, with an asset base between $20,000 and $1,139,999, hold a safety stock that is below 5% of cash. Table 41 shows that 46.8% of corporations, as measured by level of revenue, hold a safety stock below 5% of cash.

Cash Flow Characteristics Over a Six-Month Period

Tables 42, 43, and 44 represent the results designed to determine the cash flow characteristics over a six month period.

Table 42 indicates that 66% of survey respondents, as measured by the percentage of assets held as cash, characterized their net cash flows as fairly predictable over a six month period. Table 43 shows that 65.8% of respondents, as measured by asset base, characterize their cash flows as fairly predictable. According to Table 44, 65.9% of respondents, as measured by level of revenue, characterize their cash flows as fairly predictable.

TABLE 39

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE TOTAL ASSETS HELD AS CASH AND THE PERCENT OF CASH HELD AS SAFETY STOCK

Percent of Total Assets Held as Cash	Percent of Cash Held as Safety Stock							
	Below 5%		Between 5.1% and 20%		More than 20%		Total	
	N	%	N	%	N	%	N	%
None at all	17	31.5	5	9.3	6	11.1	28	51.9
.1% and above	9	16.7	10	18.5	7	13.0	26	48.1
Total	26	48.1	15	27.8	13	24.1	54	100.0

TABLE 40

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN
THE ASSET BASE AND THE PERCENT
OF CASH HELD AS SAFETY STOCK

Asset Base	Percent of Cash Held as Safety Stock							
	Below 5%		Between 5.1% and 20%		More than 20%		Total	
$ in Thousands	N	%	N	%	N	%	N	%
$ 20 to 1,139	8	17.8	2	4.4	6	13.3	16	35.6
1,140 to 2,249	1	2.2	2	4.4	1	2.2	4	8.9
2,250 to 15,999	4	8.9	4	8.9	3	6.7	11	24.4
16,000 to 203,334	4	8.9	1	2.2	3	6.7	8	17.8
$203,335 to 1,000,000	3	6.7	3	6.7	...	...	6	13.3
Total	20	44.4	12	26.7	13	28.9	45	100.0

TABLE 41

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE PERCENT OF CASH HELD AS SAFETY STOCK

Level of Revenue	Percent of Cash Held as Safety Stock							
	Below 5%		Between 5.1% and 20%		More than 20%		Total	
$ in Thousands	N	%	N	%	N	%	N	%
$ 750 to 2,329	6	12.8	5	10.6	5	10.6	16	34.0
2,300 to 3,708	2	4.3	...	...	3	6.4	5	10.6
3,709 to 6,364	3	6.4	1	2.1	1	2.1	5	10.6
6,365 to 199,999	7	14.9	4	8.5	3	6.4	14	29.8
$200,000 to 1,100,000	4	8.5	3	6.4	...	...	7	14.9
Total	22	46.8	13	27.7	12	25.5	47	100.0

TABLE 42

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE TOTAL ASSETS HELD AS CASH AND THE NET CASH FLOW CHARACTERISTICS OVER A SIX MONTH PERIOD

Percent of Total Assets Held as Cash	Net Cash Flow Characteristics Over a Six Month Period					
	Fairly Predictable		Other		Total	
	N	%	N	%	N	%
None at all	38	40.4	22	23.4	60	63.8
.1% and above	24	25.5	10	10.6	34	36.2
Total	62	66.0	32	34.0	94	100.0

TABLE 43

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND THE NET CASH FLOW CHARACTERISTICS OVER A SIX MONTH PERIOD

Asset Base	Net Cash Flow Characteristics Over a Six Month Period					
	Fairly Predictable		Other		Total	
$ in Thousands	N	%	N	%	N	%
$ 20 to 1,139	17	21.5	13	16.5	30	38.0
1,140 to 2,249	5	6.3	1	1.3	6	7.6
2,250 to 15,999	16	20.3	5	6.3	21	26.6
16,000 to 203,324	7	8.9	5	6.3	12	15.2
$203,325 to 1,000,000	7	8.9	3	3.8	10	12.6
Total	52	65.8	27	34.2	79	100.0

TABLE 44

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE NET CASH FLOW CHARACTERISTICS OVER A SIX MONTH PERIOD

Level of Revenue	Net Cash Flow Characteristics Over a Six Month Period					
	Fairly Predictable		Other		Total	
$ in Thousands	N	%	N	%	N	%
$ 750 to 2,329	17	20.7	8	9.8	25	30.5
2,330 to 3,708	8	9.8	2	2.4	10	12.2
3,709 to 6,364	7	8.5	6	7.3	13	15.9
6,365 to 199,999	14	17.1	9	11.0	23	28.0
$200,000 to 1,100,000	8	9.8	3	3.7	11	13.4
Total	54	65.9	28	34.1	82	100.0

Type of Banking Services Used

Tables 45, 46, and 47 represent the results of the question designed to determine the type of banking services respondents use.

Table 45 shows that 32.8% of corporations, as measured by the percentage of assets held by cash, use the short-term investing banking services. Table 46 indicates that 9.2% of total respondents, with an asset base between $20,000 and $1,139,999, use the short-term investing banking services and 6.6% of total respondents, with an asset base between $203,325,000 and $1,000,000,000 use the wire funds transfer and zero-based accounts type of banking services. Table 47 indicates that 8.5% of total respondents, with annual sales between $750,000 and $2,329,999, are most often using short-term investing banking services and 17.1% of total respondents, with annual sales between $6,365,000 and $1,100,000,000 most often use the zero-based accounts type of banking service.

Most Important Cash Management Policy

Tables 48, 49, and 50 represent the results of the question designed to determine the most important cash management policy.

Table 48 indicates that 45.5% of responding firms, as measured by the percentage of assets held as cash, view the speed of the collection of receivables as the most important cash management policy. Table 49 shows that 47.4% of total respondents, as measured by asset base, view the speeding of the collection of receivables as the most important cash management policy. Table 50 indicates that 14.1% of total respondents, with annual sales between $750,000 and $2,329,999 state that the speeding the collection of receivables is

TABLE 45

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE PERCENT OF TOTAL ASSETS HELD AS CASH AND THE BANKING SERVICES USED

Percent of Total Assets Held as Cash	Banking Services Used											
	Wire Funds Transfer		Payroll Management		Zero Based Accounts		Short-Term Investing		Lockbox System		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None at all	...	...	...	...	...	...	...	...	...	...	...	...
.1% and above	41	22.8	27	15.0	35	19.4	59	32.8	18	10.0	180	100.0
Total	41	22.8	27	15.0	35	19.4	59	32.8	18	10.0	180	100.0

TABLE 46

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND THE BANKING SERVICES USED

Asset Base	Banking Services Used											
	Wire Funds Transfer		Payroll Management		Zero Based Accounts		Short-Term Investing		Lockbox System		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%	N	%
$ 20 to 1,139	4	2.5	6	3.9	2	1.3	14	9.2	1	.6	27	17.8
1,140 to 2,249	8	5.3	3	2.0	2	1.3	7	4.6	3	2.0	23	15.1
2,250 to 15,999 . . .	4	2.6	3	2.0	8	5.3	12	7.9	3	2.0	30	19.7
16,000 to 203,324 . .	8	5.3	3	2.0	10	6.6	8	5.3	4	2.6	33	21.7
$203,325 to 1,000,000 .	10	6.6	6	4.0	10	6.6	7	4.6	6	3.9	39	25.7
Total	34	22.4	21	13.8	32	21.0	48	31.6	17	11.2	152	100.0

TABLE 47

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE BANKING SERVICES USED

Level of Revenue	Banking Services Used											
	Wire Funds Transfer		Payroll Management		Zero-Based Accounts		Short-Term Investing		Lockbox System		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%	N	%
$ 750 to 2,329	3	2.0	5	3.3	...	...	13	8.5	3	2.0	24	15.8
2,330 to 3,708	5	3.3	2	1.3	2	1.3	7	4.6	1	.6	17	11.2
3,709 to 6,364	2	1.3	1	.7	4	2.6	8	5.3	3	2.0	18	11.8
6,365 to 199,999 . . .	14	9.2	5	3.3	14	9.2	15	9.9	3	2.0	51	33.6
$200,000 to 1,100,000 .	11	7.2	4	2.6	12	7.9	9	5.9	6	3.9	42	27.6
Total	35	23.0	17	11.2	32	21.1	52	34.2	16	10.5	152	100.0

TABLE 48

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE PERCENT OF TOTAL ASSETS HELD AS CASH AND THE IMPORTANCE OF CASH MANAGEMENT POLICIES

Percent of Total Assets Held as Cash	Importance of Cash Management Policies: Speeding of Collecting of Receivables N	%	Minimizing Investments in Inventory N	%	Minimizing Bank Balances N	%	Slowing Payments of Accounts Receivable N	%	Total N	%
None at all	25	28.4	7	8.0	15	17.0	9	10.2	56	63.6
.1% and above	15	17.0	1	1.1	13	14.8	3	3.4	32	36.4
Total	40	45.5	8	9.1	28	31.8	12	13.6	88	100.0

TABLE 49

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN
THE ASSET BASE AND THE IMPORTANCE
OF CASH MANAGEMENT POLICIES

Asset Base	Importance of Cash Management Policies									
	Speeding of Collecting of Receivables		Minimizing Investments in Inventory		Minimizing Bank Balances		Slowing Payments of Accounts Receivable		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%
$ 20 to 1,139	11	14.5	4	5.3	6	7.9	6	7.9	27	35.5
1,140 to 2,249	5	6.6	1	1.3	1	1.3	...	...	7	9.2
2,250 to 15,999	10	13.2	1	1.3	8	10.5	1	1.3	20	26.3
16,000 to 203,324	5	6.6	1	1.3	5	6.6	1	1.3	12	15.8
$203,325 to 1,000,000	5	6.6	...	...	5	6.6	...	...	10	13.2
Total	36	47.4	7	9.2	25	32.9	8	10.5	76	100.0

TABLE 50

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE IMPORTANCE OF CASH MANAGEMENT POLICIES

Level of Revenue	Importance of Cash Management Policies									
	Speeding of Collecting of Receivables		Minimizing Investments in Inventory		Minimizing Bank Balances		Slowing Payments of Accounts Receivable		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%
$ 750 to 2,329	11	14.1	5	6.4	4	5.1	3	3.8	23	29.5
2,330 to 3,708	5	6.4	...	...	2	2.6	2	2.6	9	11.5
3,709 to 6,364	7	9.0	...	...	3	3.8	2	2.6	12	15.4
6,365 to 199,999	10	12.8	1	1.3	9	11.5	3	3.8	23	29.5
$200,000 to 1,100,000	3	3.8	1	1.3	7	9.0	...	...	11	14.1
Total	36	46.1	7	9.0	25	32.1	10	12.8	78	100.0

the most important cash management policy and 20.5% of total respondents, with annual sales between $6,365,000 and $1,100,000,000, view the minimizing of bank balances as the most important cash management policy.

Accounts Receivable Collections

Tables 51, 52, and 53 represent the results of the questions designed to determine the method corporations most often use to collect accounts receivable.

Table 51 indicates that 48.4% of the total respondents, as measured by quick assets, prefer to use the point-of-sale system to collect accounts receivable. Table 52 indicates that 52.9% of respondents, as measured by asset base, prefer the point-of-sale system to accelerate accounts receivable. Table 53 shows that 52.8% of respondents, as measured by annual sales, indicate that they prefer the point-of-sale system to accelerate accounts receivable collections.

The Frequency of Bank Deposits

Tables 54, 55, and 56 represent the results of the question designed to determine the frequency of bank deposits.

Table 54 indicates that 94.3% of respondents, as measured by the percent of assets held as cash, make daily bank deposits. Table 55 shows that 5.2% of total respondents, with an asset base between $20,000 and $2,249,999, indicate they make bank deposits every other day and 89.5% of total respondents make a daily bank deposit. Table 56 indicates that 90.2% of firms, as measured by level of revenue, make a daily bank deposit.

TABLE 51

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE TOTAL ASSETS HELD AS CASH AND THE ACCOUNTS RECEIVABLE COLLECTION METHOD

Percent of Total Assets Held as Cash	Accounts Receivable Collection Method									
	Lockbox System		Concentration Banking		Point of Sale System		Funds Remitted to Central Cash Accounts		Total	
	N	%	N	%	N	%	N	%	N	%
None at all	9	15.0	6	10.0	16	26.7	5	8.3	36	60.0
.1% and above	2	3.3	3	5.0	13	21.7	6	10.0	24	40.0
Total	11	18.3	9	15.0	29	48.4	11	18.3	60	100.0

TABLE 52

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND THE ACCOUNTS RECEIVABLE COLLECTION METHOD

Asset Base	Accounts Receivable Collection Method									
	Lockbox System		Concentration Banking		Point of Sale System		Funds Remitted to Central Cash Accounts		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%
$ 20 to 1,139	1	2.0	3	5.9	9	17.6	4	7.8	17	33.3
1,140 to 2,249	1	2.0	...	...	4	7.8	...	...	5	9.8
2,250 to 15,999	3	5.9	1	2.0	8	15.7	1	1.9	13	25.5
16,000 to 203,324	3	5.9	2	3.9	4	7.8	...	...	9	17.7
$203,325 to 1,000,000	3	5.9	1	2.0	2	3.9	1	1.9	7	13.7
Total	11	21.6	7	13.7	27	52.9	6	11.8	51	100.0

TABLE 53

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND ACCOUNTS RECEIVABLE COLLECTION METHOD

Level of Revenue	Accounts Receivable Collection Method									
	Lockbox System		Concentration Banking		Point of Sale System		Funds Remitted to Central Cash Accounts		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%
$ 750 to 2,329	...	...	1	1.9	8	15.1	4	7.6	13	24.5
2,330 to 3,708	1	1.9	...	...	5	9.4	1	1.9	7	13.2
3,709 to 6,364	3	5.7	1	1.9	5	9.4	1	1.9	10	18.9
6,365 to 199,999	3	5.7	1	1.9	8	15.1	1	1.9	13	24.5
$200,000 to 1,100,000	3	5.7	4	7.6	2	3.8	1	1.9	10	18.9
Total	10	18.9	7	13.2	28	52.8	8	15.1	53	100.0

TABLE 54

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE PERCENT OF ASSETS HELD AS CASH AND FREQUENCY OF BANK DEPOSITS

Percent of Total Assets Held as Cash	Frequency of Bank Deposits													
	Daily		Every Other Day		Two Times Weekly		Weekly		Every Other Week		Monthly		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
None at all	4	4.6	...	...	...	...	...	...	...	...	...	...	...	...	4	4.6
.1% and above	78	89.6	4	4.6	1	1.1	...	...	...	...	...	...	...	...	83	95.4
Total	82	94.3	4	4.6	1	1.1	...	...	...	...	...	...	...	...	87	100.0

TABLE 55

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND FREQUENCY OF BANK DEPOSITS

Asset Base	Frequency of Bank Deposits															
	Daily		Every Other Day		Two Times Weekly		Weekly		Every Other Week		Monthly		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
$ 20 to 1,139	23	30.3	2	2.6	...	...	...	...	...	...	...	...	1	1.3	26	34.2
1,140 to 2,249	5	6.6	2	2.6	1	1.3	...	...	...	...	...	...	...	...	8	10.5
2,250 to 15,999	18	23.7	...	...	...	...	...	...	...	...	...	...	...	...	18	23.7
16,000 to 203,324	12	15.8	...	...	...	...	...	...	...	...	...	...	1	1.3	13	17.1
$203,325 to 1,000,000	10	13.2	...	...	...	...	...	...	...	...	...	...	1	1.3	11	14.5
Total	68	89.5	4	5.3	1	1.3	...	...	...	...	...	...	3	3.9	76	100.0

TABLE 56

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND FREQUENCY OF BANK DEPOSITS

Level of Revenue	Frequency of Bank Deposits															
	Daily		Every Other Day		Two Times Weekly		Weekly		Every Other Week		Monthly		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
$ 750 to 2,329	17	20.7	3	3.7	1	1.2	...	...	...	...	...	...	...	...	21	25.6
2,330 to 3,708	9	11.0	1	1.2	...	...	...	...	...	...	...	...	...	...	10	12.2
3,709 to 6,364	11	13.4	...	...	...	...	...	...	...	...	...	...	1	1.2	12	14.6
6,365 to 199,999	26	31.7	...	...	...	...	...	...	...	...	...	...	...	...	26	31.7
$200,000 to 1,100,000	11	13.4	...	...	...	...	...	...	...	...	...	...	2	2.4	13	15.9
Total	74	90.2	4	4.9	1	1.2	...	...	...	...	...	...	3	3.7	82	100.0

Delaying Cash Disbursements

Tables 57, 58, and 59 represent the results of the question designed to determine the method companies prefer to use to delay cash disbursements.

Table 57 shows that 46.2% of respondents, as measured by the percentage of cash held as assets, use centralized payments to delay cash disbursements. Table 58 shows that 46.5% of respondents, as measured by asset base, use centralized payments to delay cash disbursements. Table 59 shows that 26.4% of total respondents, with annual sales between $750,000 and $3,708,999, use other methods to delay cash disbursements and 26.4% of total respondents, with annual sales between $6,365,000 and $1,100,000,000, use centralized payables to delay cash disbursements.

The Type of Float System Used

Tables 60, 61, and 62 represent the results of the question designed to determine the type of float system respondents use.

Table 60 indicates that 59.8% of firms, as measured by the percent of assets held as cash, use the check-clearing method type of float system. Table 61 shows that 60% of companies, as measured by asset base, use the check-clearing type of float system. According to Table 62, 60.3% of respondents, as measured by level of revenue, indicate that they use the check-clearing type of float system.

Average Length of Float

Tables 63, 64, and 65 present information on the question designed to determine the average length of the float.

TABLE 57

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSETS HELD AS CASH AND THE CASH DISBURSEMENT DELAY METHOD

Percent of Total Assets Held as Cash	Cash Disbursement Delay Method							
	Centralized Payments		Selecting Disbursing Points for Divisions		Other		Total	
	N	%	N	%	N	%	N	%
None at all	23	28.7	8	10.0	21	26.2	52	65.0
.1% and above	14	17.5	...	...	14	17.5	28	35.0
Total	37	46.2	8	10.0	35	43.8	80	100.0

TABLE 58

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND THE CASH DISBURSEMENT DELAY METHOD

Asset Base	Cash Disbursement Delay Method							
	Centralized Payments		Selecting Disbursing Points for Divisions		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%
$ 20 to 1,139	13	18.3	2	2.8	13	18.3	28	39.4
1,140 to 2,249	...	...	...	...	4	5.6	4	5.6
2,250 to 15,999	7	9.9	1	1.4	10	14.1	18	25.4
16,000 to 203,324	9	12.7	1	1.4	2	2.8	12	16.9
$203,325 to 1,000,000	4	5.6	3	4.2	2	2.8	9	12.7
Total	33	46.5	7	9.9	31	43.6	71	100.0

TABLE 59

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE CASH DISBURSEMENT DELAY METHOD

Level of Revenue	Cash Disbursement Delay Method							
	Centralized Payments		Selecting Disbursing Points for Divisions		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%
$ 750 to 2,329	5	6.9	1	1.4	15	20.8	21	29.2
2,330 to 3,708	3	4.2	...	...	4	5.6	7	9.7
3,709 to 6,364	5	6.9	1	1.4	5	6.9	10	15.3
6,365 to 199,999	15	20.8	1	1.4	7	9.7	23	31.9
$200,000 to 1,100,000	4	5.6	4	5.6	2	2.8	10	13.9
Total	32	44.4	7	9.7	33	45.8	72	100.0

TABLE 60

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE PERCENT OF TOTAL ASSETS HELD AS CASH AND THE FLOAT SYSTEM USED

Percent of Total Assets Held as Cash	Float System Used									
	Check Clearing		Mail-Time		Handling or Processing		Other		Total	
	N	%	N	%	N	%	N	%	N	%
None at all	34	39.1	8	9.2	10	11.5	4	4.6	56	64.4
.1% and above	18	20.7	4	4.6	6	6.9	3	3.5	31	35.6
Total	52	59.8	12	13.8	16	18.4	7	8.0	87	100.0

TABLE 61

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND THE FLOAT SYSTEM USED

Asset Base	Float System Used: Check Clearing		Mail-Time		Handling or Processing		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%
$ 20 to 1,139	18	24.0	3	4.0	6	8.0	3	4.0	30	40.0
1,140 to 2,249	3	4.0	1	1.3	1	1.3	...	...	5	6.7
2,250 to 15,999	13	17.3	3	4.0	4	5.3	1	1.3	21	28.0
16,000 to 203,324	7	9.3	2	2.7	1	1.3	1	1.3	11	14.7
$203,325 to 1,000,000	4	5.3	...	...	3	4.0	1	1.3	8	10.6
Total	45	60.0	9	12.0	15	20.0	6	8.0	75	100.0

TABLE 62

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE FLOAT SYSTEM USED

Level of Revenue	Float System Used									
	Check Clearing		Mail-Time		Handling or Processing		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%
$ 750 to 2,329	14	17.9	2	2.6	5	6.4	2	2.6	23	29.5
2,330 to 3,708	5	6.4	1	1.3	1	1.3	1	1.3	8	10.3
3,709 to 6,364	6	7.7	2	2.6	3	3.9	1	1.3	12	15.4
6,365 to 199,999	16	20.5	3	3.9	4	5.1	1	1.3	24	30.8
$200,000 to 1,100,000	6	7.7	1	1.3	3	3.9	1	1.3	11	14.0
Total	47	60.3	9	11.5	16	20.5	6	7.7	78	100.0

TABLE 63

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE TOTAL ASSETS HELD AS CASH AND THE AVERAGE LENGTH OF THE FLOAT

Percent of Total Assets Held as Cash	Average Length of Float									
	1-3 Days		3-6 Days		6-9 Days		More Than 9 Days		Total	
	N	%	N	%	N	%	N	%	N	%
None at all	14	18.0	25	32.0	7	9.0	3	3.8	49	62.8
.1% and above	9	11.5	12	15.4	3	3.8	5	6.4	29	37.2
Total	23	29.5	37	47.4	10	12.8	8	10.3	78	100.0

TABLE 64

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN
THE ASSET BASE AND THE AVERAGE
LENGTH OF THE FLOAT

Asset Base	Average Length of Float									
	1-3 Days		3-6 Days		6-9 Days		More Than 9 Days		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%
$ 20 to 1,139	8	11.6	9	13.0	5	7.2	5	7.2	27	39.1
1,140 to 2,249	3	4.3	2	2.9	1	1.4	1	1.4	7	10.2
2,250 to 15,999	3	4.3	8	11.6	3	4.3	2	2.9	16	23.2
16,000 to 203,324	3	4.3	8	11.6	...	...	...	...	11	15.9
$203,325 to 1,000,000	1	1.4	6	8.7	1	1.5	...	...	8	11.6
Total	18	26.1	33	47.8	10	14.5	8	11.6	69	100.0

TABLE 65

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE AVERAGE LENGTH OF THE FLOAT

Level of Revenue	Average Length of Float									
	1-3 Days		3-6 Days		6-9 Days		More Than 9 Days		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%
$ 750 to 2,329	9	12.5	5	6.9	6	8.3	3	4.1	23	31.9
2,330 to 3,708	...	...	4	5.6	1	1.4	3	4.1	8	11.1
3,709 to 6,364	4	5.6	5	6.9	...	...	1	1.4	10	13.9
6,365 to 199,999	7	9.7	12	16.7	2	2.8	1	1.4	22	30.6
$200,000 to 1,100,000	...	...	8	11.1	1	1.4	...	...	9	12.5
Total	20	27.8	34	47.2	10	13.9	8	11.1	72	100.0

Table 63 shows that 47.4% of respondents indicate the average float is three to six days. Table 64 shows that 47.8% of respondents, as measured by asset base, indicate the average length of the float is three to six days and that 11.6% of the total respondents, with an asset base of $20,000 to $1,139,999, have an average float length of one to three days. Table 65 shows that 47.2% of respondents indicate that three to six days is the average length of the float. 12.5% of the total respondents, with annual sales between $750,000 and $2,329,999 state that one to three days is the average length of the float.

Type of Computerized Information System Used

Tables 66, 67, and 68 present information on the results of the question designed to determine the type of computerized information system firms use to monitor cash balances.

Table 66 indicates that 40.9% of respondents, as measured by quick assets, use a computerized information system developed within their organization. According to Table 67, 16.4% of respondents, with an asset base between $20,000 and $1,139,999, do not use a computerized information system and 16.4% of respondents, with an asset base between $16,000,000 and $1,000,000,000 use a computerized information system developed within their own organization. Table 68 shows that 30.9% of total respondents, with annual sales between

TABLE 66

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE PERCENT OF TOTAL ASSETS HELD AS CASH AND THE TYPE OF COMPUTERIZATION INFORMATION SYSTEM USED TO MONITOR CASH BALANCES

Percent of Total Assets Held as Cash	Type of Computerized Information System											
	Developed Within Organization		Externally Purchased Software Program		Externally Developed by Consultants		None		Other		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None at all	...	...	...	...	...	...	1	1.1	1	1.1	2	2.2
.1% and above	38	40.9	16	17.2	3	3.2	32	34.4	2	2.1	91	97.8
Total	38	40.9	16	17.2	3	3.2	33	35.5	3	3.2	93	100.0

TABLE 67

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE ASSET BASE AND THE TYPE OF COMPUTERIZATION INFORMATION SYSTEM USED TO MONITOR CASH BALANCES

Asset Base	Type of Computerized Information System											
	Developed Within Organization		Externally Purchased Software Program		Externally Developed by Consultants		None		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%	N	%
$ 20 to 1,139	6	7.0	4	4.7	1	1.2	14	16.4	1	1.2	26	30.6
1,140 to 2,249	3	3.5	1	1.2	1	1.2	4	4.7	...	...	9	10.6
2,250 to 15,999	8	9.4	3	3.5	...	...	9	10.5	1	1.2	21	24.7
16,000 to 203,324	8	9.4	5	5.8	...	...	2	2.3	1	1.2	16	18.8
$203,325 to 1,000,000	6	7.0	4	4.7	1	1.1	2	2.3	...	...	13	15.3
Total	31	36.5	17	20.0	3	3.5	31	36.5	3	3.5	85	100.0

TABLE 68

NUMBER AND PERCENTAGE RELATIONSHIP BETWEEN THE LEVEL OF REVENUE AND THE TYPE OF COMPUTERIZATION INFORMATION SYSTEM USED TO MONITOR CASH BALANCES

Level of Revenue	Type of Computerized Information System											
	Developed Within Organization		Externally Purchased Software Program		Externally Developed by Consultants		None		Other		Total	
$ in Thousands	N	%	N	%	N	%	N	%	N	%	N	%
$ 750 to 2,329	5	5.7	...	...	...	...	15	17.2	1	1.1	21	24.1
2,330 to 3,708	5	5.7	3	3.4	1	1.1	3	3.4	...	...	12	13.8
3,709 to 6,364	1	1.1	1	1.1	1	1.1	9	10.3	...	...	12	13.8
6,365 to 199,999	15	17.2	5	5.7	...	...	5	5.7	2	2.3	27	31.0
$200,000 to 1,100,000	7	8.0	6	6.9	1	1.1	1	1.1	...	...	15	17.2
Total	33	37.9	15	17.2	3	3.6	33	37.9	3	3.4	87	100.0

$750,000 and $6,364,999 do not use a computerized information system to monitor cash balances and 25.2% of total respondents, with annual sales between $6,365,000 and $1,100,000,000, use a computerized information system developed within their organization.

Corporate Title of Person Completing the Survey

Table 69 represents the results designed to determine the formal corporate title of the person completing the survey. More than thirty different titles are given in answer to this question. These titles are categorized according to key words. For example, the title of partner included General Manager/Partner, Partner/Owner, and Managing Partner. These categories and their frequency may be reviewed in Table 69. The title of comptroller is most often used by the individual completing the Survey of Cash Management.

TABLE 69

RESPONSES TO SURVEY: TITLE OF INDIVIDUAL RESPONSIBLE FOR COMPLETING SURVEY

Title	Number of Responses	
	Number	%
Controller	24	26
President	19	20
Treasurer	12	13
No response to title name	10	10
Vice President	9	10
Partner	3	3
President and Treasurer	3	3
Assistant Treasurer	2	2
Treasurer Controller	2	2
President and Chief Executive Officer	2	2
Cash Manager	2	2
Corporate Secretary/Business Manager	1	1
Director of Cash Management	1	1
Director of Financial Services	1	1
Assistant Secretary-Treasurer	1	1
Manager Banking	1	1
Chief Executive Officer	1	1
Manager	1	1
Total	95	100%

Section Two-Hypotheses Testing

Hypotheses testing results are presented for each survey question by the independent variables that are:

-the percentage of assets held as cash

-the asset base of the organization

-the sales volume of the firm

For the purpose of analysis, these responses are divided into groups according to ranks. They are identified as follows:

First ranked-largest dollar volume or level of revenue

Second ranked-second largest dollar volume or level of revenue

Third ranked-third largest dollar volume or level of revenue

Fourth ranked-fourth largest dollar volume or level of revenue

Fifth ranked-fifth largest dollar volume or level of revenue

Department Responsible for Cash Management

Table 70 shows that the Chi-Square test rejected for the null hypohesis independent variable, cash as a percentage of assets and that the Kruskal-Wallis test rejected the null hypothesis for the independent variables, the dollar value of net corporate assets and annual sales.

As measured by asset base, a trend exists that indicates first ranked firms assign cash management responsibilities to the finance

TABLE 70

HYPOTHESES TESTING FOR THE DEPARTMENT OF THE FIRM THAT HAS THE MAJOR RESPONSIBILITY FOR CASH MANAGEMENT

Hypothesis I	There is no relationship between the percent of assets held as cash and the department of the firm with the major responsibility for cash management. Chi Square Test p = .0094 Chi Square = 11.489 Degrees of Freedom = 3 reject the null hypothesis at the 0.05 alpha level and conclude that there is a relationship between the percent of assets held as cash and the department of the firm with the major responsibility for cash management.
Hypothesis II	There is no relationship between the dollar value of net corporate assets and the department of the firm with the major responsibility for cash management. Kruskal-Wallis Test p = .0092 x^2 Approximation = 11.53 Degrees of Freedom = 3 reject the null hypothesis at the 0.05 alpha level and conclude that there is a relationship between the dollar value of net corporate assets and the department of the firm with the major responsibility for cash management.
Hypothesis III	There is no relationship between the annual sales of the firm and the department of the firm with the major responsibility for cash management. Kruskal-Wallis Test p = .0004 x^2 Approximation = 18.19 Degrees of Freedom = 3 reject the null hypothesis at the 0.05 alpha level and conclude that there is a relationship between the sales volume of the firm and the department of the firm responsible for cash management.

department and the corporate level is responsible for cash management in second ranked firms. Third ranked corporations assign cash management responsibilities to the accounting department and the operations department handles the cash management function in fourth ranked firms.

According to the null hypothesis that was rejected for the independent variable, annual sales, the Kruskal-Wallis test shows that the finance department is responsible for the cash management in the first ranked firms, and second ranked firms indicate that the accounting department is responsible for cash management. Third ranked firms assign cash management responsibilities to the corporate level, and the operations department has the major responsibility for cash management in fourth ranked firms.

Title of the Person Holding Major Responsibility for Cash Management

Table 71 shows that the Chi Square test rejected the null hypothesis for the independent variable, cash as a percentage of assets, and that the Kruskal-Wallis test rejected the null hypothesis for the independent variables, the dollar value of net corporate assets and annual sales.

As measured by asset base, a trend exists that indicates first ranked respondents assign cash management responsibilities to the treasurer and second ranked companies assign cash management responsibilities to the comptroller. Third ranked companies assign cash management responsibilities to other personnel and fourth ranked

TABLE 71

HYPOTHESES TESTING FOR THE TITLE OF THE PERSON HOLDING THE MAJOR RESPONSIBILITY FOR CASH MANAGEMENT

Hypothesis IV	There is no relationship between the percent of assets held as cash and the title of the person holding the major responsibility for cash management. Chi Square Test p = .0227 x^2 = 9.560 Degrees of Freedom = 3 reject null hypothesis at the alpha level of 0.05 and conclude that there is a relationship between the percent of assets held as cash and the title of the person holding the major responsibility for cash management.
Hypothesis V	There is no relationship between the firm's dollar value of net corporate assets and the title of the person holding the major responsibility for cash management. Kruskal-Wallis Test p = .0005 x^2 Approximation = 17.94 Degrees of Freedom = 3 reject null hypothesis at the alpha level of 0.05 and conclude that there is a relationship between the dollar value of net corporate assets and the title of the person holding the major responsibility for cash management.
Hypothesis VI	There is no relationship between the annual sales of the firm and the title of the person holding the major responsibility for cash management. Kruskal-Wallis Test p = .0001 x^2 Approximation = 24.54 Degrees of Freedom = 3 reject null hypothesis at the alpha level of 0.05 and conclude that there is a relationship between the annual sales volume of the firm and the title of the person holding the major responsibility for cash management.

firms indicate that the president is responsible for cash management decisions.

A trend exists, as measured by annual sales, that indicates first ranked firms assign the major responsibility for cash management decisions to the treasurer. Second ranked corporations appoint the comptroller responsible for cash management responsibilities. Third ranked firms assign them to other personnel and fourth ranked corporations assign cash management responsibilities to the president.

Cash Management Banking Arrangements

Table 72 indicates that the Gamma Test failed to reject the null hypothesis for the independent variable, cash as percentage of assets. The Test for the Linear Contrast on the Mean Ranks rejected the null hypothesis for the independent variables, the dollar value of net corporate assets and annual sales.

Since the null hypothesis failed to be rejected, this means that no relationship exists between the independent variable, cash as a percentage of assets, and the dependent variable, the frequency that the firm assesses it's cash management banking arrangements.

As measured by asset base, a trend exists that indicates first ranked companies assess cash management banking arrangements weekly and second ranked companies assess cash management banking arrangements semi-annually. Third ranked firms assess cash banking arrangements daily and fourth ranked corporations assess cash management banking arrangements quarterly. Fifth ranked respondents do not assess their cash management banking arrangements.

TABLE 72

HYPOTHESES TESTING FOR THE FREQUENCY THAT THE FIRM ASSESSES ITS CASH MANAGEMENT BANKING ARRANGEMENTS

Hypothesis VII	There is no relationship between the percent of assets held as cash and the frequency that the firm assesses its cash management banking arrangements. Gamma Test p = .3138 Gamma = 0.159 Normal Approximation 1.007 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the percent of assets held as cash and the frequency that the firm assesses its cash management banking arrangements.
Hypothesis VIII	There is no relationship between the dollar value of net corporate assets and the frequency that the firm assesses its each management banking arrangements. Test for the Linear Contrast on the Mean Ranks p = .0071 F = 7.67 Degrees of Freedom = 1,73 reject null hypothesis at the 0.05 alpha level and conclude that there is a relationship beween the dollar value of net corproate assets and the frequency that the firm assesses its cash management banking arrangements.
Hypothesis IX	There is no relationship between the annual sales of the firm and the frequency that the firm assesses its cash management banking arrangements. Test for the Linear Contrast on the Mean Ranks p = .0004 F = 13.61 Degrees of Freedom = 1,76 reject null hypothesis at the 0.05 alpha level and conclude that there is a relationship between the firm's annual sales and the frequency that the firm assesses its cash management banking arrangements.

As measured by annual sales volume, a trend exists that shows first ranked firms assess cash management banking arrangements daily, and second ranked firms assess them weekly. Third ranked firms assess cash management banking arrangements semi-annually and fourth ranked firms evaluate them quarterly. Fifth ranked firms do not assess cash management banking arrangements.

Cash Budget Revision

Table 73 indicates that the Gamma test failed to reject the null hypothesis for the independent variable, cash as a percentage of assets, and that the Test for the Linear Contrast on the Mean Ranks failed to reject the null hypothsis for the independent variables, the dollar volume of net corporate assets and annual sales. Since the null hypotheses failed to be rejected, this means that no relationship exists between the independent variables, cash as a percentage of assets, asset base, and sales volume, and the dependent variable, the frequency that a firm revises its cash budget.

Amount of Time in Advance Cash Flows are Forecast

Table 74 shows that the Gamma test failed to reject the null hypothesis for the independent variable, cash as a percentage of assets. The Test for the Linear Contrast of the Mean Ranks rejected the null hypothesis for the independent variables, the dollar value of net corporate assets and annual sales.

Since the null hypothesis failed to be rejected, this means that no relationship exists between the independent variable, cash as a percentage of assets and the dependent variable, the amount of time in advance cash flows are forecast.

TABLE 73

HYPOTHESES TESTING ON THE FREQUENCY THAT A FIRM REVISES ITS CASH BUDGET

Hypothesis I	There is no relationship between the percent of assets held as cash and the frequency that a firm revises its cash budget. Gamma Test p = .5096 Gamma = .098 Normal Approximation 0.659 null hypothesis failed to be rejected at 0.05 level and concluded that there is no relationship between the percent of assets held as cash and the frequency that a firm revises its cash budget.
Hypothesis XI	There is no relationship between the firm's dollar value of net corporate assets and the frequency that a firm revises its cash budget. Test for the Linear Contrast on the Mean Ranks p = .7237 F = 0.13 Degrees of Freedom = 1,73 null hypothesis failed to be rejected at the 0.05 level and conclude that there is no relationship between the firm's dollar value of net corporate assets and the frequency that a firm revises its cash budget.
Hypothesis XII	There is no relationship between the annual sales volume of the firm and the frequency that a firm revises its cash budget. Test for the Linear Contrast on the Mean Ranks p = .5755 F = 0.32 Degree of Freedom = 1,76 null hypothesis failed to be rejected at the 0.05 level and conclude that there is no relationship between the sales volume of the firm and the frequency that a firm revises its cash budget.

TABLE 74

HYPOTHESES TESTING FOR THE AMOUNT OF TIME IN ADVANCE THAT CASH FLOWS ARE FORECAST

Hypothesis XIII	There is no relationship between the percent of assets held as cash and the amount of time in advance that cash flows are forecast. Gamma Test p = .3035 Gamma = -0.157 Normal Approximation = -1.029 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the percent of assets held as cash and the amount of time in advance that cash flows are forecast.
Hypothesis XIV	There is no relationship between the dollar value of net corporate assets and the amount of time in advance that cash flows are forecast. Test for the Linear Contrast on the Mean Ranks p = .0112 F = 6.77 Degrees of Freedom = 1,75 reject null hypothesis at the 0.05 alpha level and conclude that there is a relationship between the dollar value of net corporate assets and the amount of time in advance that cash flows are forecast.
Hypothesis XV	There is no relationship between the firm's annual sales and the amount of time in advance tha cash flows are forecast. Test for the Linear Contrast on the Mean Ranks p = .0009 F = 11.85 Degrees of Freedom = 1,78 reject null hypothesis at the 0.05 alpha level and conclude that there is a relationship between the firm's annual sales and the amount of time in advance that cash flows are forecast.

As measured by asset base, a trend exists that indicates first ranked companies forecast cash flows semi-annually in advance and second ranked firms forecast cash flows a quarter in advance. Third ranked corporations forecast cash flows a day in advance and fourth ranked respondents indicate they forecast them one week in advance. Fifth ranked firms forecast cash flows at other times.

As measured by annual sales volume, a trend exists that shows first ranked firms indicate they forecast cash flows semi-annually in advance and second ranked companies state that they forecast cash flows daily. Third ranked corporations indicate that cash flows are forecast one month in advance and fourth ranked firms state that companies forecast them at other times. Fifth ranked companies forecast cash flows one quarter in advance.

Amount of Time in Advance the Cash Budget is Planned

Table 75 indicates that the Gamma test failed to reject the null hypothesis for the independent variables, cash as a percentage of assets. The Test for the Linear Contrast on the Mean Ranks failed to reject the null hypothesis for the independent variable, the dollar value of net corporate assets. The Test for the Linear Contrast for the Mean Ranks rejected the null hypothesis for the independent variable sales volume.

Since the null hypotheses failed to be rejected, this means that no relationship exists between the independent variables, cash as a percentage of assets and asset base, and the independent variable, the amount of time in advance the cash budget is planned.

TABLE 75

HYPOTHESES TESTING ON THE AMOUNT OF TIME IN ADVANCE THAT CASH BUDGETS ARE PLANNED

Hypothesis XVI	There is no relationship between the percent of assets held as cash and the amount of time in advance that cash budgets are planned. Gamma Test p = 0.8474 Gamma = 0.038 Normal Approximation = 0.192 fail to reject the null hypothesis at the 0.05 level and conclude that no relationship exists between the percent of assets held as cash and the amount of time in advance that cash budgets are planned.
Hypothesis XVII	There is no relationship between the dollar value of net corporate assets and the amount of time in advance that cash budgets are planned. Test for the Linear Contrast on the Mean Ranks p = .0569 F = 3.75 Degrees of Freedom = 1,69 fail to reject the null hypothesis at the 0.05 level and conclude that no relationship exists between the dollar value of net corporate assets and the amount of time in advance that cash budgets are planned.
Hypothesis XVIII	There is no relationship between the sales volume of the firm and the amount of time in advance that cash budgets are planned. Test for the Linear Contrast on the Mean Ranks p = .0466 F = 4.10 Degrees of Freedom = 1,72 reject null hypothesis at the 0.05 level and conclude that there is a relationship between the sales volume of the firm and the amount of time in advance that cash budgets are planned.

As measured by annual sales, a trend exists that indicates first ranked firms plan their cash budgets more than one year in advance and second ranked firms plan them one year in advance. Third ranked firms plan their cash budgets less than one year in advance.

Method(s) Used to Forecast Sales

Table 76 shows that the Chi Square test failed to reject the null hypothesis for the independent variable, cash as a percentage of assets, and that the Kruskal-Wallis test failed to reject the null hypothesis for the independent variable, dollar value of net corporate assets and the level of revenue. Since the null hypothesis failed to be rejected, this means that no relationship exists between the independent variables, cash as a percentage of assets and the dollar volume of net corporate assets, and the level of revenue.

Management Level that Prepares Cash Budgets

Table 77 shows that the Chi Square test failed to reject the null hypothesis for the independent variables, cash as a percentage of assets. The Test for the Linear Contrast on the Mean Ranks failed to reject the null hypothesis for the independent variable, the dollar value of net corporate assets. The Test for the Linear Contrast on the Mean Ranks rejected the null hypothesis for the independent variable, sales volume.

As measured by sales volume, a trend exists that shows that first-ranked companies prepare the cash budget at the divisional level and second-ranked corporations prepare them at the corporate level. Third-ranked firms prepare cash budgets at other levels.

TABLE 76

HYPOTHESES TESTING FOR THE METHOD(S) USED TO FORECAST SALES

Hypothesis XIX	There is no relationship between the percent of assets held as cash and the method(s) used to forecast sales. Chi Square Test p_2 = .7774 x^2 = .504 Degrees of Freedom = 2 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that there is no relationship between the percent of assets held as cash and the method(s) used to forecast sales.
Hypothesis XX	There is no relationship between the dollar value of net corporate assets and the method(s) used to forecast sales. Kruskal-Wallis Test p = .5528 x^2 Approximately 1.19 Degrees of Freedom = 2 null hypothesis failed to be rejected at the 0.05 level and conclude that there is no relationship between the dollar value of net corporate assets and the method(s) used to forecast sales.
Hypothesis XXI	There is no relationship between the annual sales volume of the firm and the method(s) used to forecast sales. Kruskal-Wallis Test p = .2760 x^2 Approximately 2.57 Degrees of Freedom = 2 null hypothesis failed to be rejected at the 0.05 level and conclude that no relationship exists between the sales volume of the firm and the method(s) used to forecast sales.

TABLE 77

HYPOTHESES TESTING ON THE MANAGEMENT LEVEL WHICH PREPARES CASH BUDGETS

Hypothesis XXII	There is no relationship between the percent of assets held as cash and the management level that prepares cash budgets. Gamma Test p = .1396 Gamma = 0.316 Normal Approximation -1.477 null hypothesis failed to be rejected at the 0.05 level and conclude that no relationship exists between the percent of assets held as cash and the management level that prepares cash budgets.
Hypothesis XXIII	There is no relationship between the dollar value of net corporate assets and the management level that prepares cash budgets. Test for the Linear Contrast on the Mean Ranks P = .0554 F = 3.79 Degrees of Freedom = 1,73 null hypothesis failed to be rejected at the 0.05 level and conclude that no relationsip exists between the dollar value of net corporate assets and the management level that prepares cash budgets.
Hypothesis XXIV	There is no relationship between the annual sales of the firm and the management level that prepares cash budgets. Test for the Linear Contrast on the Mean Ranks p = .0443 F = 4.18 Degrees of Freedom = 1,76 reject null hypothesis at the 0.05 level and conclude that there is a relationship between the annual sales of the firm and the management level that prepares cash budgets.

Since the null hypotheses failed to be rejected, this means that no relationship exists between the independent variables cash as a percentage of assets and asset base and the dependent variable, the management level that prepares cash budgets.

Cash Budget Preparation for Each Division and/or Service Concept

Table 78 indicates that the Chi Square test failed to reject the null hypothesis for the independent variable, cash as a percentage of assets. The Kruskal-Wallis test and the Wilcoxon 2-Sample test failed to reject the null hypothesis for the independent variables, dollar value of net corporate assets and annual sales. This means that no relationship exists between the dollar value of net corporate assets, annual sales, and the dependent variable, whether cash budget preparation is done for each division and/or service concept.

Method Used to Forecast Cash Needs

Table 79 shows that the Chi Square test failed to reject the null hypothesis for the independent variable, cash as a percentage of assets, and that the Kruskal-Wallis test failed to reject the null hypothesis for the independent variables, dollar value of net corporate assets and annual sales.

Since the null hypotheses failed to be rejected for the independent variables, percent of assets held as cash, asset base, and level of revenue, this means that no relationship exists between the independent variables and the dependent variable, the method used to forecast cash needs.

TABLE 78

HYPOTHESES TESTING ON WHETHER CASH BUDGETS ARE PREPARED FOR EACH DIVISION AND/OR SERVICE CONCEPT

Hypothesis XXV	There is no relationship between the percent of assets held as cash and whether cash budgets are prepared for each division and/or service concept. Chi Square Test p = .1347 x^2 = 2.238 Degrees of Freedom = 1 null hypothesis failed to be rejected at the 0.05 level and conclude that no relationship exists between the percent of assets held as cash and whether cash budgets are prepared for each division and/or service concept.
Hypothesis XXVI	There is no relationship between the dollar value of net corporate assets and whether cash budgets are prepared for each division and/or service concept. Kruskal-Wallis Test Wilcoxon 2-Sample Test p = .5556 p = .5594 x^2 Approximately 0.35 Degrees of Freedom = 1 Z Approximately 0.5837 null hypothesis failed to be rejected at the 0.05 level and conclude that there is no relationship between the dollar value of net corporate assets and whether the firm prepares a cash budget for each division and/or service concept.
Hypothesis XXVII	There is no relationship between the annual sales of the firm and whether cash budgets are prepared for each division and/or service concept. Kruskal-Wallis Test Wilcoxon 2-Sample Test p = .5344 p = .5379 x^2 Approximately 0.39 Degrees of Freedom = 1 Z Approximately 0.6160 null hypothesis failed to be rejected at the 0.05 level and conclude that there is no relationship between the annual sales of the firm and whether cash budgets are prepared for each division and/or service concept.

TABLE 79

HYPOTHESES TESTING FOR THE METHOD USED TO FORECAST CASH NEEDS WHEN PREPARING CASH BUDGETS

Hypothesis XXVIII	There is no relationship between the percent of assets held as cash and the method used to forecast cash needs when preparing cash budgets. Chi Squre Test p_2= .7774 x^2 = .504 Degrees of Freedom = 2 fail to reject the mull hypothesis at the 0.05 level and conclude that no relationship exists between cash as a percentage of assets and the method used to forecast cash needs when preparing cash budgets.
Hypothesis XXIX	There is no relationship between the dollar value of net corporate assets and the method used to forecast cash needs when preparing cash budgets. Kruskal-Wallis Test p = .5528 x^2 Approximation = 1.19 Degrees of Freedom = 2 fail to reject the null hypothesis at the 0.05 level and conclude that no relationship exists between the dollar value of net corporate assets and the method used to forecast cash needs when preparing cash budgets.
Hypothesis XXX	There is no relationship between the annual sales volume of the firm and the cash needs forecasting method when preparing cash budgets. Kruskal-Wallis Test p = .2760 x^2 Approximation = 2.57 Degrees of Freedom = 2 fail to reject null hypothesis at the 0.05 level and conclude that no relationship exists between the firm's annual sales volume and the cash needs forecasting method.

Safety Stock Required for Compensating Balance and Predictable Transaction Needs

Table 80 shows that the Chi Square test rejected the null hypothesis for the independent variable, cash as a percentage of assets, and that the Kruskal-Wallis and Wilcoxon 2-Sample Test failed to reject the null hypothesis for the independent variables, dollar volume of net corporate assets and annual sales.

Since the null hypotheses failed to be rejected for the independent variables, dollar value of net corporate assets and annual sales, this means that no relationship exists between the independent variables, asset base and sales, and the dependent variable, safety stock required for compensating balances and predictable transaction needs.

Percent of Cash Balance Held as Safety Stock

Table 81 shows that the Gamma Test failed to reject the null hypothesis for the independent variable, cash as a percentage of assets. The Test for the Linear Contrast on the Mean Ranks failed to reject the null hypothesis for the independent variables, dollar value of net corporate assets and annual sales.

Since the null hypotheses failed to be rejected, this means that no relationship exists between the independent variables, cash as a percentage of assets, dollar value of net corporate assets, and level of revenue, and the dependent variable, percent of cash balance held as safety stock.

TABLE 80

HYPOTHESES TESTING TO DETERMINE WHETHER A FIRM HOLDS A SAFETY STOCK

Hypothesis XXXI	**There is no relationship between the percent of assets held as cash and whether a firm holds a safety stock.** Chi Square Test p = .0013 x^2 = 10.282 Degrees of Freedom = 1 reject null hypothesis at the 0.05 alpha level and conclude that there is a relationship between the percent of assets held as cash and whether a firm holds a safety stock.
Hypothesis XXXII	**There is no relationship between the dollar value of net corporate assets and whether a firm holds a safety stock.** Kruskal-Wallis Test Wilcoxon 2-Sample Test p = .0816 p = .0824 x^2 Approximation = 3.03 Degrees of Freedom = 1 Z Approximation = 1.7369 fail to reject the null hypothesis at the 0.05 alpha level and conclude that no relationship exists between the dollar value of net corporate assets and whether a firm holds a safety stock.
Hypothesis XXXIII	**There is no relationship between the firm's annual sales and whether a firm holds a safety stock.** Kruskal-Wallis Test Wilcoxon 2-Sample Test p = .3531 p = .3535 x^2 Approximation = .86 Degrees of Freedom = 1 Z Approximation = .924 fail to reject the null hypothesis at the 0.05 alpha level and conclude that no relationship exists between the firm's annual sales and whether a firm holds a safety stock.

TABLE 81

HYPOTHESES TESTING FOR THE PERCENT OF CASH BALANCE HELD AS SAFETY STOCK

Hypothesis XXXIV	There is no relationship between the percent of assets held as cash and the percent of cash balance held as a safety stock. Gamma Test p = .0961 Gamma = 0.342 Normal Approximation = 1.664 fail to reject the null hypothesis at the 0.05 alpha level and conclude that no relationship exists between the percent of assets held as cash and the percent of cash balance held as a safety stock.
Hypothesis XXXV	There is no relationship between the dollar value of net corporate assets and the percent of cash balance held as a safety stock. Test for the Linear Contrast on the Mean Ranks p = .1819 F = 1.84 Degrees of Freedom = 1,42 fail to reject the null hypothesis at the 0.05 alpha level and conclude that no relationship exists between the dollar value of net corporate assets and the percent of cash balance held as a safety stock.
Hypothesis XXXVI	There is no relationship between the firm's annual sales and the percent of cash balance held as a safety stock. Test for the Linear Contrast on the Mean Ranks p = .1667 F = 1.98 Degrees of Freedom = 1,44 fail to reject the null hypothesis at the 0.05 alpha level and conclude that no relationship exists between the firm's annual sales and the percent of cash balance held as a safety stock.

Characteristics of Net Cash Flows Over a Six-Month Period

Table 82 shows that the Gamma test failed to reject the null hypothesis for the independent variable, cash as a percentage of assets. This means that there is no relationship between the independent variable, cash as a percentage of assets, and dependent variable, the characteristics of net cash flows over a six-month period.

Hypotheses testing was not done for the independent variables, dollar value of net corporate asset and annual sales.

Importance of Cash Management Policies

Table 83 indicates that the Chi Square test failed to reject the null hypothesis for the independent variable, cash as a percentage of assets. The Kruskal-Wallis test failed to reject the null hypothesis for the independent variable, dollar value of net corporate assets. The Kruskal-Wallis test failed to reject the null hypothesis for the independent variable, sales volume.

Since the null hypotheses failed to be rejected, this means that no relationship exists between the independent variables, cash as a percentage of assets and the dollar volume of net corporate assets and the dependent variable, importance of cash management policies.

As measured by sales volume, a trend exists that indicates first ranked firms state that minimizing bank balances is the most important cash management policy and second ranked firms indicate that the speeding the collection of receivables is the most important cash management policy. Third ranked corporations state that slowing the payments of receivables is the most important cash management policy

TABLE 82

HYPOTHESES TESTING FOR THE CHARACTERISTICS OF NET CASH FLOWS OVER A SIX MONTH PERIOD

Hypothesis XXXVII	**There is no relationship between cash as a percentage of assets and the cahracteristics of net cash flows over a six month period.** **Gamma Test** **p = .4685** **Gamma = -0.163** **Normal Approximation = -0.725** **null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between cash as a percentage of assets and the characteristics of net cash flows over a six month period.**

TABLE 83

HYPOTHESES TESTING FOR THE IMPORTANCE OF CASH MANAGEMENT POLICIES

Hypothesis XXXVIII	There is no relationship between the percent of assets held as cash and the importance of cash management policies. Chi Square Test p = .2740 x^2 = 3.886 Degrees of Freedom = 3 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the percent of assets held as cash and the importance of cash management policies.
Hypothesis XXXIX	There is no relationship between the dollar value of net corporate assets and the importance of cash management policies. Kruskal-Wallis Test p = .089 x^2 Approximation = 6.52 Degrees of Freedom = 3 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the dollar value of net corporate assets and the importance of cash management policies.
Hypothesis XXXX	There is no relationship between the firm's annual sales and the importance of cash management policies. Kruskal-Wallis Test p = .0272 x^2 Approximation = 9.16 Degrees of Freedom = 3 reject null hypothesis at the 0.05 alpha level and conclude that there is a relationship between the firm's annual sales and the importance of cash management policies.

and fourth ranked firms indicate that minimizing investments in inventory is the most important cash management policy.

Most Preferred Method for Accounts Receivable Collection

Table 84 shows that the null hypotheses failed to be rejected for the independent variables, cash as a percentage of assets, and dollar value of net corporate assets. The Kruskal-Wallis test rejected the null hypothesis for the independent variable annual sales.

Since the null hypotheses failed to be rejected, this means that no relationship exists between the independent variables, cash as a percentage of assets and dollar value of net corporate assets and the dependent variable, most preferred method for accounts receivable collection.

As measured by sales, a trend exists that shows first ranked firms prefer the lockbox method and second ranked firms use the concentration banking method to accelerate the collection of accounts receivables. Third ranked firms use the point-of-sale method and fourth ranked companies use the funds remitted to the central cash accounts to accelerate the collection of accounts receivables.

Method to Delay Cash Disbursements

Table 85 shows that the null hypotheses failed to be rejected for the independent variable, cash as a percentage of assets. The Kruskal-Wallis test rejected the null hypothesis for the independent variables, dollar volume of net corporate assets and annual sales.

Since the null hypothesis failed to be rejected, this means that no relationship exists between the independent variable, percent of

TABLE 84

HYPOTHESES TESTING FOR THE METHOD MOST PREFERRED TO ACCELERATE ACCOUNTS RECEIVABLE COLLECTIONS

Hypothesis XXXXI	There is no relationship between the percent of assets held as cash and the most preferred method to accelerate accounts receivable collections. Chi Square Test p = .3080 x^2 = 3.600 Degrees of Freedom = 3 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the percent of assets held as cash and the most preferred method to accelerate accounts receivable collections.
Hypothesis XXXXII	There is no relationship between the dollar value of net corporate assets and the most preferred method to accelerate accounts receivable collections. Kruskal-Wallis Test p = .0965 x^2 Approximation = 6.33 Degrees of Freedom = 3 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the dollar value of net corporate assets and the most preferred method to accelerate accounts receivable collections.
Hypothesis XXXXIII	There is no relationship between the firm's annual sales and the most preferred method to accelerate accounts receivable collections. Kruskal-Wallis Test p = .0329 x^2 Approximation = 8.75 Degrees of Freedom = 3 reject null hypothesis at the 0.05 alpha level and conclude that there is a relationship between the firm's annual sales and the most preferred method to accelerate accounts receivable collections.

TABLE 85

HYPOTHESES TESTING FOR THE METHOD MOST PREFERRED TO DELAY CASH DISBURSEMENTS

Hypothesis XXXXIV	There is no relationship between the percent of assets held as cash and the most preferred method to delay cash disbursements. Chi Square Test p = .0897 x^2 = 4.823 Degrees of Freedom = 2 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the percent of assets held as cash and the most preferred method to delay cash disbursements.
Hypothesis XXXXV	There is no relationship between the dollar value of net corporate assets and the most preferred method to delay cash disbursements. Kruskal-Wallis Test p = .0336 x^2 Approximation = 6.79 Degrees of Freedom = 2 reject null hypothesis at the 0.05 alpha level and conclude that there is a relationship between the dollar value of net corporate assets and the most preferred method to delay cash disbursements.
Hypothesis XXXXVI	There is no relationship between the firm's annual sales and the most preferred method to delay cash disbursements. Kruskal-Wallis Test p = .0024 x^2 Approximation = 12.10 Degrees of Freedom = 2 reject null hypothesis at the 0.05 alpha level and conclude that there is a relationship between the firm's annual sales and the most preferred method to delay cash disbursements.

assets held as cash, and the dependent variable, method to delay cash disbursements.

As measured by the asset base, a trend exists that shows first ranked firms use selected disbursing points for divisions and/or units, and second ranked firms use centralized payables to delay cash disbursements. Third ranked companies do not use any methods to delay cash disbursements.

As measured by sales, a trend exists that shows first ranked companies use selected disbursing points for divisions and/or units to delay cash disbursements and second ranked firms use centralized payables to delay cash disbursements. Third ranked corporations do not use any methods to delay cash disbursements.

Type of Float System

Table 86 shows that the Chi Square test failed to reject the null hypothesis for the independent variable, cash as a percentage of assets. The Kruskal-Wallis test failed to reject the null hypothesis for the independent variables, dollar value of net corporate assets and annual sales. This means that there is no relationship between the independent variables, quick assets, asset base, and annual sales, and the dependent variable, the type of float system used by the firm.

Average Length of the Float System

Table 87 shows that the Gamma test failed to reject the null hypothesis for the independent variable, cash as a percentage of assets, and that the Test for the Linear Contrast of the Mean Ranks failed to reject the null hypothesis for the independent variables, dollar value of net corporate assets and level of revenue. This means

TABLE 86

HYPOTHESES TESTING FOR THE TYPE OF FLOAT SYSTEM USED BY THE FIRM

Hypothesis XXXVII	There is no relationship between the percent of assets held as cash and the type of float system used by the firm. Chi Square Test p = .9718 x^2 = .0235 Degrees of Freedom = 3 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the percent of assets held as cash and the type of float system used by the firm.
Hypothesis XXXVIII	There is no relationship between the dollar value of net corporate assets and the type of float system used by the firm. Kruskal-Wallis Test p = .9718 x^2 Approximation = 0.02 Degrees of Freedom = 2 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the dollar value of net corporate assets and the type of float system used by the firm.
Hypothesis IL	There is no relationship between the firm's annual sales and the type of float system used by the firm. Kruskal-Wallis Test p = .9871 x^2 Approximation = 0.14 Degrees of Freedom = 3 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the firm's annual sales and the type of float system used by the firm.

TABLE 87

HYPOTHESES TESTING FOR THE AVERAGE LENGTH OF THE FLOAT SYSTEM

Hypothesis L	There is no relationship between the percent of assets held as cash and the average length of the float system. Gamma Test p = 0.7013 Gamma = 0.074 Normal Approximation 0.384 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the percent of assets held as cash and the average length of the float system.
Hypothesis LI	There is no relationship between the dollar value of net corporate assets and the average length of the float system. Test for the Linear Contrast of the Mean Ranks p = .1421 F = 2.21 Degrees of Freedom = 1,65 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the dollar value of net corporate assets and the average length of the float system.
Hypothesis LII	There is no relationship between the firm's annual sales and the average length of the float system. Test for the Linear Contrast of the Mean Ranks p = .2604 F = 1.29 Degrees of Freedom = 1,68 null hypothesis failed to be rejected at the 0.05 alpha level and conclude that no relationship exists between the firm's annual sales and the average length of the float system.

that there is no relationship between the independent variables, cash as a percentage of assets, dollar value of net corporate assets, level of revenue and the dependent variable, the average length of the float system.

Section Three-Summary of Frequency Distribution and Hypothesis Testing Results

Tables 88, 89, and 90 present information that summarizes the results of the frequency distribution and hypothesis testing results.

Summary

Chapter four presents the results of the frequency distribution tables and hypotheses testing. The frequency distribution and hypotheses testing results will be interpreted in chapter five.

TABLE 88

FREQUENCY DISTRIBUTION AND HYPOTHESES TESTING RESULTS BY PERCENT OF ASSETS HELD AS CASH

Dependent Variable	Frequency Distribution Results By Largest Percentage of Respondents	Hypotheses Testing Results Of First-Ranked Firms
Department of the Firm Responsible for Cash Management	Corporate Level	Rejected the Null Hypothesis
Title of the Person Having the Major Responsibility for Cash Management	President	Rejected the Null Hypothesis
Cash Management Banking Assangements Most Often Assessed	Divided Equally Between Quarterly and Semi-Annually	Failed to Reject the Null Hypothesis
Cash Budget Revision Done How Often	Monthly	Failed to Reject the Null Hypothesis
Amount of Time in Advance Cash Flows are Forecast	Annually	Failed to Reject the Null Hypothesis
Period in Advance that the Firm Plans its Casn Budget	One Year in Advance	Failed to Reject the Null Hypothesis
Method(s) Used to Forecast Sales	Estimates from Historical Data	Failed to Reject the Null Hypothesis
Management Level that Prepares Cash Budgets	Corporate	Failed to Reject the Null Hypothesis
Cash Budget Preparation is Done for Each Division and/or Service Concept	Yes	Failed to Reject the Null Hypothesis
Method Used to Forecast Cash Needs	Consensus of Executive Opinion	Failed to Reject the Null Hypothesis

TABLE 88 - Continued

Dependent Variable	Frequency Distribution Results By Largest Percentage of Respondents	Hypotheses Testing Results Of First-Ranked Firms
Safety Stock - Is It Held?	No	Rejected the Null Hypothesis
Percent of Cash Balance Held as a Safety Stock	Below 5%	Failed to Reject the Null Hypothesis
Net Cash Flow Characteristics Over a Six Month Period	Fairly Predictable	Failed to Reject the Null Hypothesis
Type of Banking Services Used	Short-term Investing	Hypothesis Testing Not Done
Most IMportant Cash Management Policy	Speeding of Collecting of Receivables	Failed to Reject the Null Hypothesis
Most Preferred Method for Accounts Receivable Collections	Point of Sale System	Failed to Reject the Null Hypothesis
Frequency of Bank Deposits	Daily	Hypothesis Testing Not Done
Method to Delay Cash Disbursements	Centralized Payments	Failed to Reject the Null Hypothesis
Type of Float System Used	Check Clearing	Failed to Reject the Null Hypothesis
Average Length of Float System	3-6 Days	Failed to Reject the Null Hypothesis
Type of Computerized Information System Used to Monitor Cash Balances	Developed Within Organization	Hypothesis Testing Not Done

TABLE 89

FREQUENCY DISTRIBUTION AND HYPOTHESES TESTING RESULTS
BY THE SIZE AND CLASSIFICATION OF THE ORGANIZATION

Dependent Variable	Frequency Distribution Results By Largest Percentage of Respondents	Hypotheses Testing Results Of First-Ranked Firms
Department of the Firm Responsible for Cash Management	Accounting	Finance Department
Title of the Person Having the Major Responsibility for Cash Management	Comptroller	Treasurer
Cash Management Banking Arrangements Most Often Assessed	Semi-Annually	Weekly
Cash Budget Revision Done How Often	Monthly	Failed to Reject the Nully Hypothesis
Amount of Time in Advance Cash Flows are Forecast	Annually	Semi-Annually
Period in Advance that the Firm Plans its Cash Budget	One Year in Advance	Failed to Reject the Null Hypothesis
Method(s) Used to Forecast Sales	Estimates from Historical Data	Failed to Reject the Null Hypothesis
Management Level that Prepares Cash Budgets	Corporate	Failed to Reject the Null Hypothesis
Cash Budget Preparation is Done for Each Division and/or/Service Concept	Yes	Failed to Reject the Null Hypothesis
Method Used to Forecast Cash Needs	Simple Regression Multivariate Regression Smoothing Techniques Inventory Type Models Linear Programming Models Goal Programming Models Computer Simulation Models Sensitivity Analyses	Failed to Reject the Null Hypothesis

TABLE 89 - Continued

Dependent Variable	Frequency Distribution Results By Largest Percentage of Respondents	Hypotheses Testing Results Of First-Ranked Firms
Safety Stock - It Held?	No	Failed to Reject the Is Null Hypothesis
Percent of Cash Balance Held as a Safety Stock	Below 5%	Failed to Reject the Null Hypothesis
Net Cash Flow Characteristics Over a Six Month Period	Fairly Predictable	Hypothesis Testing Not Done
Type of Banking Services Used	Short-term Investing	Hypothesis Testing Not Done
Most Important Cash Management Policy	Speeding of Collecting of Receivables	Failed to Reject the Null Hypothesis
Most Preferred Method for Accounts Receivable Collections	Point of Sale System	Failed to Reject the Null Hypothesis
Frequency of Bank Deposits	Daily	Hypothesis Testing Not Done
Method to Delay Cash Disbursements	Centralized Payments	Selected Disbursing Points for Divisions and/or Units
Type of Float System Used	Check Clearing	Failed to Reject the Null Hypothesis
Average Length of Float System	3-6 Days	Failed to Reject the Null Hypothesis
Type of Computerized Information System Used to Monitor Cash Balances	Equally Divided Between Developed Within Organization and None	Hypothesis Testing Not Done

TABLE 90

FREQUENCY DISTRIBUTION AND HYPOTHESES TESTING RESULTS BY THE LEVEL OF REVENUE

Dependent Variable	Frequency Distribution Results By Largest Percentage of Respondents	Hypotheses Testing Results Of First-Ranked Firms
Department of the Firm Responsible for Cash Management	Equally Divided Between the Corporate Level and Accounting Department	Finance Department
Title of the Person Having the Major Responsibility for Cash Management	President	Treasurer
Cash Management Banking Arrangements Most Often Assessed	Semi-Annually	Daily
Cash Budget Revision Done How Often	Monthly	Failed to Reject the Nully Hypothesis
Amount of Time in Advance Cash Flows are Forecast	Annually	Semi-Annually
Period in Advance that the Firm Plans its Cash Budget	One Year in Advance	More Than One Year in Advance
Method(s) Used to Forecast Sales	Estimates from Historical Data	Failed to Reject the Null Hypothesis
Management Level that Prepares Cash Budgets	Corporate	Division Level
Cash Budget Preparation is Done for Each Division and/or/Service Concept	Yes	Failed to Reject the Null Hypothesis
Method Used to Forecast Cash Needs	Percent of Sales	Failed to Reject the Null Hypothesis

TABLE 90 - Continued

Dependent Variable	Frequency Distribution Results By Largest Percentage of Respondents	Hypotheses Testing Results Of First-Ranked Firms
Safety Stock - It Held?	No	Failed to Reject the Is Null Hypothesis
Percent of Cash Balance Held as a Safety Stock	Below 5%	Failed to Reject the Null Hypothesis
Net Cash Flow Characteristics Over a Six Month Period	Fairly Predictable	Hypothesis Testing Not Done
Type of Banking Services Used	Short-term Investing	Hypothesis Testing Not Done
Most Important Cash Management Policy	Speeding of Collecting of Receivables	Minimizing Bank Balances
Most Preferred Method for Accounts Receivable Collections	Point of Sale System	Lockbox Method
Frequency of Bank Deposits	Daily	Hypothesis Testing Not Done
Method to Delay Cash Disbursements	Centralized Payments	Selected Disbursing Points for Divisions and/or Units
Type of Float System Used	Check Clearing	Failed to Reject the Null Hypothesis
Average Length of Float System	3-6 Days	Failed to Reject the Null Hypothesis
Type of Computerized Information System Used to Monitor Cash Balances	Equally Divided Between Developed Within Organization and None	Hypothesis Testing Not Done

Chapter V

Discussion

The purpose of this research is to investigate and assess cash management practices in the food service and lodging industry.

A questionnaire relevant to the cash management practices was developed. The survey focused upon ten categories of cash management activities which are:

-person and department responsible for cash management
-cash budgets
-safety stock
-assessment of cash management banking services
-cash flows
-importance of cash management policies
-the float
-banking services and deposits
-acceleration of accounts receivable and slowing of accounts payable
-type of computer information available
-title of the individual completing the survey

The Survey of Cash Management contains 25 open and closed-ended questions, three questions of which are used as independent variables (Q-4, Q-23, and Q-24) that analyze data by the percent of assets held as cash, dollar value of net corporate assets, and level of revenue.

Results of the frequency distribution tables and hypotheses testing data were discussed in the preceding chapter. These results provide a multitude of information about cash management practices in the food service and lodging industry.

The mailing of the Survey of Cash Management took place in May, June, and July of 1983. A sample size of 434 companies was chosen for the survey, and 95 responded.

All the data were coded for statistical analysis by the computerized SAS program. Frequency distributions were used to describe results of the data. Statistical tests which are the Chi-Square test, the Gamma test, the Kruskal-Wallis test, the Linear Contrast on the Mean Ranks, and the Wilcoxon 2-Sample test described the relationship between the dependent and independent variables.

In this section, theoretical and prescriptive cash management practices are compared with frequency distribution and hypotheses testing results. These will be interpreted according to the categories of cash management established earlier in this chapter.

INTERPRETATION OF THEORETICAL AND PRESCRIPTIVE VERSUS ACTUAL CASH MANAGEMENT PRACTICES BY CATEGORY

Person and Department Responsible for Cash Management

Department Responsible for Cash Management

The frequency distribution results associated with the department of the firm responsible for cash management shows that the corporate level or accounting department is most often responsible for cash management. 6.8% of the total responding firms with an asset base between $203,325,000 and $1,000,000,000 assign cash management

responsibilities to the finance department. Refer to page 34 and Tables 6, 7, and 8.

Hypotheses testing results associated with the department of the firm responsible for cash management indicate that the larger the firms asset base and level of revenue the more specialized the department responsible for cash management practices of the firm. First-ranked firms, as measured by asset base and level of revenue, assign the cash management function to the finance department and fourth-ranked firms assign the cash management function to the operations department. Refer to Table 70 and page 110.

The findings of the survey support March, Kaplan, Gitman, Moses, and White's research that the larger firms use more sophisticated cash management techniques (March, 1979) (Kaplan, 1980) (Gitman, Moses, and White, 1979). Since large firms use more sophisticated cash management techniques, the corporate treasurer or cash manager is the individual most responsible for the cash management function.

Title of the Person Responsible for Cash Management within the Firm

The frequency distribution tables, designed to determine the person having the major responsibility for cash management, show that the majority of cash management decisions are made by the president in small firms while the treasurer or comptroller makes these decisions in large firms. Refer to pages 34 and 41 and Tables 9, 10, and 11.

Hypotheses testing results, designed to determine the person having the major responsibility for cash management within the firm, indicate that the treasurer is responsible for cash management in large firms. Refer to Table 71 and page 112.

Though it is preferred, the cash manager or the corporate treasurer be responsible for the cash management function, this is not always feasible in small businesses. An owner or general manager may be performing all management functions in small organizations.

These findings support March (1979) and Kaplan's (1980) research that the cash manager or corporate treasurer should be held responsible for cash management. Results support Fielitz's (1978) contention that small businesses may not have skilled financial management personnel managing their cash management departments.

Cash Budgets

Revision

The frequency distribution results determine the frequency that the firm revise it's cash budget and they show that cash budgets are most often revised monthly. Refer to page 45 and Tables 15, 16, and 17.

Hypotheses testing results show that no relationship exists between the dependent variable, cash budget revision, and the independent variables, quick assets, asset base, or sales volume. Refer to Table 73 and page 116.

The frequency distribution results of this study support Coltman's (1979) suggestion that efficient cash management procedures may increase profits. So that profits may be increased, cash budgets should be revised periodically to give management an accurate financial picture of the firm. More importantly, since respondents indicate cash budgets are most often revised monthly, this allows

management adequate time to invest excess cash or if needed, reduce corporate expenditures.

Planning

The frequency distribution results show that small firms plan their cash budgets less than one year in advance and large firms plan their cash budgets one year in advance. Refer to page 52 and Tables 21, 22, and 23.

Hypotheses testing results show that small firms, as measured by annual sales, plan their cash budgets less than one year in advance. Refer to page 119 and Table 75.

The hypotheses testing and frequency distribution results of this study support Coltman's (1979) suggestion that the more efficient the cash management of the firm, the more funds available for investment. Since the cash budget presents a financial picture of the firm, planning the cash budget in advance lets management invest excess cash, borrow cash if needed, and if necessary reduce expenses. Not only does advance planning of the cash budget aid in the efficiency of cash management but it also lets the large as well as small firms synchronize their cash flows. More importantly, these results show that larger firms plan their cash budgets further in advance that small firms and support Gitman, Moses, and White's (1979) research that the larger the firm the more sophisticated their cash management techniques.

Method(s) to Forecast Sales

The frequency distribution results show the method(s) used to forecast sales and indicates that small firms use estimates based on

historical data and large firms use estimates from the company sales force to forecast sales. Refer to pages 52 and 59 and Table 24, 25, and 26.

Hypotheses testing results show that no relationships exists between the independent variables, cash as a percentage of assets, dollar value of net corporate assets, and level of revenue, and the dependent variable, method(s) used to forecast sales. Refer to page 121 and Table 76.

The findings of the study support Edmund's (1979) contention that firms forecast sales from historical data. The methods used to forecast sales by large firms, are not addressed by the literature.

Management Level that Prepares Cash Budgets

The frequency distribution results show the management level that prepares cash budgets and indicates that most often the corporate level of management prepares cash budgets. Refer to page 59 and Tables 27, 28, and 29.

Hypotheses testing results show that large firms prepare cash budgets at the divisional level and small firms prepare cash budgets at other levels. Refer to Table 77 and page 121.

The frequency distribution results and hypotheses testing results for large firms support March's (1979) notion that firms should have a cash manager or corporate treasurer to direct the cash management department. The cash management department's responsibility includes cash budget preparation and is done at the corporate level. Results of the study support the suggestion of Fielitz (1978) that small firms are managed by people lacking financial management

expertise. Fielitz's (1978) statement is supported by the data that indicates small firms plan cash budgets at other levels.

Cash Budget Preparation for Each Division and/or Service Concept

The frequency distribution results indicate that small firms prepare separate cash budgets for each concept and large firms do not prepare cash budgets for each division and/or service concept. Refer to page 59 and 66 and Tables 30, 31, and 32.

Hypotheses testing results show that no relationship exists between the independent variables, percent of assets held as cash, dollar value of net corporate assets and annual sales and the dependent variable, cash budget preparation for each division and/or service concept. Refer to page 124 and Table 78.

The findings of this study are mixed with regard to March (1979), Leitch, Barrack and McKinley's (1980) statements that corporations should review the financial status of each corporate function. Small firms indicate that they prepare a cash budget for each service concept or division and each service concept and/or division could be treated as a separate corporate function. Though large firms may have several divisions and/or service concepts they do not prepare cash budgets for each corporate function. The preparation of a cash budget for each function could provide a more accurate financial picture of the firm.

Cash Needs Forecasting

The frequency distribution results indicate that most firms prefer the percent of sales method to forecast cash needs, as measured by quick assets and asset base. As measured by sales, firms with

sales between $750,000 and $2,329,999 prefer the percent of sales method and firms with sales between $6,365,000 and $1,100,000,000 prefer regression models to forecast cash needs. Refer to page 66 and Tables 33, 34, and 35.

Hypotheses testing results show that no relationship exists between the independent variables, cash as a percentage of assets, asset base, and level of revenue. Refer to page 124 and Table 79.

The findings of this study agree with those of Mathur and Luisada's (1980) that the three most prevalent cash forecasting services offered by banks are regression and trend analysis, exponential smoothing, and percent of sales.

Safety Stock

Safety Stock

The frequency distribution results show how the firms hold their safety stock. Firms, that do not hold any assets as cash, indicate that they do not hold a safety stock. Small firms, as measured by asset base and level of revenue, indicate that they do hold a safety stock over the required compensating balance and predictable transaction needs. Large firms, as measured by asset base and level of revenue, indicate that they do not hold a safety stock over the required compensating balance and predictable transaction needs. Refer to pages 66 and 73 and Tables 36, 37, and 38.

Hypotheses testing shows that a relationship exists between the independent variable, cash as a percent of assets and the dependent variable, whether the firm holds a safety stock above the required

compensating balance and predictable transaction needs. Refer to Table 80 and page 127.

Percent of Cash Held as Safety Stock

The frequency distribution results of the study suggest that firms, as measured by quick assets, asset base, and level of revenue hold safety stocks that are below 5% of cash. Refer to tables 39, 40, and 41 and page 73.

Hypotheses testing results designed to determine the percent of cash held as a safety stock indicate that no relationship exists between the independent variables, quick assets, asset base, and level of revenue, and the dependent variable, the percent of cash held as safety stock. Refer to Table 81 and page 127.

The review of literature produced no information about the percent of cash held as safety stock.

Cash Flows

Time in Advance that Cash Flows are Forecast

The frequency distribution results show the amount of time in advance cash flows are forecast and show that cash flows are most often forecast one year in advance. 12.2% of corporations with sales between $750,000 and $2,329,999 forecast cash flows one month in advance. Refer to page 45 and Tables 18, 19, and 20.

Hypotheses testing results determined that first-ranked firms, as measured by asset base and sales, forecast their cash flows semi-annually in advance and fourth-ranked firms, as measured by sales, and fifth-ranked firms, as measured by asset base, forecast cash flows at other times. Refer to Table 74 and page 116.

The findings of this study are similar to those of Godick's (1980) which indicated that cash flow forecasts can cover either long or short time spans or periodic intervals such as: daily, weekly, monthly, or quarterly. These cash flow forecasts of different time spans or periodic intervals have different managerial applications.

Cash Flow Characteristics Over a Six-Month Period

Frequency distribution results indicate that most respondents characterize their cash flows as fairly predictable over a six-month period. Refer to page 73 and Tables 42, 43, and 44.

Hypotheses testing results show that no relationship exists between the independent variable, cash as a percentage of assets, and the dependent variable, the characteristics of cash flows over a six-month period. Refer to page 130 and Table 82.

The findings of this study support Gale and Branch's (1981) statement that cash flow is predictable and can be manipulated to serve as an effective cash management tool. Manipulating cash flow is an effective tool in business strategies and is needed for the growth and modernization of businesses and to finance daily business operations.

Importance of Cash Management Policies

Most Important Cash Management Policy

Frequency distribution results indicate that most respondents, as measured by quick assets and asset base, view speeding the collection of receivables as the most important cash management policy. As measured by sales, small firms indicate receivables collection as the most important cash management policy and large firms view the

minimizing of bank balances as the most important cash management policy. Refer to page 80 and 87 and Tables 48, 49, and 50.

Hypotheses testing results show that first-ranked firms, as measured by level of revenue, viewed minimizing bank balances as the most important cash management policy. As measured by asset base, fourth-ranked firms indicate that the slowing the payments of accounts payable is the most important cash management policy. Refer to page 130 and Table 83.

The hypotheses testing findings of this study support Gitman, Moses, and White's (1979) research that small firms, as measured by sales, consider inventory control as one of the most important cash management policies. Small firms place less emphasis on minimizing bank balances and accounts payable disbursements than large firms. The frequency distribution results, as measured by level of revenue, support Gitman, Moses, and White's (1979) research that small firms indicate receivables collection is one of the most important cash management policies.

The Float

Type of Float System Used

Frequency distribution results indicate that most firms are using the check clearing method type of float system. Refer to page 94 and Table 60, 61, and 62.

Hypotheses testing results indicated that no relationship exists between the independent variables, cash as a percentage of assets, dollar volume of net corporate assets, and level of revenue and the

dependent variable, the type of float system used. Refer to page 136 and Table 86.

The frequency distribution findings of this study support Gitman, Moses, and White's (1979) research that small and large firms use the float similarly and prefer the check clearing method of float system.

Average Length of the Float

Frequency distribution results indicate that small firms, as measured by sales, have an average float of one to three days and large firms, as measured by sales, have a float of three to six days. Refer to page 94 and Table 65.

Hypotheses testing results indicate that no relationship exists between the independent variables, cash as a percentage of assets, dollar value of net corporate assets, and level of revenue, and the dependent variable, the average length of the float. Refer to page 136 and Table 87.

Cash Management Banking Arrangements

Assessing Cash Management Banking Arrangements

The frequency distribution results show the frequency that the firm assesses its cash management banking arrangements and indicates that small firms, with sales between $750,000 and $3,708,999 and firms with an asset base between $20,000 and $1,139,999 assess them semi-annually. Refer to page 41 and Tables 13, and 14.

Hypotheses testing results show that the frequency that the firm assesses it's cash management banking arrangements indicate that fifth-ranked firms did not perform this function. Cash banking arrangements were assessed by first-ranked firms, as measured by asset

base, and second-ranked firms, as measured by sales, on a weekly basis. Refer to Table 72 and page 114.

The findings of this study support Bonocure's (1980) statement that companies should determine the effectiveness of their present cash management banking arrangements before altering them. Companies should evaluate the cash management policies and procedures, their information systems that supply data for those making cash management decisions, and their cash management organizational structure. Though Bonocure (1980) discusses the evaluation of the current cash management banking arrangements, he doesn't recommend how often this diagnosis should be performed.

Banking Services and Deposits

Banking Services

Frequency distribution results indicate that small firms, as measured by sales and asset base, use short-term investment banking services. Large firms, as measured by asset base, use wire funds transfer and large firms, as measured by sales, use the zero-based accounts type of banking services. Refer to Tables 45, 46, and 47 and page 80.

Hypotheses testing was not done for this survey question.

The frequency distribution findings of this study, for the independent variable, level of revenues, support Gitman, Moses, and White's (1979) research that larger companies use the zero-based accounts banking services and small firms use short-term investment banking services.

Bank Deposits

Frequency distribution results indicate that most firms make daily bank deposits. The exception is small firms, as measured by asset base, that make every other day bank deposits. Refer to page 87 and Tables 54, 55, and 56.

Hypotheses testing was not done for this survey question.

The frequency distribution findings of this study support Coltman's (1979) suggestion that the more efficient the cash management of the firm, the more funds available for investing. Funds which are deposited daily can earn more interest than funds deposited less often. The interest accrued from the companies bank deposits can add to the firm's profits.

Receivables and Payables

Acceleration of Accounts Receivable

Frequency distribution results indicate that respondents, as measured by quick assets, asset base, and sales, prefer the point-of-sale system to accelerate accounts receivable. Refer to Tables 51, 52, and 53 and page 87.

Hypotheses testing shows that first-ranked firms, as measured by sales, prefer the lockbox method to accelerate accounts receivable collections. Third ranked firms, as measured by sales, prefer the point-of-sale system to accelerate accounts receivable collections. Refer to Table 84 and page 133.

These hypotheses testing results support Gitman, Moses, and White's (1979) research that the lockbox is used most often by large firms to accelerate accounts receivable collections.

Delaying Cash Disbursements

Frequency distribution results indicate that respondents, as measured by quick assets and asset base, prefer centralized payments to delay cash disbursements. As measured by sales, small firms use other methods to delay cash disbursements and large firms use centralized payables to delay cash disbursements. Refer to Tables 57, 58, and 59 and page 94.

Hypotheses testing indicates that third-ranked firms, as measured by asset base and sales, do not use any method to delay cash disbursements. Refer to Table 85 and page 133.

The frequency distribution results and hypotheses testing results of this study, as measured by sales, support Gitman, Moses, and White's (1979) research that small firms use less sophisticated techniques to slow payables. The frequency distribution results show that a greater number of large firms than small firms use centralized payables to slow disbursements.

Computer Systems

Type of Computer System Used

Frequency distribution results indicate that small firms, as measured by asset base and sales, do not use a computer system in their organization. Large firms, as measured by asset base and sales, use a computerized system developed within their organization. Refer to Tables 66, 67, and 68 and page 104.

Hypotheses testing was not done for this survey question.

The frequency distribution results support Bonocure's (1980) notion that timely access of financial information is crucial, so that

management can make reliable cash management decisions. The computerized information system provides management with timely access to financial information.

Person Completing the Survey

The Title of the Person Completing the Survey

Frequency distribution results indicate that the comptroller completed the Survey of Cash Management most often. Refer to Table 69 and page 109.

Summary

Chapter five interprets and discusses the data results that are presented in chapter four. Not only does chapter five discuss and interpret the results, but it also describes the relationship between the frequency distribution tables, hypotheses testing results, and the theoretical and prescriptive cash management practices.

Chapter six tells about the conclusions of the research project, future research problems, limitations of the study, and recommendations to the industry.

Chapter VI

Conclusions

Chapter five discusses the frequency distribution tables and hypotheses testing results. It also describes the relationship of theoretical and prescriptive cash management practices of each dependent variable to the results of the Survey of Cash Management.

Chapter six presents future research problems, limitations of the study, recommendations to the industry and draws conclusions from the research project.

Conclusions

Chapter five grouped the research results into eleven categories. These categories included all of the dependent variables on the survey. Based on the findings of the study, several conclusions can be drawn:

1. The larger the firm's asset base and level of revenue, the more specialized the department of the firm responsible for the cash management function. For example, large firms assign the cash management function to the finance department and small firms assign it to the operations department.

2. The cash management responsibilities are assigned to the treasurer or comptroller in large firms, as measured by level of revenue or asset base. In small firms, the president may be responsible for the cash management responsibility.

3. Cash management banking arrangements were evaluated more often by large firms than small firms, as measured by asset base and level of revenues.

4. The majority of respondents indicated that cash budgets are revised monthly.

5. Large firms, as measured by level of revenue, plan their cash budgets further in advance that small firms.

6. Small firms use estimates from historical data and large firms use estimates from the company sales force to forecast sales.

7. Small firms prepare cash budgets at other levels than the corporate or divisional level. These small firms may not have personnel with financial expertise preparing cash budgets. Large firms prepare cash budgets at the corporate level and may have the cash manager or corporate treasurer directing the cash budget preparation.

8. Small firms prepare a cash budget for each division and/or concept and large firms prepare a cash budget for the corporation, not for each division and/or concept.

9. Cash flows are characterized as fairly predictable over a six-month period.

10. Large firms view minimizing bank balances as the most important cash management policy and small firms view minimizing investments in inventory, receivables collections, or receivables disbursements as the most important cash management policy.

11. The check-clearing method is the most preferred type of float system.

12. Large firms have an average float length of three to six days and small firms have an average float length of more than ten days.

13. Large companies use the zero-based accounts type of banking services and small firms prefer the short-term investing type of banking services.

14. A few small firms, as measured by asset base, make every other day bank deposits. Most other firms, as measured by quick assets, asset base, and level of revenue, make daily bank deposits.

15. Large firms, as measured by level of revenue, prefer the lockbox method to accelerate accounts receivables.

16. Small firms, as measured by sales, use methods other than centralized payables or selected disbursing points for divisions to delay cash disbursements.

17. Small firms do not use computerized information systems within their organizations while large firms use a computerized information system developed within their organization.

In the last few paragraphs, conclusions to the Survey of Cash Management have been discussed. In the next section, recommendations to the industry will be presented.

Recommendations to the Industry

Today the food service and lodging industry is the third or fourth largest industry. Despite the size of the industry, small food service and lodging firms do not practice efficient cash management practices, while large firms have an active committment to cash management. Based on the conclusions of this study, the following recommendations to the industry can be made:

1. Small firms should retain a cash management consultant to assist the person responsible for the cash management function. The cash management consultant should be able to guide the person responsible for cash management so that this function will operate efficiently. Efficient cash management will lead to increased profits which may in turn cover the cost of the consultant.

2. Small firms should evaluate cash banking arrangements quarterly so that they can be changed if needed. The evaluation of cash management banking arrangements is an inexpensive way to make the firms cash management function more effective.

3. Small firms should revise cash budgets more often and plan them further in advance.

4. Small firms lacking personnel with cash management expertise should consult a cash management specialist to prepare the cash budget. Since the cash budget is the backbone of the cash management function and will let the firm know when there is excess cash for investment or when funds need to be borrowed, it is essential that it be prepared accurately. A cash budget that is prepared inaccurately can be very costly to a firm. Though hiring a cash management specialist requires an expenditure by the small firm, it is still less costly than a cash budget that is not prepared or prepared inaccurately.

5. Large firms should prepare a cash budget for each service concept and/or division. A cash budget, which is prepared for each service concept and/or division, allows management to review the financial status of each corporate function. More importantly, a cash budget

that is prepared for each service concept and/or division aids the cash manager in preparing the corporate cash budget.

6. Small firms should place more emphasis on minimizing their bank balances. They should have sufficient amount of cash in their bank accounts to cover compensating balances and predictable transaction needs. Any excess amount of funds in the account over the required amount, could result in lost earnings potential.

7. Bank deposits should be made daily. Respondents indicated that in some instances bank deposits were made every other day. Rather that depositing funds every other day, deposits should be made daily so that firms can earn interest immediately.

8. Small organizations need the availability of a computerized information system. They should have access to a computerized information system, since it provides more timely financial information. A computerized information system gives management the opportunity to make more effective cash management decisions.

The recommendations to the industry were presented in the previous paragraphs. In the following section, the limitations of the study will be discussed.

Limitations of The Study

This study should be viewed as exploratory and is meant to inspire further investigation of cash management practices in the food service and lodging industry.

A major limitation of this study was the small sample size of the study. The results of the study are supported by the 21.89% response

rate. If more results were elicited, the findings of this study would be more conclusive.

Another limitation of this study was the breakdown of the independent variable, cash as percentage of assets. Statistical data that was supplied, only allowed the independent variable to be categorized two ways:

-none

-.1% and above

These two categories provided the researcher with very little information. The categorization of the independent variable, cash as a percentage of assets, was beyond the researcher's control. If this variable were broken into categories such as:

-none at all

-.1% to 10%

-10.1% to 20%

-20.1% to 30%

-30.1% to 40%

-40.1% to 50%

-Over 50%

then relevant data could have been extracted from the responses.

A third limitation of the study is that it is a general overview of cash management practices in the food service and lodging industry rather than focusing on one segment of the industry, such as fine dining, budget motels, or fast food restaurants. This may make application of this study to one particular segment of the industry difficult.

Limitations of this study were discussed in the last few paragraphs. In the next few paragraphs, future research problems will be presented.

Future Research Problems

If this research could be repeated, several changes would be made. First of all, the survey instrument definitions would be placed close to the question. Since it was necessary to turn the survey page to consult the definitions, some respondents may not have done this. There is no way to determine whether or not this point affected the responses.

Secondly, question #21 on the survey that asks about the average length of the float would be changed to ask about either the disbursement or receivables float. There is no way to determine whether or not this point affected the responses.

Thirdly, since it took three mailings to achieve the desired response rate, the researcher may consider telephone interviews to get the desired response rate.

Fourthly, the researcher found firms were reluctant to divulge financial data even though they were assured that the information was confidential.

Last, for any further study it is recommended to increase the sample size so that conclusions may represent a general overview of the industry.

Future research problems have been discussed in the past few paragraphs. The next few paragraphs will present future research questions.

Future Research Questions

This research project did not cover all the variables that may effect cash management practices. For further research, it is recommended that the questionnaire include the following topics:

-how often sales are projected

-how often does the firm experience a negative cash flow

-what is the dollar value of cash management external costs associated with the float, accounting functions, personnel and other related operations costs.

This study provides a multitude of information about cash management practices in the food service and lodging industry, but many other factors remain to be studied.

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Appendix A

SURVEY OF

CASH MANAGEMENT PRACTICES

___ Please check if summary of results is desired.

Survey of

CASH MANAGEMENT PRACTICES

1. What department of your firm has the major responsibility for cash management? (Please check only one.)

_____ Division Level
_____ Corporate Level
_____ Finance
_____ Accounting
_____ Operations
_____ Shared among several divisions. Please specify _____

2. What is the title of the person holding the major responsibility for cash management decisions within your firm?

_____ President
_____ Treasurer
_____ Comptroller
_____ Accountant
_____ Other. Please specify _____

3. How often does your firm assess its cash management banking arrangements? (Please consult definitions on the pages following this survey.)

_____ Daily
_____ Weekly
_____ Quarterly
_____ Semi-annnually
_____ Annually
_____ Activity not performed

4. What percent of your firm's total assets are held as cash?

_____ .1 to 10%
_____ 10.1 to 20%
_____ 20.1 to 30%
_____ 30.1 to 40%
_____ 40.1 to 50%
_____ Over 50%
_____ None at all

5. How often does your firm revise its cash budget?

_____ Daily
_____ Weekly
_____ Monthly
_____ Quarterly
_____ Semi-annually
_____ Other. Please specify _____.

CASH MANAGEMENT PRACTICES, continued

6. How far in advance are cash flows forecast?

_____ Daily
_____ Weekly
_____ Monthly
_____ Quarterly
_____ Semi-annually
_____ Annually
_____ Other. Please specify _____.

7. How far in advance does your firm plan its cash budget?

_____ Less than one year
_____ One year
_____ Two years
_____ Three years
_____ More than three years
_____ Some combination of above. Please specify _____.

8. When preparing cash budgets, which method(s) is used to forecast sales?

_____ Sales estimates from company sales force
_____ Marketing research division estimates
_____ Estimates from historical data
_____ Upper managements' opinion
_____ Other. Please specify _____.

9. At what level are cash budgets prepared?

_____ Corporate Level
_____ Division Level
_____ Other. Please specify _____.

10. Are cash budgets prepared for each divison and/or service concept? (Please count definitions page following this survey.)

_____ Yes
_____ No

CASH MANAGEMENT PRACTICES, continued

11. When preparing cash budgets, how are cash needs forecast?
(If more than one approach is used, please rank them as follows with 1 being most important and 10 being least important.)

_____ Percent of sales
_____ Simple regression
_____ Multivariate regression
_____ Smoothing techniques (e.g., moving)
_____ Inventory type models (e.g., EOQ models)
_____ Linear programming models (i.e., optimization models)
_____ Goal programming models
_____ Computer simulation models
_____ Sensitivity analysis
_____ Consensus of executive opinion
_____ Other

12. Does your firm hold a safety stock of cash above the amount required for compensating balances and predictable transaction needs? (Please check.)

_____ Yes

_____ No

13. What percentage of your cash balances (on the average) are generally attributable to this safety stock? (Please check.)

_____ Less than 5% on the average
_____ Between 5.1%-10% on the average
_____ Between 10.1%-15% on the average
_____ Between 15.1%-20% on the average
_____ Between 20.1%-25% on the average
_____ Between 25.1%-30% on the average
_____ More than 30.1%

14. How would you characterize your net cash flows over a six month period? (Please consult definitions on the pages following this survey.)

_____ Fairly predictable
_____ Somewhat predictable
_____ Unpredictable

15. Check below those banking services you are currently using. (Please consult definitions on the pages following this survey.)

_____ Wire Funds Transfer
_____ Payroll Management
_____ Zero Balance Accounts
_____ Short-term Investing
_____ Lockbox System

CASH MANAGEMENT PRACTICES, continued

16. Please rank the following cash management policies as to their importance. (With 1 being most important and 5 being least important.)

_____ Speeding of Collecting Receivables
_____ Minimizing Investment in Inventory
_____ Minimizing Bank Balances
_____ Slowing Payments of Accounts Payable
_____ Other. Please specify _____.

17. Please rank, by order of frequency used, the methods to accelerate the collection of accounts receivable. (With 1 being most used and 5 the least used.) (Please consult definitions on the pages following this survey.)

_____ Lockbox System
_____ Concentration Banking
_____ Depository Transfer Checks
_____ Pre-authorized Checks
_____ Point-of-Sale System
_____ Funds Remitted to Central Cash Account.

18. Please indicate the frequency with which bank deposits are made.

_____ Daily
_____ Every other day
_____ Two times weekly
_____ Weekly
_____ Every other week
_____ Monthly
_____ Other. Please specify _____.

19. Please rank, by order of frequency used, the following methods for delaying cash disbursements. (1=most used, etc.) (Please consult definitions on the pages following this survey.)

_____ Centralized Payables
_____ Selecting Disbursing Points for Divisions or Units
_____ Payable Drafts
_____ None
_____ Other. Please specify _____.

20. Which type of float system does your firm use? (Please consult definitions on the pages following this survey.)

_____ Check clearing
_____ Mail-time
_____ Handling or Processing
_____ Other. Please specify _____.

CASH MANAGEMENT PRACTICES, continued

21. What is the average length of your float?

_____ 1-3 days
_____ 3-6 days
_____ 7-9 days
_____ More than ten days

22. What type of computerized information system does your firm use to monitor cash balances? (Check all that apply.)

_____ Developed Within Your Organization
_____ Externally Purchased Software Package
_____ Externally Developed by Consultants
_____ None
_____ Other. Please specify _____.

23. Please specify your formal corporate title (e.g., treasurer, cash manager, etc.) _____.

24. Please specify the dollar value of your net corporate assets on your last Balance Sheet date _____, dated _____.

25. Please specify your annual sales from food and lodging operations in fiscal year 1982 _____.

DEFINITIONS

Banking Arrangements - an organization(s) which your firm holds responsible for lending, handling, holding, investing or otherwise servicing money and other instruments of claims to value.

Division - a substantial body of operating functions and responsibilities. May include a whole group of major companies comprising part of a corporation as well as a single substantial function within an organization.

Service Concept - an idea utilizing an organized system of apparatus, appliances and/or employees for supplying activities required by the customers.

Fairly Predictable - can predict cash flow 80% of the time.

Somewhat Predictable - can predict cash flows 50-80% of the time.

Unpredictable - highly variable; can predict cash flows less than 50% of the time.

Wire Funds Transfer - a method of payment which simplifies bank account control. A flexible method allowing fewer dollars to be in transit and larger amounts of dollars to rapidly transfer.

Payroll Management - used to directly deposit payroll checks via electronic funds transfers. Eliminates the cost of issuing payroll checks to employees. Deletes the payroll account and the necessity for compensating balances or fees assessed to the payroll account.

Zero-Balance Account - process allowing a centralized cash control where corporate disbursing agents write checks drawn on individual accounts with no balance. Checks are presented at the drawee bank where a debit balance accumulates in the zero-balance account which is offset by the firm's master account.

DEFINITIONS, continued

Short-Term Investing - used to invest idle funds which accumulate during peak business periods for use within one year. Examples include treasury bills, treasury notes, federal agency securities, certificates of deposit, commercial paper, and money market certificates.

Lockbox System - system where firms receive payments at a lockbox number controlled by the bank which in turn deposits cash into corporate cash

Concentration Banking - system which allows local banks to collect funds while actual information relative to the deposit is reported to a central source.

Depository Transfer Checks - system whereby checks move through the banks in the same manner as regular checks, but clear the Federal Reserve quickly.

Pre-Authorized Checks - system which allows funds to be collected by drawing directly on a customer's checking account.

Point-of-Sale System - a system where cash is collected at the time of the sale.

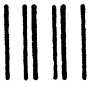
Centralized Payables - a system which allows the departments to send payment authorizations to a central location and emphasize fund concentration at a central source.

Payable Drafts - drafts which are presented to the company for payment rather than drawing on the firm's bank.

Check Clearing - a float system utilizing the time frame needed for the firm's check to clear the Federal Reserve and be debited to the corporate checking account.

Mail-time - a float system using the time necessary for accounts payable to reach their destination through the mail, allowing the accounts payable firm to utilize its cash without having funds available in the corporate checking account.

Handling or Processing - a float system utilizing the time it takes the corporation to process accounts payable payments.



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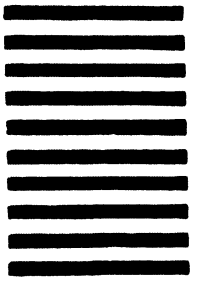

Appendix B

INTRODUCTORY LETTER OF THE SURVEY

center for research
in the hospitality
service industries

ADMINISTRATION
MICHAEL D OLSEN PhD
Executive Director
Virginia Polytechnic Institute
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CARL BELLAS, PhD
Associate Director
Virginia Polytechnic Institute
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SUSAN MILLS
KENNETH C MUNCH
CLINTON C NAPPOLE
ERIC ROGERS
DON PAUL SMITH
JANE V WALLACE
MAX S WORTMAN JR
Management

May 13, 1983

Dear Chief Financial Officer:

During periods of financial austerity, cash management has become an increasingly important managerial concern. Cash Management techniques are many and varied yet little is known about the extent of their use within the food service and lodging industry. We would like your help in remedying this situation.

Your firm is one of a small number of food service and lodging firms which are being asked to provide information on cash management practices. Your firm's name was obtained from the International Food Service Manufacturers Association and the financial officers league of the National Restaurant Association. In order that the results will truly represent the thinking of the national food service and lodging corporations, it is important that each questionnaire be completed and returned by May 27, 198 We would like the person responsible for the cash management function within your firm to complete this questionnaire.

You may be asssured of complete confidentiality. This questionnaire has an identification number for mailing purposes only. This is so your name may be checked off the mailing list when your questionnaire is returned. Your name will never be placed on this questionnaire. You may receive the summary of results by checking the appropriate box on the questionnaire.

Thank you for your assistance.

Sincerely,

Michael D. Olsen, Ph.D.
Executive Director - Center for Research in the
Hospitality Service Industries

MDO/sr

A JOINT EFFORT BY THE SOCIETY FOR THE ADVANCEMENT OF FOOD SERVICE RESEARCH AND
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

205 S main st blacksburg va 24060 703 951 8767

Appendix C

FOLLOW UP LETTER-SECOND MAILING

center for research in the hospitality service industries

ADMINISTRATION

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Executive Director
Virginia Polytechnic Institute and State University

CARL BELLAS, Ph D.
Associate Director
Virginia Polytechnic Institute and State University

S L FUTTERMAN, M P H
Administrator
Virginia Polytechnic Institute and State University

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Oneida Silversmiths

DON PAUL SMITH
President
Lineweal Inc

JANE Y WALLACE
Vice President
Editor-in-Chief
Rest & Inst Magazine

MAX S WORTMAN JR
The William B Stokely Professor of Management
Univ of Tennessee

June 20, 1983

Dear Chief Executive Officer:

About four weeks ago we wrote seeking information on your organization's cash management techniques. As of today, we have not received your completed questionnaire.

The Center for Research in the Hospitality Service Industry has undertaken this study because during periods of financial austerity, cash management has become an increasingly important managerial concern. Since cash management techniques are many and varied, little is known about the extent of their use within the food service and lodging industry.

We are corresponding with your organization again because of the significance each questionnaire has to the usefulness of this study. Your organization's name was obtained from the International Food Service Manufacturers Association and the Financial Officers League of the National Restaurant Association. In order for the results of this study to be truly representative of the opinions of all food service and lodging organizations' cash management techniques, it is essential that the person responsible for the cash management function complete this survey. Please return the completed questionnaire no later than July 8, 1983. In the event that your questionnaire has been misplaced, a replacement is enclosed.

You may be assured of complete confidentiality. This questionnaire has an identification number for mailing purposes only, so your name may be checked off a mailing list when the survey is returned. You may receive a summary of the results by checking the appropriate box on the questionnaire.

Your cooperation is greatly appreciated.

Sincerely,

Michael D. Olsen, Ph.D.
Executive Director
Center for Research
in the Hospitality Service
Industries

Enclosure

A JOINT EFFORT BY THE SOCIETY FOR THE ADVANCEMENT OF FOOD SERVICE RESEARCH AND VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

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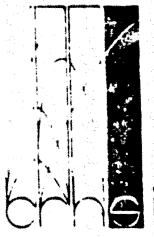
Appendix D

FOLLOW UP LETTER-THIRD MAILING



center for research in the hospitality service industries

ADMINISTRATION

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Virginia Polytechnic Institute and State University

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Virginia Polytechnic Institute and State University

S L FUTTERMAN M P H
Administrator
Virginia Polytechnic Institute and State University

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Univ of Massachusetts

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Univ of Houston

ERIC ROGERS
Manager of Marketing Services
Oneida Silversmiths

DON PAUL SMITH
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JANE Y WALLACE
[illegible]
Editor in Chief
Rest & Inst Magazine

MAX S WORTMAN JR
The William [illegible] Professor of Management
Univ of Tennessee

August 5, 1983

Dear Chief Executive:

About four weeks ago we corresponded with your organization for a second time seeking information on your firm's cash management techniques. As of today, we have not received your completed questionnaire.

The large number of questionnaires returned is very encouraging. However, in order to accurately describe cash management techniques in the food service and lodging industry our study depends upon your organization and other organizations which have not yet responded.

The Center for Research in the Hospitality Service Industry has undertaken this study because cash management has become an important managerial concern during periods of financial austerity. Presently, there is little knowledge of cash management techniques and the extent of their use within the food service and lodging industry.

We are corresponding with your organization for a third time because each questionnaire is significant to the usefulness of this study. To assure us that the results of this study are truly representative of all food service and lodging organizations' cash management techniques, please forward this survey to the person responsible for handling the cash management function within your organization. Please return the completed questionnaire no later than August 19, 1983. In the event that your questionnaire has been misplaced, a replacement is enclosed.

The questionnaire has an identification number for mailing purposes only, so your organization may be assured of complete confidentiality.

A summary of the results of this survey may be received by checking the appropriated box on the questionnaire. Your organization's contribution to the success of this study will be appreciated greatly.

Sincerely,

Michael D. Olsen, Ph.D.
Executive Director - Center for Research in the Hospitality Service Industries

Enclosure

A JOINT EFFORT BY THE SOCIETY FOR THE ADVANCEMENT OF FOOD SERVICE RESEARCH AND [illegible] INSTITUTE AND STATE UNIVERSITY

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