

CHAPTER 1

INTRODUCTION TO MANAGING CORPORATE CASH

Objectives

After reading this chapter you will be able to:

- Understand the importance of managing corporate cash and how cash management is instrumental to the ongoing operations of a company
- Appreciate why cash managers are needed and the role they play in managing the day-to-day cash position and liquidity of the company
- Review the historical evolution of cash management through to the current day
- Learn the major terms, concepts and objectives of treasury and cash management

This chapter sets the stage for all subsequent chapters, which will develop the topics more fully throughout the book.

Introduction

Bill Fold is the treasurer of a diversified manufacturing and distributing company, General Trading and Delivery (GETDOE) that operates on a decentralized basis. The company grew primarily through acquisition of complementary businesses, with an assurance of minimal interference from corporate headquarters. To date the company's cash management has been managed very autonomously. Although other functions such as technology, legal and internal auditing have been centralized to achieve efficiencies and economies of scale, treasury remains highly decentralized.

Bill finds himself with an almost continuous liquidity problem, and is under daily pressure from the business units for operating funds and investment capital for plant and equipment. Meanwhile, the bankers are pressuring Bill for more non-credit business to augment the slim margins on the credit lines, and his boss, the chief financial officer, is demanding better and timelier information on the company's finances.

Bill believes the time has come for the treasury to be managed more efficiently in order to release the pockets of “unused” cash he suspects are hidden within the company. In order to analyze the current activities and to begin initiating improvements, Bill hires a cash manager with considerable experience, Ann I. Shade. Ann has been a cash manager for over 10 years and looks forward to the challenge of applying her skills in the new company.

What Is Cash Management?

Cash management is the art -- and increasingly the science -- of managing a company’s short-term resources to sustain its ongoing activities, mobilize funds and optimize liquidity. The most important elements are:

- The efficient utilization of current assets and current liabilities of a firm throughout each phase of the business operating cycle.
- The systematic planning, monitoring and management of the company’s collections, disbursements, and account balances.
- The gathering and management of information to effectively use available funds and identify risk.

Exhibit 1.1 presents the cash management model and illustrates how the primary cash management functions interrelate.

[Insert Exhibit 1.1 here]

Cash management comprises at least nine major functions:

1. Accelerating and efficiently collecting cash inflows
2. Concentrating collected funds
3. Controlling the timing of cash outflows
4. Securing adequate sources of short-term funds
5. Optimizing use of any temporary cash surpluses
6. Forecasting the cash position
7. Gathering timely information
8. Implementing the systems and services necessary to monitor, manage and control the cash position
9. Ensuring the internal and external transfer of financial data

Each of these functions will be discussed in greater detail when reviewing the responsibilities of the cash manager later in this chapter.

The Cash Management Profession

Managing corporate cash effectively is an integral part of a company's success. Advances over the last fifty years have resulted in a cash management discipline that has a significant impact on a company's bottom line and on shareholder value. In the process of this development, the profession has broadened its focus to encompass the functions of the treasurer (as treasury management) and financial management.

The Association for Financial Professionals (AFP) in the U.S. has more than 14,000 members and provides a source of ongoing professional development through its certification programs; the Certified Cash Manager (CCM) and Certificate in Finance and Treasury Management. A 550-page body of knowledge called "Essentials of Cash Management", now in its seventh edition, supports the CCM program. In addition there are 62 regional AFP and Treasury Management Associations. The AFP also supports its membership by providing, financial tools and publications, career development, continuing education, research, representation to legislators and regulators, and the development of industry standards

The Association of Corporate Treasurers (ACT) is an international organization with 18 regional groups in the U.K. and overseas. The ACT's objective is to encourage and promote the study and practice of corporate treasury management and related subjects. It offers extensive training opportunities and treasury related publications. The ACT's Certificate in International Cash Management (Cert CM) is offered in locations around the globe.

Technology has been putting tools in the hands of cash managers and providing solutions for the analysis and management of a company's cash position. Globalization has added complexity and new challenges, requiring knowledge of the cross-border management of funds, the implications of tax and risk exposure in the broader international environment.

Historical Perspective

The birth of cash management can be traced back more than one-half century when in 1947, RCA became one of the first companies to use a lockbox to accelerate collection of payments from dealers. According to the "Global Payments 2000/1 Report" of the Boston Consulting Group, by the year 2008, the worldwide cash management revenue associated with domestic and cross-border payments is estimated to reach almost \$310 billion per year.

Prior to the late 1940s interest rates were low -- March 1948 was when the 3-month U.S. Treasury Bill rate first rose to 1% -- and there was little incentive to manage cash flows on an active basis. However, when interest rates began to rise in the late 1960s -- the 3-month Treasury Bill rate was almost 8% by the end of the decade -- banks developed new investment vehicles to attract funds (e.g. the negotiable certificate of deposit), and companies began to manage cash more aggressively.

The 1970s saw the wide-spread use of one of the first major technological innovations in cash management, the lockbox model. These computer programs used mail times between cities and bank availability schedules (see Chapter 3) to develop optimal lockbox locations to minimize total collection float.

The 1980s produced a combination of conditions that encouraged the rapid adoption of cash management techniques:

- Significant inflation, driven to a large extent by the OPEC oil embargo of 1973-1974.
- High interest rates, with the prime rate reaching nearly 20% by 1980.
- Financial innovation, including the first products to cross traditional financial services boundaries, such as Merrill Lynch's cash management account (CMA).
- Technological advances in electronic banking, including treasury information systems (see Chapter 6) and the introduction of Automated Teller Machines (ATMs).

Financial innovation gave rise to new products and services to meet the needs of the corporate customer, including:

- Remote (later "controlled") disbursement: Takes advantage of the time checks take to clear.
- Depository Transfer Checks (later ACHs): Permits the transfer of funds from local collection banks to concentration banks.
- Automated Clearing House (ACH) transfers: Introduces an electronic payment alternative to wire transfers for low value, non-urgent transfers.
- Bank balance reporting: Provides previous day balances and transaction detail electronically.
- Commercial paper: Offers large companies a less expensive short-term borrowing mechanism than traditional bank lending.

In the 1980s, the personal computer (PC), which later spawned the treasury workstation (TWS), began the revolution that would transform the role of the cash manager from being a gatherer of data to being an

analyzer and user of information. With the TWS performing the routine data gathering functions, the liberated cash manager can now focus on interpretation of trends, forecasting, risk management, and the optimization of liquidity.

During the 1990s, technological developments progressed even more rapidly, and deregulation of the banking industry continued. The most significant milestones of this decade were:

- The Interstate Banking and Branch Efficiency Act of 1994 effectively replaced the 1927 McFadden Act, permitting banks to branch nationwide by 1997. (See Chapter 8.)
- The 1933 Glass-Steagall Act was repealed by the passage of the Gramm-Leach-Bliley Act (1999). This legislation deregulated financial services and permitted such mergers as the Travelers Insurance Company and Citibank, creating the new financial powerhouse, Citigroup. (See Chapter 8.)
- The development of electronic data interchange (EDI) and its successor electronic commerce (EC) began to change the nature of the trade cycle and how business is conducted; see Chapters 2 and 10.
- The Economic and Monetary Union (EMU) was launched at the end of the last century, introducing a centralized European Central Bank and a single currency, the euro, for eleven European countries. This significant development promises new and future efficiencies in cross-border liquidity management as harmonization continues to evolve throughout the EMU and new countries join the union (see Chapter 7).
- Technology enabled the centralization of treasury and/or outsourcing of selected functions, such as collections and disbursements, resulting in a more efficient and cost-effective treasury organization.

The trends of the 21st century are already emerging. Banks are finding themselves in fierce competition with non-bank providers as suppliers of financial services. At the same time, credit is becoming a scarcer commodity for corporate borrowers, and treasurers are learning to reduce their dependence on cheap short-term loans. The Internet has brought the world to the doorstep of even the smallest company. In addition, the Web is reengineering business processes and the way in which companies

assess their core competencies. Cash management is headed for interesting times.

Why Cash Managers Are Needed

The cash manager is responsible for managing the imbalances between a company's cash inflows and cash outflows caused by both the operating cycle and the nature of cash flows. An understanding of both concepts is necessary, and especially how they relate to individual companies and their industry.

The Operating Cycle and the Cash Flow Timeline

For the majority of companies the operating cycle consists of buying raw materials, converting them into goods and services and selling the finished goods. (See Exhibit 1.2)

[Insert Exhibit 1.2 here]

The operating cycle, in turn, defines the cash flow timeline, i.e. the timing of cash inflows and cash outflows. Exhibit 1.3 illustrates the connection between the operating, cash, trade and accounting cycles.

[Insert Exhibit 1.3 here]

The usual pattern is for cash outflows to precede inflows. The purchase of raw materials leads to additional, ongoing expenses associated with the conversion process. And a sale does not necessarily result in an immediate cash inflow. A company will need sufficient liquidity to finance the operations until funds are actually collected.

In the above example, a restaurant buys fresh produce in the morning, transforms the ingredients into meals that are then sold and paid for during the day. The time between when the cash disbursements are made and the cash is collected is less than a day, i.e. the business has an 18 - 24 hour cash flow cycle.

At the other end of the spectrum, the aircraft industry has a considerably longer operating and cash flow cycle. Years are spent on design and development, preceding contract negotiations for the purchase of raw materials. This is followed by a protracted manufacturing and testing phase, after which a sale is concluded, usually, on a long-term lease basis.

There are a few industries with a reverse cash flow cycle, although these are the exception rather than the rule. For example, in the insurance

business policyholders pay premiums in advance, and claims settle after the cash inflow has been received.

The role of the cash manager, in every case, is to ensure that there are sufficient funds for the company to continue in business until the completion of the cash flow cycle. However, each cash manager will perform very different roles, face different challenges, and employ different cash management techniques to assure their company's ongoing operation and liquidity.

Liquidity is not to be confused with profitability or net worth. It is possible for a company that is profitable and with significant assets to go bankrupt from lack of operating (or "working") capital. For example, an airline company can own many valuable assets such as aircraft, landing slots and real estate, but their inability to pay for even one day's fuel can put them out of business.

The Nature of Cash Flows

In managing working capital, the cash manager is challenged by the variable nature of cash flows. Cash flows can be:

- Mistimed: Outflows often precede inflows.
- Mismatched: Inflows may not entirely cover outflows.
- Irregular: Inflows may be uneven. Many seasonal businesses, e.g., retailers and the tourism industry face extra challenges in managing cash. Inflows are concentrated during peak months of activity but operating expenses continue throughout the year.
- Unpredictable: Cash flows can be difficult to forecast. Bills may be presented earlier than anticipated or the collection of funds may take longer than forecast. The unpredictability factor increases significantly in cross-border business.

The cash manager performs an important role, balancing the company's borrowing and investment activities to maintain the minimum level of liquidity required to sustain the company through the cash cycle.

Positioning the Cash Manager

Although no two companies have identical structures, the cash manager typically reports to the treasurer, who in turn reports to the Chief Financial Officer (CFO) of the company. See Exhibit 1.4 for a representative organization chart.

[Insert Exhibit 1.4 here]

In the Real World

There is no such thing as a “typical” organization. Each company will evolve a structure that is appropriate to its size, business and priorities. In larger companies it is usual to see a greater segregation of responsibilities than in smaller companies, where separation of duties is not always economically possible. However, one emerging organizational development that appears to be present in most global companies is the centralization of treasury and finance, to concentrate expertise and bank contact in a single location.

The CFO is responsible for managing the company’s financial position and for quantifying the impact of any capital budgeting or strategic investment decisions being considered. The CFO is usually part of the senior management team, reporting to the president or chief executive officer (CEO). The major functions that report to the CFO include the treasurer and the comptroller.

- The treasurer will typically be responsible for cash management, overseeing bank relationships, including bank borrowing, (short and long term), liquidity management, foreign exchange, risk management, corporate finance and the management of pension assets.
- The comptroller manages the budgeting and planning group, the accounting department, (financial reporting, tax reporting and internal auditing), and the accounts receivable and accounts payable functions.

The division of labor between the treasurer and the comptroller is important to ensure that adequate controls are maintained between those who record cash to be disbursed and received, and those who actually initiate the movement of funds.

The cash manager’s primary function is to ensure that there are enough *sources* of funds to cover the *uses* of cash required by the company’s operating cycle. Sources of funds can be internal, for example, pockets of cash elsewhere in the company, or external, such as from maturing or liquidated investments, borrowing or the sale of assets, goods or services. The uses of cash include ongoing operating expenses, cost of goods sold, payroll, taxes, repayment of interest or debt, or, in the case of an excess of funds, investments.

The cash manager’s time horizon is usually three to six months. Any decisions requiring long-term financing or investment are typically referred

to the treasurer level. In order to perform the role effectively, the cash manager has to receive and share information with numerous internal and external sources.

The Role of the Cash Manager

The cash manager's primary day-to-day responsibilities include:

- Ensuring adequate liquidity: maintaining sufficient liquidity reserves to meet the short-term obligations of the company (current liabilities). This requires that sufficient credit is available and that any surplus funds are invested in short-term instruments that can be quickly and easily liquidated.
- Managing daily cash flows: monitoring funds that are received or disbursed, initiating payments and transfers, controlling cash balances in the bank, and moving funds as necessary.
- Optimizing use of cash resources: determining the best use of temporary surplus cash. Leaving balances idle in a disbursement account is not a good use of cash. Assuming that the company is paying a higher rate to borrow than the bank is paying on investments, the best use of funds is to reduce interest expense by repaying debt.
- Procuring cost-effective financing: arranging access to sufficient *unused* borrowing capacity, both short and long-term, in a timely and cost effective manner. This means that adequate bank relationships are required to assure the necessary levels of funding for the company. The most expensive form of financing is last minute, unanticipated borrowing.
- Assessing, monitoring and controlling risk: understanding the nature and scope of financial risks. As companies globalize, the traditional areas of commercial, interest rate and commodity risk are augmented by foreign exchange and country risks. The increased use of technology also adds a new kind of risk to be monitored and controlled.
- Producing timely and accurate short-to-medium term cash forecasts: using forecasting tools to enhance the company's liquidity management, financial control, cost control and capital budgeting.
- Managing banking relationships: ensuring that the right services are available and are being provided for a "fair" price. This often

involves a trade-off between the level of service, timeliness and cost control.

- **Managing information:** collecting timely and accurate information. The cash manager is not only dependent upon the inflow of information but is also responsible for providing and coordinating data to other internal sources. The information is crucial for the management of funds, accurate forecasting, risk management, updating internal accounting systems and risk management.

In The Real World

The former chairman of Citibank, Walter Wriston, stated that “Information about money will become more important than the money itself”. In today’s global economy that was never truer. Unless one is aware that funds are in an account, they may remain idle and unused. The role of the banks in cash management has evolved from primarily processing payments and deposits to being a major provider of information. Increasingly, banks are actively supporting their clients as they move into the world of electronic commerce by sourcing and supplying real-time, detailed, consolidated information.

Important Concepts

The following are six critical concepts in treasury and cash management.

1. *Float.* Float refers to delays in the process of collection, concentration, or disbursement. In the business cycle, float can occur at various points, beginning with the time it takes to issue an invoice and ending when the payer’s account is debited. Float is a zero-sum game. Increases in float are to the benefit of the disburser. Conversely, efficiencies in reducing float will be at the cost of the disburser and to the benefit of the person receiving funds. The diagram in Exhibit 1.5 illustrates where float can arise.

Cash managers spend much of their time managing disbursement and collection float. They are concerned with the float that occurs between the time a payment is due and when the funds become available, if collecting, and the time between when a payment is due and when the funds are debited to the account, if disbursing. Depending on the context and circumstances, every cash manager is both a disburser and a collector of funds. Chapters 3 and 4 on collections and disbursements, respectively, discuss the different types of float and how they are managed.

[Insert Exhibit 1.5 here]

Availability

Availability refers to the time when funds become usable by the corporate depositor. Depending on the type of instrument being deposited, availability can vary from immediate, as with wire transfers, to two business days for checks issued through U.S. commercial banks distant from where they are deposited. Banks issue complex availability schedules that determine the length of time customers must wait until they can use deposited funds based on the originating point of a check and the drawee bank. (See Chapter 3.)

Finality

Finality refers to the point in time at which deposited funds become irrevocable and may not be returned without the prior consent of the payee. For large or urgent transactions, finality is often more important than availability. Wire transfers become available and final upon confirmation of receipt of the wire by the Federal Reserve. Checks may become available but not final until several days later, as they can be debited back from the account if rejected by the drawee bank.

Time Value of Money

Time Value of Money refers to the concept that cash has a higher value today rather than tomorrow. Cash today can be invested or used to pay down loans. This concept is important for cash managers for a number of reasons:

- Determining the cost/benefit of a cash management product: In analyzing the cost effectiveness of a lockbox, the cash manager will need to offset the benefit of the accelerated funds flow against the cost of the lockbox.
- Assessing the value of cash discounts: Vendors may offer a discount for early payment of an invoice. Cash managers need to calculate the value of taking the trade discount against the other uses to which they could be putting the money, or the cost of borrowing money to pay early.
- Making capital budgeting decisions: When determining whether or not to proceed with a project that will necessitate a cash outflow in the present but will result in a cash inflow in the future, the cash manager needs to determine whether the present value of the inflows is greater than the cost of undertaking the project.

- Investing surplus funds: When evaluating the returns on different types of investments, the cash manager needs to be able to bring all of the future returns to a comparable basis before assessing which instrument has the best return.

Opportunity Cost

Opportunity cost is the cost of a foregone alternative use of funds. It is relevant in evaluating a suboptimal situation in comparison to implementing changes toward achieving an ideal solution, for example, attaining the lowest cost in a collection system. Opportunity cost is measured as the cost of the alternative use of funds, such as the lost investment income when idle balances remain in disbursement accounts, or the cost of missed or early payments.

Idle Balances

Idle balances (sometimes referred to as transaction balances) refer to funds that are in a bank account without earning interest. There is an inferred opportunity cost in allowing funds to remain idle.

Tips and Techniques

Idle balances are largely the result of the remaining provisions of Regulation Q (see Chapter 8) that prohibits the payment of interest on corporate demand deposits. Cash managers have a number of tools available to reduce idle balances, such as controlled disbursement accounts and sweep accounts. These tools will be discussed in Chapters 3 and 5.

Summary

In this chapter, we have discussed the major concepts of treasury and cash management and why there is a need for companies to manage their cash efficiently. The following chapters will examine the topics of managing corporate cash in more detail.

A knowledge of the nature of the banking system, the payment mechanisms and the legislation that impacts cash management are necessary in order to appreciate how the discipline of cash management evolved. Chapters 2, and 8 are devoted to these topics. It is also important to understand the practical aspects of collections, disbursements, concentration, liquidity and international cash management and to know where to look for improvements and efficiencies. These subjects are discussed in Chapters 3, 4, 5 and 7. Other important topics such as

treasury information systems and managing banking relationships are looked at in chapters 6 and 9 respectively. The final chapter is a summary of the important trends and how treasurers should be positioning themselves to manage corporate cash in the current environment.

In addition to the corporate case study which will set the scene for every chapter, the “Tips & Techniques” section highlights realistic advice for the cash manager; while “In the Real World” provides insights into how the theory relates to the actual business world.

The appendices include a list of Websites of Useful Sources of information, a Suggested Reading list with other valuable references, as well as tables of the NACHA formats and SWIFT Message Types most important to the cash manager.

Managing corporate cash is a major challenge for companies and becoming increasingly complex. However, doing it well can have as much impact on company results as a significant new product introduction.

As very little has changed over the last 10 years in the way GETDOE manages its cash, there appear to be many opportunities for significant improvements in the treasury group that will realize some immediate bottom line efficiencies. Ann will not only be responsible for recommending and implementing the changes, but also for ensuring that Bill and the CFO understand the nature of the innovations and their impact. The CFO comes from the accounting side of the business and until now, has had no treasury background. Educating the CFO and Bill will be an important part of Ann’s role.