University of North Dakota

UND Scholarly Commons

Theses and Dissertations

Theses, Dissertations, and Senior Projects

11-1-1982

Current Trends In Cash Management

Frank-Mathew Canada Kahren

How does access to this work benefit you? Let us know!

Follow this and additional works at: https://commons.und.edu/theses

Part of the Business Commons

Recommended Citation

Kahren, Frank-Mathew Canada, "Current Trends In Cash Management" (1982). *Theses and Dissertations*. 4415.
https://commons.und.edu/theses/4415

This Independent Study is brought to you for free and open access by the Theses, Dissertations, and Senior Projects at UND Scholarly Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UND Scholarly Commons. For more information, please contact und.commons@library.und.edu.

CURRENT TRENDS IN
CASH MANAGEMENT

BY

Frank-Matthew Canada Kahren

B.A. in English

University of California, Berkeley, 1976

An Independent Study

Submitted to the Faculty of the

University of North Dakota

in partial fulfillment of the

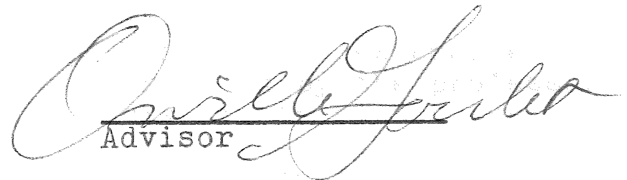
requirements for a Degree of

Master of Business Administration

Minot Air Force Base

November 1982

This independent study submitted by Frank-Matthew Canada Kahren in partial fulfillment of the requirements for the Degree of Master of Business Administration from the University of North Dakota is hereby approved by the Faculty Advisor under whom the work has been done.


Advisor

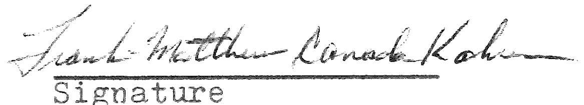
PERMISSION

Title: Current Trends in Cash Management

Department: School of Business and Public Administration

Degree: Master of Business Administration

In presenting this independent study in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the library of the AFIT Graduate School shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my independent study work or, in his absence, by the Resident Administrator. It is understood that any copying or publication or other use of this independent study or part thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of North Dakota in any scholarly use which may be made of any material in my independent study.


Signature

29 November 1982
Date

TABLE OF CONTENTS

Introduction 1
Cash Forecasting 3
Forecasting Methods 4
Long Term Forecasts 6
Managing Cash Flows 6
Corporate-Bank Relations 8
Investing Surplus Cash 10
Controlling 11
Methodology 11
Criterea for Analysis and Evaluation 12

Current Trends in Corporate Cash Management 13
Remote Disbursement 16
Electronic Funds Transfer 18
Fees vs Balances 21

Current Trends in Personal Cash Management 23

Conclusion 30

INTRODUCTION

Cash management is the process of administrating a firm's cash flow cycle. The four widely agreed upon general areas of cash management are 1) cash forecasting, 2) managing cash flows, 3) corporate-bank relations and 4) investment of surplus cash.

Procedures necessary to implement programs in each of these areas can be found in any given number of texts. Forecasting formats, zero balance accounts, lock box systems and yield curve strategies are all readily available. Furthermore, cash management procedures must involve a certain amount of stability and repetition. For instance, cash forecasts are usually made on standardized forms according to an established method. This may lead to two incorrect conclusions. First, that cash management, as we know it, has been around for quite a while and secondly, that cash management is a static endevour.

Conyngton, Bennett and Conyngton's voluminous Corporation Procedure published in 1927 does not refer to cash management as such at all. Particularly interesting is their view that surplus profits should be "jealously guarded

and conserved to the upbuilding of a substantial surplus - a much desired and distinguishing mark of a prosperous and well managed corporation. The general purpose of this accumulated surplus is to increase the resources, the reputation, the credit standing and the stability of the corporation."[1]

This vision of substantial funds lying inert is less a function of naivete than the state of financial markets of the period. As the financial environment has changed, cash management has developed and changed in order to take advantage of new opportunities and meet new challanges.

> "What's a corporate treasurer to do when inflation is proceeding at more than one percent a month? Make sure that idle cash balances during any particular month earn as close to that one percent as possible. . . . Most large firms turned daily cash management from an idle past time into an exciting and profitable operation. Computerized reports on available funds are scrutinized daily . The free balances are then put to work earning high rates of interest for a day or two or three."[2]

As inflation squeezes profit margins, companies are forced to operate more efficiently, putting every available dollar to work and keeping their balances in the best possible trim. It is for this reason that cash management is an area of continued developmant. It is the

---

[1] Conyngton, Bennett, Conyngton, Corporation Procedure, revised, (The Ronald Press Company, New York, 1927), p. 864.

[2] "Advice about Inflation Fighting Techniques", CPA Journal, March 1980, p.80.

purpose of this study to review current trends in cash management. First, however, it is necessary to outline the general areas of cash management.

CASH FORECASTING

Cash forecasts are essential to good cash management. A cash forecast may serve a number of purposes, among which are determining operating cash requirements, anticipating short term financing, managing money market investments, and gauging the impact proposed aquisitions or new product development will have on the firm's balance sheet in the future. Cash forecasts are divided into short term and long term forecasts. The generally accepted dividing line between the two is one year.

Short term forecasting serves to establish what funds will be needed for a given period. This forecast lets the manager know how much cash must be kept on hand, how much must be borrowed or how much is available for investment in the money market.

> "Still other reported applications include planning reductions in short or long term debt, scheduling payments in connection with capital expenditures programs, planning forward purchases of inventories, checking accuracy of long range cash forecasts, taking advantage of cash discounts offered by suppliers, and guiding credit policies."[1]

The Conference Board reports that, for the most part,

---

[1] Fisher, David, Cash Management, (The Conference Board, New York, 1973), p. 5.

three forecasting periods are widely preferred, "one month broken down by weeks, one quarter broken down by months, one year broken down by either quarters or months."[1]

FORECASTING METHODS

Two methods of forecasting are generally used, the receipts and disbursements method and the adjusted net income method. The receipts and disbursements method pinpoints what the company's inflows and outflows of cash will be for a given period. The forecast must include all significant receipts and disbursements to be effective. "Generally, the greatest problem with this type of forecast is estimating the receipts, not only their amounts but also when they will be collected." This information is usually gathered from either sales projections or guesses based on past experience. Both of these methods are prone to some degree of error. On the other hand, the company should have no trouble estimating disbursements since this information is readily available within the company. In addition, the company has some flexibility over when payments are made. This flexibility can be used as needed to fine tune the budget.

"The receipts and disbursements forecast is an excellent way of tracking cash flows for a limited period. However, this type of forecast does have its pitfalls. The biggest one is that it can conceal steady buildups that may

---

[1] Ibid.

[2] Fisher, David, Cash Management in the Moderate Sized Company, (The Conference Board, New York, 1972), p. 10.

be taking place in either accounts receivable or inventories."[1] To counter such a possibility, many companies supplement this forecast with the adjusted net income method.

> "An adjusted net income forecast concentrates on changes in balance sheet items, particularly the working capital accounts. It projects the company's need for cash at some future date and whether the company can generate the money internally and, if not, how much of it will have to be borrowed."[2]

The format of the adjusted net income forecast enables the forecaster to convert estimated earnings from an accrual basis to a cash basis, more importantly, to foresee the developing structure of the balance sheet. Net income can come from the profit budget and many items such as income tax, depreciation and dividends and can be relatively easily determined. The most difficult estimates are of working capital items. The accuracy of the forecast will depend upon these estimates. Estimates of accounts receivable, sales and inventory may be developed either through ratios or, if necessary, from the estimates of the affected departments.

> "The principle reason for employing the adjusted net income method is that it avoids the major weaknesses of the receipts and disbursements method by providing an accurate estimate of the cash position that takes into account the effect on cash by changes in working capital items."[3]

---

[1] Ibid.

[2] Ibid.

[3] Hill, Cash Management Techniques, (American Management Association, 1970), p. 20.

LONG TERM FORECASTS

Long term forecasts give only a rough sketch of a company's distant financing requirements. The forecast is used to determine what the company's future money needs will be as well as what the expected effect on cash flow will be by future ventures. A long term forecast is usually for two, three or five years. These forecasts are updated periodically but seldom more frequently than quarterly or semi-annually. While either the receipts and disbursements or the adjusted net income method may be used, the latter is widely preferred. "Cash managers say this method not only reflects more accurately the impact of any recent aquisitions but also foreshadows financing problems these new additions may pose for the company."[1]

MANAGING CASH FLOWS

"Modern cash management developed out of a custodial function - cash control and safekeeping. . . ."[2] In order to maintain control of cash disbursements, it is imperative that a company's financial control be centralized. This centralized management has the advantage of providing better control over timing of payments in order to ensure that bills are paid only as they come due or, if cash discounts are offered, that they are taken. It also helps streamline banking relations thus

---

[1]Fisher, David. Cash Management, (The Conference Board, New York, 1973), p.17.

[2]Op. Cit. Hill, p.23.

balances or excess fees. Finally, centralized control ensures the maximum employment of excess cash through short term money market investment. Under a splintered cash management system, much of these funds might not be utilized.

Centralized cash control utilizes three types of accounts; the imprest account, the zero balance account, and the automatic balance account. An imprest account establishes a fund for a division at its local bank. A budgeted amount is deposited for a given period. The division must provide receipts when replenishing the account at the end of the period.

The zero balance account sets up a general account to the company and a clearing account for the division. As checks are cashed on the division, the bank transfers funds from the general account. This consolidates payables into a single account as well as providing the company a means of determining their cash balance quickly and accurately.

The automatic balance account keeps an account at the divisions local bank at a specified level. Excesses are transferred to the central bank and any amount under the specified level is drawn from the central bank.

In addition to controlling payables and bank balances, good cash management requires speeding up collections.

> "Corporate treasurers have long known that rapid collection of debts owed to a company not only helps the firm pay its bills but also reduces its borrowing costs and promotes its earning additional income."[1]

Principally, it appears that the two methods that can aid this

[1] Op. Cit. Fisher, Cash Management, p. 25.

are area concentration banking and the lock box system.

The area concentration system is best suited to an organization with a large number of offices or stores which each have relatively small deposits. Sales offices are held responsible for collections which are made to local banks. The monies are then wired to regional centers. Those amounts which are in excess of the regional centers predetermined needs are forwarded to the company's major banks.

A lock box system establishes post office boxes to which customers mail their payments. Several times daily, the bank collects the payments, deposits them to the company's account while simultaneously forwarding listings to the company so they can post their accounts. This system cuts conversion time of payments to as little as two days and also imposes the clerical load of handling receivables upon the banks. However, a lock box system can be relatively expensive. "One New York bank, for example, estimates that it's cost of handling an individual lock box item runs about 15 cents and that when special servicing is called for, which many companies desire, this cost can double."[1]

CORPORATE-BANK RELATIONS

Most large corporations do business with a great many banks. The Conference Board puts this number at between 20 and 100, some use several hundred and a few use over 2000. It is through banks that companies implement their day to day

---

[1]Ibid. p. 28.

transactions, collecting receivables, paying bills, investing surplus cash. Two types of banks are used, large central banks for major banking services and local banks for general disbursements of the company's branches. A company uses relatively few major banks. These banks provide financing, manage the collection systems and handling short term investment transactions. These banks are selected by virtue of their financial condition, their lending limit, and whether their prices are competitive. Local banks are selected by location, price and whether they belong to the bank wire service.

Companies pay banks through either fees or compensating balances. Compensating balances are funds left in the bank so that banks can gain revenues through lending these balances. There is no hard and fast rule as to how much compensating balances should be. A line of credit generally requires a 10% compensating balance for the line of credit and 20% for the amount actually borrowed. "Typically they rely on some formula applied to your average daily available balance to come up with the income earned on your account. This figure is compared to the cost of services to your account and a profit or loss is determined for your account. These 'profit' statements should include the available balance for tax payment deposits and should be reviewed with the banks. If they are reluctant to do so, that may indicate that you have left too much money 'on the table'."[1] That is,

[1]Morely, "Cash Management, Working for the Extra 1% or 2%, Management Accounting, October, 1978, p. 19.

the compensating balances to which you have agreed are higher than need be.

INVESTING SURPLUS CASH

Surplus cash is money that exceeds a minimum cash balance needed to cover immediate operating expenses as well as minor contingencies. In addition, it is the amount in excess of compensating balances maintained at banks. The chief considerations in short term investing are price stability, marketability, maturity and yield. Investment philosophies are conservatively inclined, profit center oriented, or reasonable return oriented which is a compromise of the previously two. Why would companies want to bother tracking down surplus funds and investing them for as little as a single day? Perhaps because one million dollars invested for a single day at five percent yields $136.99. Many companies have such amounts available nearly every day. Based on a 365 day year, this amounts to an extra $50,001.35 less expenses. As long as this practice nets more that it costs, all is well. "According to Mr. Westoby, the Monsanto portfolio in the U.S. currently yields an average 10.55% on maturities averaging between 60 and 270 days. He also estimated that the active portfolio trading in which he engages is probably worth one quarter of a percentage point in additional yield. On a $300 million portfolio, for example, that amounts to $750,000 in a year."[1]

---

[1]Hertzberg, Daniel, "Corporate Investor: Managing Cash for Big Firm Requires a Fast Pace", The Wall Street Journal, 13 Aug. 1979, p. 1.

CONTROLLING

How much time does Mr. Westoby spend in short term investing? On the day of the Wall Street Journal interview, he had invested $30 million by 10:15 A.M. . The interest on the one days investment of $30 million "could earn Monsanto $8500 in interest"[1]. The rest of the day is spent attending to the other necessities of cash management. He has a staff of about one half dozen.

Cash managers may invest in Treasury Bills, state and municipal securities, bank certificates of deposit and the like. Generally, the greater the risk, the greater the yield. However, yield is not the sole goal of the cash manager. Safety is the watchword in a business where funds invested today may be required to pay the rent tomorrow. "Performance of a short term portfolio should be considered within the framework of the corporate objectives and management investment philosophy. . . ."[2]

METHODOLOGY

In seeking out new cash management techniques, the most thorough approach might be to question a large number of corporate treasurers and cash managers. It would be impossible, of course, to question them all. Cost and time constraints make this unworkable. A questionaire would be expensive and much too random. How would you know who was up to some-

[1]Ibid.

[2]Op. Cit., Hill, p. 63.

thing new? How many would respond with usable information?

Another approach would seem to be a survey of recent business publications. It is in an executive's best interest to publish articles in order to establish or maintain his standing among his peers as well as improve his value in the eyes of any future prospective employers. These articles are readily available, current, and ready to be evaluated and sorted according to their merits. There are also a number of institutions which market their cash management expertise to the small investor. Summaries of their services should be readily available.

Material will be presented in order as it applies to cash forecasting, managing cash flows, corporate-bank relations, and investment of surplus cash. In addition to these as they pertain to corporate entities, the new cash management services which are being offered to the small investor by some banks and investment firms will be examined.

CRITERIA FOR ANALYSIS AND EVALUATION

The items presented in this paper will, for the most part, need to be evaluated, point by point, on a qualitative basis. Where quantified results are available, they will be used. The ideas under scrutiny will be examined to see if they are new or a reorganization of old ideas. Ideas will not be ranked but rather grouped in the functional areas presented.

CURRENT TRENDS IN CORPORATE CASH MANAGEMENT

Cash management has long required a close working relationship between corporations and their banks. In a recent survey of 113 banks ranging in assets from 100 million to over 5 billion, 34.5% offered cash forecasting services for collections and disbursements.[1] The three main forecasting methods were regression and trend analysis, exponential smoothing, and percent of sales. Larger banks placed a greater emphasis on regression and trend analysis while the smaller banks preferred the percent of sales method. Banks also offer the standard cash collection and disbursements services, i.e. float forecasting, lock box, concentration and correspondent banking etc., as well as short term financing services. Large corporations may use a few of these services while a small to medium sized corporation may have it's bank perform all or nearly all of its cash management functions.

In an interview with Ed Everts, Assistant Vice-President and Operations Officer for the First Bank of Minot, several new services for the small business were outlined:

1) First Rate Fund, an automatically renewable retail repurchase agreement with a $3,000 minimum,
2) A Sweep Account, a combination NOW and retail repurchase agreement,

---

[1] Mathur, Iqbal, and Luisada, Penny J., "Cash Management Services Offered by Banks", The Bankers Magazine, July - August, 1980, p. 65.

3) Certificates of Deposit for periods ranging from seven to thirty-one days with a minimum deposit of $20,000.

4) Wholesale repurchase agreements ranging from $50,000 to $100,000.

The First Bank system also offers the smaller business faster collection of receivables through it's APEX automated clearinghouse with courier routes. While neither repurchase agreements nor automated clearinghouses are new, their availability to the small business is.

Clearly the relationship between professional cash management and the size of the firm benefiting from it has changed. Also changing is the relationship between banks and their own cash management departments. "Most non-credit services, including cash management, were simply made available to strengthen relationships, and those services tended to be paid for via demand deposit balances rather than pricing based on true costs. . . . Many banks are now looking to their cash management departments for future earnings growth."[1] In his article on the progressive evolution of cash management from a marketing mechanism to a profit center, Richard J. Poje maintains that there are four stages an institution may encounter, 1) launching the campaign, 2) fast tracking, 3) cash management sink, 4) harvesting for the long haul.

---

[1] Poje, Richard J., "Progressive Evolution of Cash Management", Bankers Monthly, 15 March 1982, p. 18.

When a bank launches the campaign which will put it into the cash management market, Poje maintains it is for either of two reasons, because they perceive an opportunity for profit or because they are responding to competitive pressure. As a rule, a stage I bank focuses on an already existing capability using an intuitive and enterpreneurial approach to product management. "Pricing and profitability are not subject to rigorous analysis in Stage I. Because entry costs are minimal, operating budgets are seldom formalized, and pricing is generally not determined with respect to profit targets or cost structure."[1]

Stage II or "fast tracking" begins at the point where a bank decides to broaden its cash management services. This is a period of rapid expansion of services, products and staff. Budgets increase dramatically but with the main concentration on growth. "A bank enters Stage II desiring to make investments that will expand the scope and profitability of the simple well-defined products introduced in Stage I. But expansion aimed at increased revenues and a broader customer base cannot be achieved without the kind of management framework that would define long-term profit and investment targets. By the end of Stage II, a bank is faced with serious managerial problems, reduced product quality, customer discontent and unfulfilled profit expectations."[2]

Stage III, cash management sink, is defined by a

---

[1]Ibid., p. 19.
[2]Ibid., p. 19.

shift from relationship dominated management to centralized management control emphasizing both market and financial performance. At this phase, senior management becomes more directly involved with reassessment, resource consolidation and a concerted drive to stem any losses incurred during stage II.

Stage IV is achieved as product areas become more sophisticated and specialized. "The bank does not try to offer all things to all customers as a rule. Product/ relationship managers, committed to senior management's charted plan, refine or create products geared to each targeted market segment."[1] Each bank that enters the cash management services market will not encounter all of these phases. There is no guarantee that a bank which enters stage I will eventually evolve to stage IV or that a bank encountering serious mismanagement in stage II will not leave the market altogether. What is important is that cash management has advanced to the point where the overall lifecycle of the line of business is scrutinized.

REMOTE DISBURSEMENT

Currently, one of the most controversial issues in cash management is remote disbursement. The Federal Reserve has defined remote disbursement "as a bank service offered to corporate customers with the explicit intent of delaying payment of the customers checks."[2] This delay in payment

[1] Ibid., p. 20.

[2] Beehler, Paul J., Cash Management: Principles and Practices for the '80s, (AMACOM, New York, 1980), p. 57.

is due to Federal Reserve float. A corporation writes checks on a small regional bank to pay bills mailed across the country. The payee deposits the check usually with the understanding that the bank grants availability immediately only to debit the customers account if the check is returned. Clearing the check may take four or five days. The payor is notified by the local bank of the exact amount owed each day. Since wire transfer results in same day availability of funds to the bank, the paying corporation can use the funds for several days while writing checks on an unfunded account.

The Federal Reserve is concerned with the potential risk that receipts of remotely disbursed payments may experience. "For example, a small manufacturing company selling to a larger firm could deposit a check for clearance against a remote disbursement point. During the ensuing days, the larger firm becomes insolvent. Because of the delay in payment of the deposited check, collected funds may not be available to make good the check. Although the probability of this situation is limited (there is only one documented case), the Federal Reserve is concerned with the potential liability with small companies and especially individuals."[1]

The advantage to the cash manager is a significant increase in control, additional float which reduces the need for short term capital funding, and to improve forecasting disbursement capability. There are also negative impacts. There may be a loss of creditability with critical suppliers

---

[1] Ibid.

if remote disbursement is used for cash short suppliers. Also, small suppliers may not have the cash flow to sustain being remotely disbursed upon.

In addition to other considerations, the Federal Reserve opposes remote disbursement because of its affect on Federal Reserve float. Federal Reserve float has increased from $3 billion to $6 billion over a period of three or four years. Remote disbursing techniques are regarded as the major contributors to this increase. "Efforts made by the Federal Reserve to reduce the practice of remote disbursement have included:

1) Telephone or personal contact of senior management officials of banks offering remote disbursement by the Federal Reserve
2) Increased scrutiny by bank examiners on settlement procedures between corporate customers and banks they are utilizing for remote disbursing
3) Implementation of a late deposit package sort program that will accelerate check collection in the Federal Reserve System
4) Initiation on an evaluation process for potential legislation directed against banks to control remote disbursement."[1]

ELECTRONIC FUNDS TRANSFER

A problem with many current procedures, even electronic

---

[1] Ibid., p. 60.

procedures, is that at some point they revert to a paper based system. A very large firm may use eighty or more lock boxes, (Kroger uses 800), but an effective EFT system would reduce the number significantly. Dr. Alan Lipis, an EFT consultant, predicts that future techniques will be all electronic and has identified several events which are forcing the change.

> "In particular, there are the Federal Reserve's new pricing program and it's plan to reduce float, which together he called the 'single most important thing that will impact on cash management'. He estimated that float was something on the order of $6 billion - a paper based, geographically sensitive scheme of things which benefits the banks to the tune of some $1 billion annually in revenues. . . . Lipis calls the implications of the Fed's actions 'quite staggering', and he predicts that corporations will wind up dealing with fewer banks, and in a more automated fashion, because of the higher clearing costs."[1]

Further, Lipis predicts the existance of fewer banks, stating that corporations will need banks with the latest techniques and interface with systems like Bank-Wire, SWIFT, CHIPS, and Fed Wire. "Technology, he says, will be more critical than geography."[2] He also suggests that higher collection and clearance costs, due to reduction of float, may prompt more corporations to take over those tasks themselves.

---

[1] "Cash Management Will Change in the 80's - With or Without Banks", ABA Banking Journal, December 1980, p. 38.

[2] Ibid.

An example of one of the new sophisticated float reducing systems is CHIPS, implemented on 1 October 1981. CHIPS is the Clearing House Interbank Payment System, an international electronic check-transfer system. It's function is to settle accounts between banks on the same day instead of on a next-day basis. It is believed that moving to same-day settlement will minimize the risk that a transaction can't be settled. "Some banks practice of carrying overnight huge debit positions - sometimes larger than those bank's net worths and then scurrying to find cover in the Fed funds market the next morning will come to an end."[1]

CHIPS should also eliminate weekend arbitrage, the means banks use to lower their reserve requirements by borrowing clearing house funds overseas on Friday but not covering until Monday. "On a $100 million transfer, with one day deposits earning 16% annual interest, that works out to an additional $87,671 in interest."[2]

"The primary stimulus for EFT activity to date has been the federal government, which generates approximately 86 percent of nationwide EFT volume."[3] As EFT becomes more prevalent, the following areas of cash management will be affected:

1) Reductions in the use of Depository Transfer Checks (DTC) by Automated Clearing Houses (ACH) which have a one day clearance time.

2) Reduction of remote disbursement policies by converting

---

[1] "CHIPS: Goodby to Next-Day Settlements", Business Week, 23 March, 1981, p.98.

[2] Ibid.

3 Op.Cit. Beehler, p.65.

payments of less than $1,000 to an EFT settlement to improve cost/benefit.

3) Increased funds will be available through dramatically accelerated receivables collection.

4) There will be reduced use of lock box services as preauthorized debit and EFT's reduce processing costs.

5) EFT will reduce a portion of check volume thus reducing account services.

6) There will be increased use of wire transfer services to help cash managers use their funds more effectively in the shorter allotted time frames.

FEES vs BALANCES

As banks and their corporate customers have changed their approaches toward cash management services there has also been a change in the attitude toward how those services should be paid for. Traditionally, banks have offered numerous services for which they were paid with compensating balances. This is still the predominant method of payment for loans with a compensating balance being required and a further balance required for the amount actually borrowed. Non credit services would be equated to compensating balances with the following formula: Compensating Balance Required =

$$\frac{\text{Monthly Service Cost} \times 12}{(1 - \text{Reserve Requirement})\ (\text{Earnings Credit Rate})}$$ [1]

[1] Op. Cit. Beebler, p. 63.

"For example, a service charge of $1,200 per month provided by a bank with a reserve requirement of 17.5% and offering an earnings credit rate of 8% would result in the following required compensating balance:

$$\frac{\$1200 \quad x \quad 12}{(1-.175)(.08)} = \$218,182$$"[1]

There has been a recent trend away from compensating balances because of the increasing value of dollar balances to the corporate customer. "Because the banks deduct reserve requirements as illustrated above, corporations feel the price they pay for services is higher than explicitly stated. Additionally, the earnings credit rate provided by the bank is typically lower than a corporation can earn by paying loans if it finds itself in a net borrowing position or investing in the commercial paper market."[2] Corporations view paying fees more favorably because it places cash management in a profit center environment not to mention that explicit fee payments are tax deductable. In addition, competition among banks has driven down prices for non credit services putting pressure on banks to identify their costs and price their services on an individually profitable basis.

---

[1]Ibid.

[2]Ibid.

CURRENT TRENDS IN PERSONAL CASH MANAGEMENT

Application of cash management techniques to the financial assets of the individual is, in itself, something of an innovation. Surely cash managers and others applied techniques they had used or seen used at work in the management of their own affairs where applicable. Wealthy families or individuals have employed the services of a professional financial manager or, knowing what was to be done, performed these services for themselves. Personal cash management, for the purposes of this paper, we take to be the very same cash management used by corporations; cash forecasting, controlling cash flows, individual-bank relations and investing surplus cash. Clearly, using this definition, two major problems appear for the individual cash manager: 1) the individual may not have the resources to enable him to use cash management techniques, that is, to manage cash, you need enough to make it worth while. 2) Even with sufficient funds, banks have been reluctant, to say the least, to offer the same services to the individual that they offer to the corporate customer.

These barriers to the cash management field were settled in the inflationary environment of the 1970's. As money markets rose to prominance and fewer savers were content with passbook rates equal to less than half the rate of inflation, the stage was set for a whole new group of financial services.

In 1977, Merrill Lynch introduced it's Cash Management Account[1] and a host of other firms like Bache, Dean Witter Reynolds, E.F.Hutton, and Shearson/American Express followed suit. In general, a central assets account requires a fee and an initial investment ranging from $1,000 to $25,000 and offers the following services; checking services, high interest savings through a money market fund, brokerage services, a credit or debit card and monthly statements that list and describe the various transactions during the period. Merrill Lynch charges an initial fee of $50 and a continuing annual fee of $35 and requires a minimum initial investment of $20,000. Dean Witter has the same minimum investment and has an annual fee of $30.

In order to gain a fuller understanding of a central assets account, a more detailed examination of two particular accounts may prove useful. The two selected are the Merrill Lynch Cash Management Account and the Dean Witter Active Assets Account. The Merrill Lynch CMA program consists of the securities account, three no load money funds and a Visa check/card account maintained by Bank One of Columbus, Ohio. The securities account is a conventional Merrill Lynch securities margin account, a government securities fund investing in direct U.S. Government obligations, a money market fund investing in money market securities, and a tax exempt fund investing in tax exempt securities and paying dividends exempt from federal income taxation.

---

[1] Merrill Lynch's Cash Management Account, or CMA, is a registered trademark. In the interest of simplicity, no attempt has been made to follow it with a sub-script each time it appears.

The free credit cash balances are automatically reinvested in shares of one of the funds designated by the investor. The reinvestment is made not later than the first business day of each week. Dividends of the money funds are declared daily and reinvested daily in additional shares. The limitations of the CMA Visa account are based on the real assets in the CMA account, the uninvested free credit cash balances in the securities account, the net asset value of the money fund shares and the available margin loan value of securities in the securities account. The Visa card is a debit card, not a credit card. Use of the Visa account reduces the value of the overall account.

The Dean Witter Active Assets Account is much like the Merrill Lynch CMA. There is a securities account, the money market, tax free and government securities funds and a debit card from Bank One of Columbus, Ohio. Other central asset accounts are described in the following table:

Source	Minimum Investment	Annual Fee	Card	Funds
Bache "Command Account"	$20,000 in Cash or Securities	$50	Debit	Money Mkt. Tax Free & Government
Dean Witter AAA	$20,000 in Cash or Securities	$30	Debit	Money Mkt. Tax Free & Government
E.F. Hutton "Asset Mgmt Account"	$10,000/Cash or $20,000 Securities	$100	American Express Gold	General Purpose Only
Merrill Lynch CMA	$20,000 in Cash or Securities	$35	Debit	Money Mkt. Tax Free & Government

Continued

Source	Minimum Investment	Annual Fee	Card	Funds
Shearson/ American Express "Financial Management Account"	$25,000 in Cash or Securities	$100	American Express Gold	Money Mkt. Tax Free & Government
MasterCard "Money Manager Account"	Varies among banks offering the account	Set by individual banks	Debit	General Purpose Only
Advest "Reserve Cash Account"	$10,000 in Cash or Securities	$25	Debit	Money Mkt. & Tax Free

At a glance, it becomes obvious that many of these accounts bear a striking similarity to the Merrill Lynch CMA, a similarity Merrill Lynch seems to have noticed. "We appreciate the flatter, says Merrill Lynch, but we want to be paid for our idea. Merrill, having patented the system, wants royalties from others using it. Eight firms have received stiffly worded letters to that effect. Payne Webber, which calls it's version Resource Management Account, both denies any patent infringment and questions the validity of the patent."[1]

The success of central asset accounts for the brokerage industry has forced the banking industry to respond. One response is the ". . . hybrid 'sweep accounts' already being offered come in numerous disguises, but they share a common element: above a certain minimum level on deposit, the bank has a customers funds 'swept' daily into a money fund, ...

---

[1]"Sincere Flattery", Forbes, 6 December, 1982, p. 108.

The Chase One Account combines a $5\frac{1}{4}\%$ NOW account with a sweep into funds. Assuming a fund yield of 12%, the blended yield on a $15,000 account would be 8.63%."[1] Crocker National Bank is introducing a Working Capital Account requiring an initial deposit of $20,000 in cash and/or securities and offering a money market yield, a credit line and other features similar to the Merrill Lynch account. Crocker will charge a $45 annual fee as well as a maintenance fee for accounts which fall below a certain level. Citibank is planning to test market a similar program.

"Thirteen state bankers associations in the midwest have created a new jointly owned subsidiary - the Mid-America Bankers Service Co., MABSCO for short. . . . MABSCO's first product for it's members is the Financial Management Account-a package of services that is straight out of Wall Street's book."[2] The FMA includes a NOW account with a money market sweep as well as other optional services such as a line of credit, a debit card, or discount brokerage services. Each bank tailors it's own package of services to suit it's own needs. These accounts closely resemble the Merrill Lynch CMA account and not without reason. While Merrill Lynch requires a $20,000 minimum, it also has 450,000 investor-customers with an average balance of $55,000 and some $40 billion in assets.

The potential for gain is obvious. In 1981 the money market funds increased from $75 billion to $186 billion. Much

---

[1]"Banks Blend with the Funds", Business Week, 24 May, 1982, p. 143.
[2]"Midwest Bankers Have Plan to Outfox Wall Street", ABA Banking Journal, February, 1982, p. 22.

of this gain was at the expense of banks. However, the banks run the risk of reducing their revenues by offering higher yields without gaining market share. It will not be enough for banks to take customers from each other, these new services will have to compete successfully with the brokerage houses.

Clearly, there are a number of services being offered by central asset accounts. Bache, for instance, offers Citicorp Password Service, travelers checks which can be ordered by phone and delivered to either home or office and Dean Witter allows check cashing up to $250 at any Sears. The question remains, however, of what cash management value are these services to the individual? With computerized, centralized accounts such as these, cash forecasting is greatly simplified. Forecasting of receivables is limited to the immediate availability of declared dividend payments but control over cash flows such as disbursements is enhanced. Since assets are centralized, tracking disbursements is greatly enhance. Many customers use the check writing services from these accounts instead of bank checking. With funds drawing interest until the checks clear and the service being free, many customers recoup their annual fee in check writing alone. Individual-bank relations are well defined with respect to lines of credit available and the extent of services offered. Investment of surplus cash is preplanned and hence, accelerated. These accounts offer convenience, high yields, automatic investment of interest, investment flexibility, detailed expense and transaction records in a single summary and

immediate account information on any business day. These services allow the individual investor many of the services available to corporations.

With all of these services, what are the disadvantages or potential disadvantages related to these accounts? First, it is possible for the capabilities of these accounts to exceed the skills of the individual investor. With the ability to immediately restructure his financial accounts, an undisciplined investor may be tempted to churn his accounts from equities to money market funds and back, generating nothing but service fees. Also, "the merging of capital and income violates a cardinal rule of personal as well as corporate financial management. The danger: you can start eating into principal without knowing it."[1] Here, the investor would do well to remember the potential hazards of a debit card. As with any service, a central asset account makes sense only if it satisfies a real need for the individual investor.

---

[1] "Adroit Personal Cash Management", Boardroom Reports, 15 Sept. 1982, p. 15.

CONCLUSION

Over the last several years, a number of changes have occurred in the field of cash management. Without empirical data, it would be inappropriate to claim to have isolated all or even the most important causal factors behind recent shifts in the field of cash management. However, having disclaimed absolute knowledge does not preclude a certain degree of educated speculation.

There appear to be at least four general forces shaping recent trends in cash management; evolutionary, environmental, technological and educational. To these one may also choose to add political. Remote disbursement is a practice currently drawing fire because of changes in the general financial environment as well as the political environment. As remote disbursement adds $3 billion to the float in the money supply of this country, the Federal Reserve takes it upon itself to reassert government control of the money supply. The government's tools are political change, moral suasion and technological innovation. Indeed, it may have been the technological innovation, computerized money wire systems, which brought the problem of remote disbursement into focus for the Federal Reserve. These combined forces and the changes they bring may be

called evolutionary. Electronic funds transfer is a technological innovation. It's wide-spread implementation will have educational and environmental impacts as world float grows inexorably smaller. The rising issue of explicit fees as opposed to compensating balances stems from a changing world in which cash managers, increasingly more mindful of the value of unemployed funds, seek to pay only for what they use. It may be added that as bankers become more aware of the difference between their client's apparent balance and their true net collected balance, stripped of that deceptive float, they too are rethinking traditional approaches to compensation.

In the area of personal cash management, causal factors are even more apparent because most features available today are recent. Competition for the funds of the individual investor has been spurred by the inflationary environment that made him fickle and restive, by the political environment which allowed so many types of institutions to compete for his money and by the technological and educational pressures which brought a panoply of responsive financial services within the grasp of persons of moderate means and then taught them to recognize their value.

What then does the future hold for cash management? In general, it is safe to say that technology will continue to reduce available float while giving financial managers the increased control over their cash flows to continue to play a game whose pace is accelerating while margins for

maneuver are narrowing. Corporate-bank relations will continue to become more well defined in terms of services and their attending costs. The government will continue to to strive to increase it's control over the money supply. The individual consumer will continue to enjoy an increasingly more centralized and liquid asset base regardless of his ability to avoid squandering slowly accumulated savings. Cash management itself may aquire a more prosaic and staid reputation. Rather than being perceived as a gimmick for getting something for nothing, it will, and in many cases has, become just another one of the many tasks that must be performed well in an increasingly demanding business environment.

Bibliography

Books

Beehler, Paul J. _Cash Management: Principles and Practices for the '80s_, New York: AMACOM, 1980.

Conyngton, Bennett, and Conyngton. _Corporation Procedure_, New York: The Ronald Press, 1927.

Fisher, David. _Cash Management_, New York: The Conference Board, 1973.

Fisher, David. _Cash Management in the Moderate Sized Company_, New York: The Conference Board, 1972.

Hill, Richard. _Cash Management Techniques_, New York: American Management Association, 1970.

Milling, Bryan E. _Cash Flow Problem Solver_, Radnor, Pa. : Chilton Book Company, 1981.

Periodicals

"Adroit Personal Cash Management", _Boardroom Reports_, 15 September, 1982.

"Advice About Inflation Fighting Techniques", _CPA Journal_, March, 1980.

"Banks Blend With the Funds", _Business Week_, 24 May, 1982.

Bonacore, Joseph J. "Getting a Picture of Cash Management", _Financial Executive_, May, 1980.

"Cash Management", _CPA Journal_, February, 1980.

"Cash Management Plans Draw Shipper Interest", _Chiltons Distribution_, January, 1980.

"Cash Management Will Change in the '80s - With or Without Banks", ABA Banking Journal, December, 1980.

"CHIPS: Goodbye to Next Day Settlements", Business Week, 23 March, 1981.

Hertzberg, Daniel. "Corporate Investor: Managing Cash for Big Firms Requires a Fast Pace", The Wall Street Journal, 13 August 1979.

Mather, Iqbal and Luisada, Penny J. "Cash Management Services Offered by Banks", The Bankers Magazine, July-August, 1980.

"Midwest Banks Have Plan to Outfox Wall Street", ABA Banking Journal, February, 1982.

Morely, James E. Jr. "Cash Management - Working for the Extra 1% or 2%", Management Accounting, October, 1978.

Nadler, Paul S. "Banking's Number 1 Enemy", Bankers Monthly, 15 September, 1979.

Poje, Richard J. "Progressive Evolution of Cash Management", Bankers Monthly, 15 March 1982.

Milne, John K. and Doyle, Stephen X. "Rx for Ailing Bank Trust Departments", The Bankers Magazine, May, 1980.

Renshaw, William. Adroit Cash Management", Boardroom Reports, 15 September, 1982.

Richards, Verlyn and Laughlin, Eugene J. " A Cash Conversion Cycle Approach to Liquidity Analysis", Financial Management, Spring, 1980.

Rosenstein, Jay. "A Financial Swiss Army Knife", Fact, July, 1982.

"Sincere Flattery", Forbes, 6 December, 1982.

"Time for a New Look at Corporate Cash Management?", ABA Banking Journal, May, 1980.

Interview

Everts, John. First Bank of Minot, Minot, North Dakota, 4 August, 1982.

Prospectuses

"The Dean Witter Reynolds Active Asset Account Program", New York, 26 February, 1982.

"The Merrill Lynch Cash Management Account Program", New York, 29 July, 1982.