Working Capital Management

CODE – KMBFM04

UNIT- 2

Management of Cash and Marketable Securities

Meaning of Cash

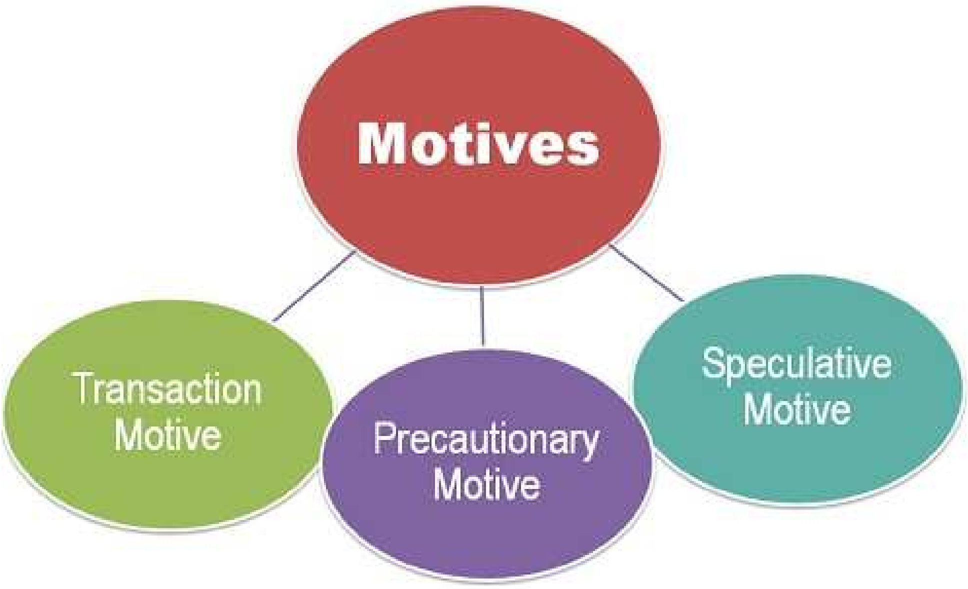
Cash is the most liquid asset a company can own. A company's cash account in its chart of accounts includes all currency and coins owned by the company as well as all deposits in the bank including checking accounts and savings accounts. Cash also includes instruments or contracts that can be deposited in a bank account like vendee checks, customer checks, cashier's checks, certified checks, as well as money orders.

The cash account, like all asset accounts, is a debit account. This means that debit or left entry in the cash account would increase the cash account. A credit entry would do the opposite.

Motives for holding Cash

The Motives for Holding Cash is simple, the cash inflows and outflows are not well synchronized, i.e. sometimes the cash inflows are more than the cash outflows while at other times the cash outflows could be more. Hence, the cash is held by the firms to meet the certain as well as uncertain situations.

Majorly there are three motives for which the firm holds cash



1. **Transaction Motive:**

The transaction motive refers to the cash required by a firm to meet the day to day needs of its business operations. In an ordinary course of business, the firm requires cash to make the payments in the form of salaries, wages, interests, dividends, goods purchased, etc.

Likewise, it also receives cash from its sales, debtors, investments. Often the firm's cash inflows and outflows do not match, and hence, the cash is held up to meet its routine commitments.

Therefore a firm needs cash to make payments for acquisition of resources and services for the normal conduct of business.

2. **Precautionary Motive:**

The precautionary motive refers to the tendency of a firm to hold cash, to meet the contingencies or unforeseen circumstances arising in the course of business. Since the future is uncertain, a firm may have to face contingencies such as an increase in the price of raw materials, labor strike, lockouts, change in the demand, etc. Thus, in order to meet with these uncertainties, the cash is held by the firms to have an uninterrupted business operations. Therefore a firm keeps additional funds to meet any emergency situation.

3. **Speculative Motive:**

Some firms may also maintain cash for taking advantages of speculative changes in prices of input and output. These firms hold cash for the speculative purposes to avail the benefit of bargain purchases that may arise in the future. For example, if the firm feels the prices of raw material are likely to fall in the future, it will hold cash and wait till the prices actually fall.

Thus, a firm holds cash to exploit the possible opportunities that are out of the normal course of business. These opportunities could be in the form of the low-interest rate charged on the borrowed funds, expected fall in the raw material prices or favorable change in the government policies.

Thus, the cash is the most significant and liquid asset that the firm holds. It is significant as it is used to pay off the firm's obligations and helps in the expansion of business operations.

Cash Management

Management of Cash involves three things: (*a*) managing cash flows into and out of the firm, (*b*) managing cash flows within the firm, and (*c*) financing deficit or investing surplus cash and thus, controlling cash balance at a point of time. It is an important function in practice because it is difficult to predict cash flows and there is hardly any synchronisation between inflows and outflows.

- ***Cash management is concerned with the managing of:***
    - ***cash flows into and out of the firm,***

- ***cash flows within the firm, and***
- ***cash balances held by the firm at a point of time by financing deficit or investing surplus cash***

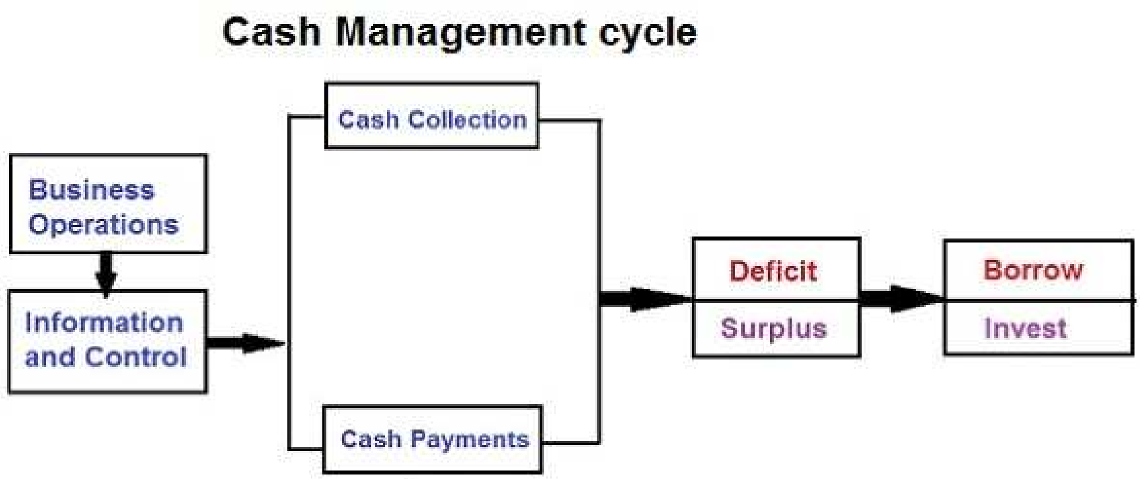
Four Facets of Cash Management

- ***Cash planning***
- ***Managing the cash flows***
- ***Optimum cash level***
- ***Investing surplus cash***

Objectives of Cash Management

The **Cash Management** is concerned with the collection, disbursement and the management of cash in such a way that firm's liquidity is maintained. In other words, it is concerned with managing the cash flows within and outside the firm and making decisions with respect to the investment of surplus cash or raising the cash from outside for financing the deficit.

The objective of cash management is to have adequate control over the cash position, so as to avoid the risk of insolvency and use the excessive cash in some profitable way. The cash is the most significant and highly liquid asset the firm holds. It is significant as it is used to pay the firm's obligations and helps in the expansion of business operations.



The concept of cash management can be further understood in terms of the cash management cycle. The sales generate cash, and this has to be disbursed out. The firm invests the surplus cash or borrows cash in case of deficit. Thus, it tries to achieve this cycle at a minimum cost along with the liquidity and control.

An optimum cash management system is one that not only prevents the insolvency but also reduces the days in account receivables, increases the collection rates, chooses the suitable investment vehicle that improves the overall financial position of the firm.

The importance of the cash management can be understood in terms of the uncertainty involved in the cash flows. Sometimes the cash inflows are more than the outflows, or sometimes the cash outflows are more. Thus, a firm has to manage cash affairs in a way, such that the cash balance is maintained at its minimum level while the surplus cash is invested in the profitable opportunities.

This overall objective can be translated into the following operational goals:

(i) To satisfy day-to-day business requirements;

(ii) To provide for scheduled major payments;

(iii) To face unexpected cash drains;

(iv) To seize potential opportunities for profitable long-term investment;

(v) To meet requirements of bank relationships;

(vi) To build image of creditworthiness;

(vii) To earn on cash balance;

(viii) To build reservoir for net cash inflow till the availability of better use of funds by conscious planning;

(xi) To minimize the operating cost of cash management.

Cash Planning

- **Cash planning is a technique to plan and control the use of cash.**
- **Cash Forecasting and Budgeting**
  - **Cash budget is the most significant device to plan for and control cash receipts and payments.**
  - **Cash forecasts are needed to prepare cash budgets**.

Short-term Cash Forecasts

  - ***The important functions of short-term cash forecasts***
    - To determine operating cash requirements
    - To anticipate short-term financing

- To manage investment of surplus cash.

- ***Short-term Forecasting Methods***

  - The receipt and disbursements method

  - The adjusted net income method.

The Receipt and Disbursements Method

Receipts and Disbursements Method is employed to forecast for shorter periods. The individual items of receipts and payments are identified and analysed. Cash inflows could be categorised as: (*i*) operating, (*ii*) non-operating, and (*iii*) financial. Cash outflows could be categorised as: (*i*) operating, (*ii*) capital expenditure, (*iii*) contractual, and (*iv*) discretionary. Such categorisation helps in determining avoidable or postponable expenditures.

- **The virtues of the receipt and payment methods are:**

It gives a complete picture of all the items of expected cash flows.

It is a sound tool of managing daily cash operations.

- **This method, however, suffers from the following limitations:**

Its reliability is reduced because of the uncertainty of cash forecasts. For example, collections may be delayed, or unanticipated demands may cause large disbursements.

It fails to highlight the significant movements in the working capital items.

The Adjusted Net Income Method

Adjusted Income Method uses proforma income statement (profit and loss statement) and alance sheet to work out cash flows (by deriving proforma cash flow statement). As cash flows are difficult to predict, a financial manager does not base his forecasts only on one set of assumptions. He or she considers possible scenarios and performs a sensitivity analysis. At least, forecasts under optimistic, most probable and pessimistic scenarios can be worked out.

- **The benefits of the adjusted net income method are:**

It highlights the movements in the working capital items, and thus helps to keep a control on a firm's working capital.

It helps in anticipating a firm's financial requirements.

- **The major limitation of this method is:**

It fails to trace cash flows, and therefore, its utility in controlling daily cash operations is limited.

Long-term Cash Forecasting

- **The major uses of the long-term cash forecasts are:**

It indicates as company's future financial needs, especially for its working capital requirements.

It helps to evaluate proposed capital projects. It pinpoints the cash required to finance these projects as well as the cash to be generated by the company to support them.

It helps to improve corporate planning. Long-term cash forecasts compel each division to plan for future and to formulate projects carefully.

Factors Determining Cash needs

The working capital needs of a firm are influenced by numerous factors. The important ones are:

- Nature of business.
- Seasonality of operations.
- Production policy.
- Market conditions.
- Conditions of supply.

Nature of business:

The working capital requirement of a firm is closely related to the nature of its business. A service firm, like an electricity undertaking or a transport corporation which has a short operating cycle and which sells predominantly on cash basis, has a modest working capital requirement. On the other hand, a manufacturing concern likes a machine tools unit, which has a long operating cycle and which sells largely on credit, has a very substantial working capital requirement.

Seasonality of operations:

Firms which have marked seasonality in their operations usually have highly fluctuating working capital requirements. To illustrate, consider a firm manufacturing ceiling fans. The sale of ceiling fans reaches a peak during the summer months and drops sharply during the winter period. The working capital need of such firm is likely to increase considerably in summer months and decrease significantly during the winter period. On the other hand, a firm manufacturing product like lamps, which have even sales round the year, tends to have stable working capital needs.

Production policy:

A firm marked by pronounced seasonal fluctuation in its sales may pursue a production policy which may reduce the sharp variations in working capital requirements. For example, a manufacturer of ceiling fans may maintain a steady production throughout the year rather than intensify the production activity during the peak business season. Such a production policy may dampen the fluctuations in working capital requirements.

Market Conditions:

The degree of competition prevailing in the market has an important bearing on working capital needs. When competition is keen, a larger inventory of finished is required to promptly serve customers who may not be inclined to wait because other manufacturers are ready to meet their needs.

Further, generous credit terms may have to be offered to attract customers in a highly competitive market. Thus, working capital needs tend to be high because of greater investment in finished goods inventory and accounts receivable.

If the market is strong and competition weak, a firm can manage with a smaller inventory of finished goods because customers can be served with some delay. Further, in such a situation the firm can insist on cash payment and avoid lock-ups of funds in accounts receivable –it can even ask for advance payment, partial or total.

Conditions of supply:

The inventory of raw materials, spares, and stores on the conditions of supply. If the supply is prompt and adequate, the firm can manage with small inventory. However, if the supply is unpredictable and scant, then the firm, to ensure continuity of production, would have to acquire stocks as and when they are available and carry large inventory on an average. A similar policy may have to be followed when the raw material is available only seasonally and production operations are carried out round the year.

Cash Management Models

Optimum Cash Balance

Optimum Balance of Cash A firm should hold an optimum balance of cash,and invest any temporary excess amount in short-term (marketable) securities.In choosing these securities, the firm must keep in mind safety, maturity and marketability of its investment.

- ***Optimum Cash Balance under Certainty: Baumol's Model***
- ***Optimum Cash Balance under Uncertainty: The Miller–Orr Model***

Cash Management Model # 1. William J. Baumol's Model:

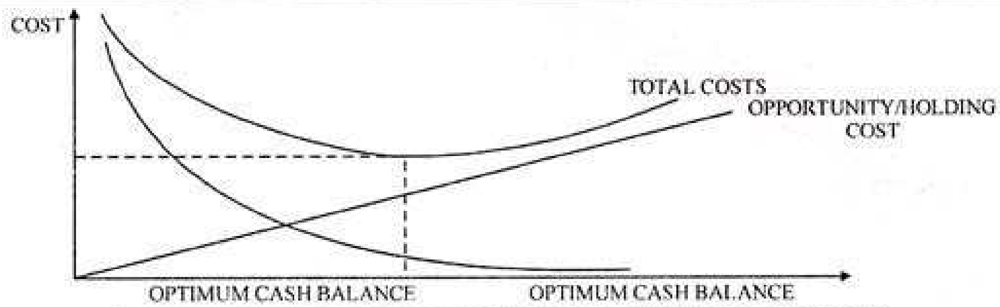
William J. Baumol developed a model (The Transactions Demand for Cash: An Inventory Theoretic Approach) which is usually used in inventory management but has its application in determining the optimal cash balance also. Baumol found similarities between inventory management and cash management.

As Economic Order Quantity (EOQ) in inventory management involves tradeoff between carrying costs and ordering cost, the optimal cash balance is the tradeoff between opportunity cost or cost of borrowing or holding cash and the transaction cost (i.e. the cost of converting marketable securities into cash etc.) The optimal cash balance is reached at a point where the total cost is the minimum. The figure below shows the optimum cash balance.

Baumol Model of Cash Management considers cash management similar to an inventory management problem. The formula is where *C** is the optimum cash balance, *c* is the cost per transaction, *T* is the total cash needed during the year and *k* is the opportunity cost of holding cash balance. The optimum cash balance will increase with increase in the per transaction cost and total funds required and decrease with the opportunity cost.

Baumol's Model–Assumptions:

- The firm is able to forecast its cash needs with certainty.
- The firm's cash payments occur uniformly over a period of time.
- The opportunity cost of holding cash is known and it does not change over time.
- The firm will incur the same transaction cost whenever it converts securities to cash.



(BAUMOL MODEL : TRADE OFF BETWEEN HOLDING COST AND TRANSACTIONS COST)

The Baumol model is based upon the following assumptions :

(a) The cash needs of the firm are known with certainty.

(b) The cash disbursements (usage) of the firm occurs uniformly over a period of time and is known with certainty.

(c) The opportunity cost of holding cash is known and it remains constant.

(d) The transaction cost of converting securities into cash is known and remains constant.

The Baumol model can also be represented algebrically :

$$C = \sqrt{\frac{2A \times F}{O}}$$

Where, C = Optimum balance

A = Annual (or monthly) cash disbursements

F = Fixed cost per transaction

O = Opportunity cost of holding cash.

Illustration–Baumol's Model

Illustration 1:

The annual cash requirement of A Ltd. is Rs 10 lakhs. The company has marketable securities in lot sizes of Rs 50,000, Rs 1, 00,000, Rs 2, 00,000, Rs 2, 50,000 and Rs 5, 00,000. Cost of conversion of marketable securities per lot is Rs 1,000. The company can earn 5% annual yield on its securities. You are required to prepare a table indicating which lot size will have to be sold by the company. Also show that the economic lot size can be obtained by the Baumol Model.

Solution :

Table Indicating Lot Size

(a) Annual requirement of cash (₹)	10,00,000	10,00,000	10,00,000	10,00,000	10,00,000
(b) Lot size of securities (₹)	50,000	1,00,000	2,00,000	2,50,000	5,00,000
(c) Number of lot sizes [a ÷b]	20	10	5	4	2
(d) Average holding of cash (₹) [b÷2]	25,000	50,000	1,00,000	1,25,000	2,50,000
(e) Opportunity holding cost of cash (₹) [d× $^5/_{100}$]	1,250	2,500	5,000	6,250	12,500
(f) Fixed conversion cost per transaction (₹)	1,000	1,000	1,000	1,000	1,000
(g) Total conversion cost (₹) [c× f]	20,000	10,000	5,000	4,000	2,000
(h) Total cost (₹) [e+g]	21,250	12,500	10,000	10,250	14,500

The above table clearly indicates that the total cost is minimum at ₹ 10,000 when the lot size of securities is ₹ 2,00,000 and thus it is economic lot size of selling securities.

Calculation of Economic Lot Size (Baumol Model)

$$C = \sqrt{\frac{2A \times F}{O}}$$

Where, C = Optimum cash balance or lot size
A = Annual requirements of cash (₹ 10,00,000)
F = Fixed conversion cost per transaction (₹ 1,000)
O = Opportunity cost of holding cash (5% or 0.05)

$$C = \sqrt{\frac{2 \times 10,00,000 \times 1,000}{0.05}} = \text{Rs. } 2,00,000$$

Cash Management Model # 2. Miller and Orr Model:

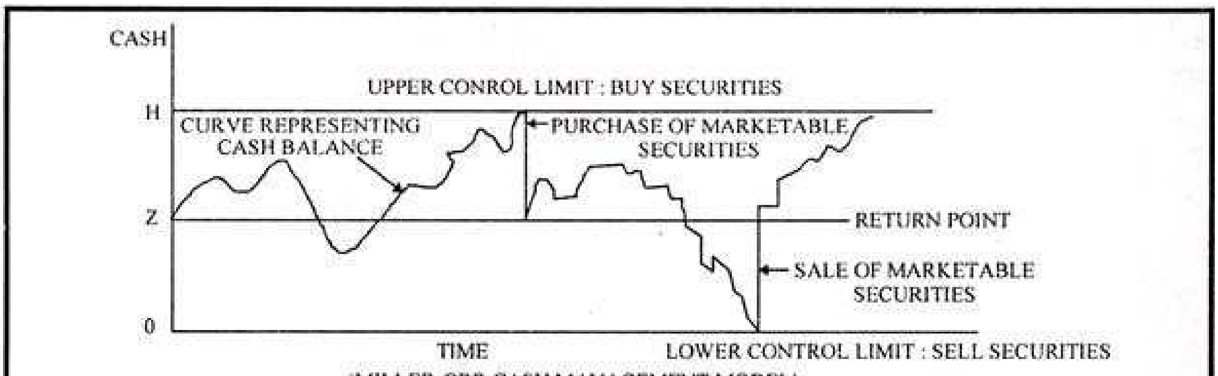
Baumol's model is based on the basic assumption that the size and timing of cash flows are known with certainty. This usually does not happen in practice. The cash flows of a firm are neither uniform nor certain. The Miller and Orr model overcomes the shortcomings of Baumol model.

M.H. Miller and Daniel Orr (A Model of the Demand for Money) expanded on the Baumol model and developed Stochastic Model for firms with uncertain cash inflows and cash outflows.

Miller-Orr Model If the firm's cash flows fluctuate randomly and hit the upper limit, then it buys sufficient marketable securities to come back to a normal level of cash balance (the return point). Similarly, when the firm's cash flows wander and hit the lower limit, it sells sufficient marketable securities to bring the cash balance back to the normal level (the return point).

- The MO model provides for two control limits–the upper control limit and the lower control limit as well as a return point.
- If the firm's cash flows fluctuate randomly and hit the upper limit, then it buys sufficient marketable securities to come back to a normal level of cash balance (the return point).
- Similarly, when the firm's cash flows wander and hit the lower limit, it sells sufficient marketable securities to bring the cash balance back to the normal level (the return point).
- The difference between the upper limit and the lower limit depends on the following factors:
  - the transaction cost (*c*)
  - the interest rate, (*i*)
  - the standard deviation (*s*) of net cash flows.

The Miller and Orr (MO) model provides two control limits-the upper control limit and the lower control limit along-with a return point as shown in the figure below:



(MILLER-ORR CASH MANAGEMENT MODEL)

When the cash balance touches the upper control limit (h), markable securities are purchased to the extent of hz to return back to the normal cash balance of z. In the same manner when the cash balance touches lower control limit (o), the firm will sell the marketable securities to the extent of oz to again return to the normal cash balance.

The spread between the upper and lower cash balance limits (called z) can be computed using Miller-Orr model as below:

$$Z = 3\left(\frac{3}{4} \times \frac{\text{Transaction Cost} \times \text{Variance of Cash Flows}}{\text{Interest Rate}}\right)^{\frac{1}{3}}$$

$$\text{and, Return Point} = \text{Lower Limit} + \frac{\text{Spread (Z)}}{3}$$

Variance of Cash Flows = (Standard deviation)^2 or (s)^2

Illustration 2:

A company has a policy of maintaining a minimum cash balance of Rs 1, 00,000. The standard deviation in daily cash balances is Rs 10,000. The interest rate on a daily basis is 0.01%. The transaction cost for each sale or purchase of securities is Rs 50. Compute the upper control limit and the return point as per the Miller-Orr model.

Solution :

Spread between the upper and lower cash balance (Z)

$$Z = 3\left(\frac{3}{4} \times \frac{\text{Transaction Cost} \times \text{Variance of Cash Flows}}{\text{Interest Rate}}\right)^{\frac{1}{3}}$$

$$= 3\left(\frac{3}{4} \times \frac{50 \times (10{,}000)^2}{.0001}\right)^{\frac{1}{3}}$$

$= ₹\ 1{,}00{,}415$

Thus, the upper control limit of cash balance is

$= ₹\ 1{,}00{,}000 + ₹\ 1{,}00,\ 415 = ₹\ 2{,}00{,}415$

And, the return point is

$$= \text{Lower Limit} + \frac{\text{Spread}}{3}$$

$= ₹\ 1{,}00{,}000 + 1{,}00{,}415/3$

$= ₹\ 1{,}33{,}472$

Illustration 3:

A firm having an annual opportunity cost of 15 per cent is contemplating installation of a lock box system at an annual cost of Rs 3, 00,000. The system is expected to reduce mailing time by 4 days and reduce cheque clearing time by 3 days. If the firm collects Rs 4, 00,000 per day, would you recommend the system?

Reduction in time if lock box system is installed		
Mailing time	=	4 days
Cheque clearing time	=	3 days
Total reduction in time	=	7 days
Calculation of reduction in float		
₹ 4,00,000 per day for 7 days	=	₹ 28,00,000
Annual savings on account of reduction in float		
Gross Savings = 28,00,000 × 15/100	=	₹ 4,20,000
Annual cost of lock box system	=	₹ 3,00,000
Net annual savings if the proposed lock box system is installed	=	₹ 1,20,000

Thus, it is recommended that the proposed lock box system should be installed.

Cash Budget

The **Cash Budget** is a budget prepared to estimate the cash inflows and outflows during a specific period of time. In other words, cash budget shows the cash inflows and cash outflows expected to occur in the immediate future period.

The purpose of preparing the cash budget is to determine that whether the enterprise has sufficient cash balance to meet out its short-term cash requirements or whether too much cash is being left idle and unproductive in the organization. Thus, it helps the management to determine the surplus and shortage of funds so that suitable actions can be undertaken.

One of the major advantages of cash budget is that it provides a clear picture of all the expected cash flows, thereby enabling the firms to plan their expenditures accordingly. Also, the companies can raise adequate funds in case of the shortage of the cash balance and can make an optimum utilization of funds in case of cash surplus, for example investing in marketable securities.

But however, these cash budgets are not free from the limitations. These are less reliable as the future is uncertain and the cash forecast may not be correct. For example, unseen demands of cash, delayed cash collection, unanticipated cash disbursements, etc. Also, the cash budget is inefficient to track a significant movement in the working capital items.

In other words Firms prepare cash budget to plan for and control cash flows. Cash budget is generally prepared for short periods such as weekly, monthly, quarterly, half-yearly or yearly. Cash budget will serve its purpose only if the firm can accelerate its collections and postpone its payments within allowed limits. The main concerns in collections are: (*a*) to obtain payment from customers within the credit period, and (*b*) to minimise the lag between the time a customer pays the bill and the time cheques etc. are collected. The financial manager should be aware of the instruments of payments, and choose the most convenient and least costly mode of receiving payment. Disbursements or payments can be delayed to solve a firm's working capital problem. But this involves cost that, in the long run, may prove to be highly detrimental.

Therefore, a firm should follow the norms of the business.

Cash Management: Basic Strategies, Techniques and Processes

Cash Management Strategy # 1. Cash Planning:

Cash planning is a technique to plan and control the use of cash. A projected cash flow statement may be prepared, based on the present business operations and anticipated future activities. The cash inflows from various sources may be anticipated and cash outflows will determine the possible uses of cash.

Cash Management Strategy # 2. Cash Forecasts and Budgeting:

A cash budget is the most important device for the control of receipts and payments of cash. A cash budget is an estimate of cash receipts and disbursements during a future period of time. It is an analysis of flow of cash in a business over a future, short or long period of time. It is a forecast of expected cash intake and outlay.

The short-term forecasts can be made with the help of cash flow projections. The finance manager will make estimates of likely receipts in the near future and the expected disbursements in that period. Though it is not possible to make exact forecasts even then estimates of cash flows will enable the planners to make arrangement for cash needs.

It may so happen that expected cash receipts may fall short or payments may exceed estimates. A financial manager should keep in mind the sources from where he will meet short-term needs. He should also plan for productive use of surplus cash for short periods.

The long-term cash forecasts are also essential for proper cash planning. These estimates may be for three, four, five or more years. Long-term forecasts indicate company's future financial needs for working capital, capital projects, etc.

Both short-term and long-term cash forecasts may be made with the help of following methods:

(i) Receipts and disbursements method

(ii) Adjusted net income method.

(i) Receipts and Disbursements Method:

In this method the receipts and payments of cash are estimated. The cash receipts may be from cash sales, collections from debtors, sale of fixed assets, receipts of dividend or other incomes of all the items; it is difficult to forecast sales. The sales may be on cash as well as credit basis. Cash sales will bring receipts at the time of sale while credit sales will bring cash later on.

The collections from debtors (credit sales) will depend upon the credit policy of the firm. Any fluctuation in sales will disturb the receipts of cash. Payments may be made for cash purchases, to creditors for goods, purchase of fixed assets, for meeting operating expenses such as wage bill, rent, rates, taxes or other usual expenses, dividend to shareholders etc.

The receipts and disbursements are to be equaled over a short as well as long periods. Any shortfall in receipts will have to be met from banks or other sources. Similarly, surplus cash may be invested in risk free marketable securities.

It may be easy to make estimates for payments but cash receipts may not be accurately made. The payments are to be made by outsiders, so there may be some problem in finding out the exact receipts at a particular period. Because of uncertainty, the reliability of this method may be reduced.

(ii) Adjusted Net Income Method:

This method may also be known as sources and uses approach. It generally has three sections: sources of cash, uses of cash and adjusted cash balance. The adjusted net income method helps in projecting the company's need for cash at some future date and to see whether the company will be able to generate sufficient cash.

If not, then it will have to decide about borrowing or issuing shares, etc. In preparing its statement the items like net income, depreciation, dividends, taxes, etc. can easily be determined from company's annual operating budget.

The estimation of working capital movement becomes difficult because items like receivables and inventories are influenced by factors such as fluctuations in raw material costs, changing demand for company's products and likely delays in collections. This method helps in keeping a control on working capital and anticipating financial requirements.

Techniques and Process

The success of a business often depends on how healthy its cash flow is and how well it's managed. As a result, many wonder how to improve cash flow, ensuring they have enough incomings to balance with outgoings.

If you're a new or growing business then this is especially important, as it's likely you will have experienced lower levels of available working capital. Having plenty of working capital allows you to invest in greater resources, increase production and comfortably cover outgoings for a smooth cash flow.

Below are some of the best methods we've found to effectively manage your cash flow.

Keep track of it

First and foremost, you have to know the status of your cash flow in order to be able to manage it. This means keeping a close eye on every area of the business where money is involved, and regularly checking how much is being spent versus received.

Once you have a good idea of the business's general cash flow health, you can begin to plan ways to improve it. If you find any problems, such as a few large expenses that mean more money is going out than coming in, then look for and apply a fix early on.

Cut out inefficiencies

You should locate any inefficiencies which are hampering your cash flow immediately, as even small ones can lead to big losses further down the line. This includes monitoring your overheads to see if you are spending unnecessary money on running the business, as well as having a clear picture of the overall state of your business.

It could also include selling assets which are outdated or no longer needed, as this can provide you with capital to finance more jobs or reinvest in the business.

Continue to invest in people and resources

Creating a smooth cash flow isn't all about cutting back costs. It may sound counterproductive, but investing in your business by hiring new staff and equipment will eventually lead to greater profits and more money coming into the business.

This in turn will ease cash flow problems and make them far easier to manage, which is a great help when it comes to running a business.

Such investments can help build up an emergency fund for cash flow problems. This could prove to be a life saver and a worthy investment further down the line, as it will prevent cash running out – which would grind your business to a halt.

Speed up payments

One of the most effective cash flow management techniques is speeding up payments. This means encouraging the customer to part with their money before the end of the invoicing period.

It could include asking for an upfront payment before work has started or is completed, or offering incentives for early payment, such as a discount.

Use invoice financing

If you find cash flow challenges are affecting your short-term business finance, our invoice finance services can help smooth out your cash flow. Our cash flow solutions here at MarketInvoice make it quick and easy for your business to secure funding against your outstanding customer invoices.

Getting paid upfront means you'll have access to more cash for helping with things like business operations, paying employees, investing in growth and more.

Managing your cash flow doesn't need to be an overly complicated process, provided you have the systems in place to effectively control it.

Lock Box system and Concentration Banking, Compensating Balances

Lock Box System

The **Lockbox Banking** is the service offered by the commercial banks to the companies wherein, the payment made by the customers is directed to the special post office box rather than to the company.

Under the lockbox banking system, the company opens up a lockbox account with a bank, which is generally at the central location, easily accessible to the bank. The box is emptied several times in a day, and as the money receipts are collected, the bank deposits the same into the company's account and inform about it to the company via electronic data transmission.

Through lockbox banking, the company's burden of accepting mails and the payments from the customers has reduced drastically. And with time to time updations from the bank, a company can put money in the work as soon as it is received.

But however, there is a fear that the bank employees who have access to the lockbox can commit a fraud. The fraud can be in the form of check counterfeiting as the checks in the lockbox contains all the information sufficient to make a check counterfeit. To overcome this limitation, the company must choose a bank which they trust and should keep a regular check on the lockboxes.

Concentration Banking

The **Concentration Banking** is the arrangement used by the firms, wherein the funds from all the regional banks in different locations gets concentrated or collected into the single bank account.

In other words, a firm has its operations in several parts of the country and in order to ease the complexity of handling multiple bank accounts at different locations, the firm may opt for a concentration banking service, whereby all the funds from different regional banks gets forwarded to a single bank account called as a concentration account.

Although the organizations can have many accounts in different banks, but they usually have a single account in which major transactions take place, such account is called the concentration account and the bank in which the account is held is called the concentration bank.

How does the Concentration Banking operate?

- First of all, the places are identified where company's major customers are placed and then the local bank accounts are opened at each location.

- Once the accounts are opened, the local collection center (agents) or the bank branch is identified where all the cheques are collected from the customers at the respective locations.
- The remittances from the customers can be collected either in person or through the post. Once the cheques are collected are deposited in the local banks for the clearance.
- On the realization of cheques, the funds are transferred to the head office bank account (concentration account) through any telegraphic/electronic transfer schemes.

The concentration banking helps the organizations in reducing the mailing float. Since the remittances from the customers are either collected in person or by local post, the mailing float has substantially reduced. Also, it has reduced the cheque processing float at company's office, as the detailed list of all the remittances received is sent to the company's head office as a credit advice.

Through concentration banking, the banking processing float has also been reduced considerably, as the cheques are cleared locally and the funds are readily made available. Thus, the time required for the clearance of the outstation cheques have reduced manifold.

Compensating Balances

A compensating balance is a minimum bank account balance that a borrower agrees to maintain with a lender. The purpose of this balance is to reduce the lending cost for the lender, since the lender can invest the cash located in the compensating bank account and keep some or all of the proceeds. The borrower may also benefit from being granted a somewhat lower interest rate. However, the borrower is also paying interest on a net loan balance that is smaller than the amount of the loan, so the effective interest rate for the entire arrangement is higher.

For example, a corporation has a Rs. 5 million line of credit with a bank. The borrowing agreement states that the corporation will maintain a compensating balance in an account at the bank of at least Rs. 250,000. When the two sides of the arrangement are netted, the loan is actually Rs. 4,750,000.

Marketable Securities: Concept, Types

Investing Surplus Cash in Marketable Securities

Marketable Securities The excess amount of cash held by the firm to meet its variable cash requirements and future contingencies should be temporarily invested in marketable securities, which can be regarded as near moneys. A number of marketable securities may be available in the market. The financial manager must decide about the portfolio of marketable securities in which the firm's surplus cash should be invested.

Marketable Securities are the financial instruments that one can easily buy or sell in the market. The maturities of these financial instruments are usually less than a year. Since they have high liquidity, these investments are good for businesses that need quick cash. Some examples of these financial instruments are government bonds, common stock or certificates of deposit.

Businesses keep their cash in reserves. Such reserves help them in situations when they require cash, like for acquisitions or any unforeseen payment. However, companies do not put all their cash in the reserves. Instead, they invest some in short-term liquid securities to earn interest. This way, the cash not only earns an interest income, but a company can also easily liquidate the investment to meet any future cash need.

The returns on such securities are relatively lower due to their liquidity and the fact that we see them as safe investments. Apple holds a major portion of its wealth in the form of such securities.

- **Selecting Investment Opportunities:**
    - ***safety,***
    - ***Maturity, and***
    - ***marketability.***

Short-term Investment Opportunities:

- ***Treasury bills***
- ***Commercial papers***
- ***Certificates of deposits***
- ***Bank deposits***
- ***Inter-corporate deposits***
- ***Money market mutual funds***

WHY INVEST IN THEM?

BETTER THAN IDLE CASH

Cash lying idle does not give any return and cash in the bank account offers meager returns. Therefore, investing in such securities not just offer a better return, but the safety of investment as well.

PAYING SHORT-TERM LIABILITIES

Short-term liabilities are payable within a year. So, marketable securities, which also liquidate after a year, are the best way to pay such liabilities as they are highly liquid and earn some income in the meantime as well.

REGULATORY REQUIREMENT

To borrow funds from financial institutions, companies have to follow some guidelines. These guidelines could be in the form of maintaining a certain level of working capital and investing in cash. Moreover, these requirements are often in the form of ratios. So, marketable securities help a company meet such guidelines with liquidity and solvency ratios.

TYPES

Marketable securities broadly have two groups – Marketable debt securities and Marketable equity securities.

Marketable debt securities are government bonds and corporate bonds. One can trade these on the public exchange and their market price is also readily available. In the balance sheet, all marketable debt securities are shown as current at the cost, until a company realizes a gain or loss on the sale of the debt instrument.

Marketable equity securities are common stock and most preferred stock as well. One can also easily trade them on the public exchanges and their market price information is easily available. All marketable equity securities are shown in the balance sheet at either cost or market whichever is lower.

There is also a third type of marketable securities classified further into three categories – **money market instruments, derivatives, and indirect investments**. Indirect investments include money put into hedge funds and unit trusts.

Derivatives are the investments that are dependent on another security for their value, like futures, options, and warrants.

Money market securities are short-term bonds, like Treasury bills (T-bills), banker's acceptances and commercial paper. Big financial entities purchase these in massive quantities.

Reasons for Holding Marketable Securities

1. **Transactions Motives:**

Transaction motives require a firm to hold cash to conduct its business in elite ordinary course. The firm needs cash primarily to make payments for purchases, wages, operating expenses, taxes, dividends, etc. The need to hold cash would not arise if there were perfect synchronization between cash receipts and cash payment i.e. enough cash is received when the payment has to be made. But cash receipt and payments are not perfectly synchronized. Sometimes cash receipts exceed cash payments, while at another times cash payment are more than cash receipts. For those periods when cash payments exceed cash receipts, the firm should maintain some cash balance to be able to make the required payments. For transactions purpose, a firm will purchase the securities whose maturity corresponds with some anticipated payments, such as dividends, taxes etc., in future. However, the transactions motive mainly refers to holding cash to meet anticipated payment whose timing is not perfectly matched with cash receipts.

2. Precautionary Motives:

The precautionary motive is the need to hold cash to meet any contingencies in future. It provides a cushion or buffer to withstand some unexpected emergency. The precautionary amount of cash to be kept depends upon the predictability of cash flows. If cash flows can be predicted with accuracy, less cash will be maintained against an emergency. The amount of precautionary cash is also influenced by the firm's ability to borrow at short notice, when the need arises. Stronger ability of the firm to borrow at short notice lessens the need for precautionary balance.

The precautionary balance may be kept in cash and marketable securities. Marketable securities play an important role here. The amount of cash set aside for precautionary reasons is not expected to earn anything, therefore, the firm should attempt to earn some profit on it. Such funds should be invested in high liquid and low-risk marketable securities. Precautionary balances should, thus, be held more in marketable securities and relatively less in cash.

3. The Speculative Motives:

The speculative motive relates to the holding of cash for investing in profit making opportunities as and when they arise. The opportunity to make profit may arise when the security prices changes. The firm will hold cash, when it is expected that interest rates will fall. Securities can be purchased when the interest rate is expected to fall. The firm will benefit by the subsequent fall in interest rates and increase in security prices. The firm may also speculate on materials prices. If it is expected that materials price will fall, the firm can postpone materials purchasing and make purchases in future when price actually falls. Some firms may hold cash for speculative purposes. By and large, business firms do not engage in speculations. Thus, the primary motives to hold cash and marketable securities are the transactions motive and the precautionary motive.

Advantages/benefits of marketable securities:

Investment in marketable securities provide the following additional advantages:

(1) Interest and Dividend Revenue

Marketable securities earn dividend or interest revenue for the company. If a company holds a large sum of cash and does not invest it anywhere, it will generate nothing for the company.

(2) Increase in Market Value:

Marketable securities also generate a return when their market value increases.

(3) Liquidity

Unlike long term investments, purchase of marketable securities does not impact the liquidity position of the business. They can be quickly sold in the secondary financial markets to meet immediate cash needs of the company.

Alternative Strategies of Marketable Securities, Choice of Securities

Alternative Strategies of Marketable Securities

Marketable securities are investments that can easily be bought, sold or traded on public exchanges. The high liquidity of marketable securities makes them very popular among individual and institutional investors. These types of investments can be debt securities or equity securities.

Types of Marketable Securities

Though there are numerous types of marketable securities, the most common types of equity and debt securities are, relatively, stocks and bonds.

Stocks

Stock represents an equity investment because shareholders maintain partial ownership in the company in which they have invested. The company can use shareholder investment as equity capital to fund the company's operations and expansion.

In return, the shareholder receives voting rights and periodic dividends based on the company's profitability. The value of a company's stock can fluctuate wildly depending on the industry and the individual business in question, and so investing in the stock market can be a risky move. However, many people make a very good living investing in equities, using short- and long-term strategies.

Bonds

Bonds are the most common form of marketable debt security and are a useful source of capital to businesses that are looking to grow. A bond is a security issued by a company or government that allows it to borrow money from investors. Much a like a bank loan, a bond guarantees a fixed rate of return, called the coupon rate, in exchange for use of the invested funds.

The face value of the bond is its par value. Each issued bond has a specified par value, coupon rate and maturity date. The maturity date is when the issuing entity must repay the full par value of the bond.

Because bonds are traded on the open market, they can be purchased for less than par (referred to as the discount) or for more than par (also called the premium), depending on their current market values. Coupon payments are based on the par value of the bond rather than its market value or purchase price, and so an investor who can purchase a bond at a discount still enjoys the same interest payments as an investor who purchases the security at par value.

Interest payments on discounted bonds represent a higher return on investment than the stated coupon rate. Conversely, the return on investment for bonds purchased at a premium is lower than the coupon rate.

Preference Shares

There is another type of marketable security that has some of the qualities of both equity and debt. Preference shares, also called preferred shares, have the benefit of a fixed dividend, much like a bond.

Unlike a bond, however, the shareholder’s initial investment is never repaid, making it a hybrid security. In addition to the fixed dividend, preferred shareholders are granted a higher claim on funds than their common counterparts if the issuing company goes bankrupt and must liquidate assets to pay off its liabilities.

In exchange, preferred shareholders give up the voting rights that ordinary shareholders enjoy. The guaranteed dividend and insolvency safety net make preference shares a more enticing investment to those who find the common stock market too risky but don’t want to wait around for bonds to mature.

Indirect Investments

Marketable securities can also come in the form of money market instruments, derivatives and indirect investments. Each of these types contains several different specific securities.

Indirect investments include hedge funds and unit trusts. These instruments represent ownership in investment companies. Most market participants have little or no exposure to these types of instruments, but they are common among accredited or institutional investors.

Derivatives are investments directly dependent on the value of other securities. In the last quarter of the 20th century, derivatives trading began growing exponentially. Many types of derivatives can be considered marketable, such as futures, options and rights and warrants.

The most reliable liquid securities fall in the money market category. Most money market securities act as short-term bonds and are purchased in huge quantities by large financial entities. These include Treasury bills (T-bills), banker’s acceptances, purchase agreements and commercial paper.

Common Characteristics of Marketable Securities

The overriding characteristic of marketable securities is their liquidity, or the ability to convert them into cash and use them as an intermediary in other economic transactions. A security is further made liquid by its relative supply and demand in the market and the volume of its transactions. Because marketable securities have short maturities, and can be sold easily with price quotes available instantly, they typically have a very low rate of return, paying less interest than other instruments. But they are usually perceived as low-risk as well.

From a liquidity standpoint, investments are marketable when they can be bought and sold easily. If an investor or a business needs some cash in a pinch, it is much easier to enter the market and liquidate common stock than, say, a nonnegotiable certificate of deposit (CD).

This introduces the element of intent as a characteristic of “marketability.” And in fact, many financial experts and accounting courses claim intent as a differentiating feature between marketable securities and other investment securities. Under this classification, the marketable security must satisfy two conditions. The first is ready convertibility into cash; the second condition is that those who purchase marketable securities must intend to convert them when in need of cash. In other words, a note purchased with short-term goals in mind is much more marketable than an identical note bought with long-term goals in mind.

Marketable Securities and Working Capital

In accounting terminology, marketable securities are classified as current assets, and, therefore, are often included in the working capital calculations on corporate balance sheets. (It is often noted if they are not; the definition of adjusted working capital, for example, considers only operating assets and liabilities, excluding any financing-related items, such as short-term debt and marketable securities.) Businesses that have conservative cash management policies tend to invest in marketable securities instead of long-term or riskier securities, such as stocks and other fixed-income securities with maturities longer than a year. Marketable securities are typically reported right under the cash and cash equivalents account on a company’s balance sheet at the current assets section.

An investor who analyzes a company may wish to carefully study the company’s announcements that make certain cash commitments, such as dividend payments before they are declared. For a company that is low on cash and has all its balance tied in marketable securities, an investor may exclude the cash commitments that management announced from its marketable securities, since this portion of marketable securities is earmarked and spent on something other than paying off current liabilities.

The Bottom Line

It’s important to note that there are liquid assets that are not securities, and there are securities that are not liquid assets. Every marketable security must still satisfy the requirements of being a financial security: It must represent interest as an owner, creditor or rights to ownership, carry an assigned monetary value, and be able to provide a profit opportunity for the purchaser.

Choice of Marketable Securities

Factor # 1. Marketability:

The prime requisite of highly liquid and profitable investments is that they can be liquidated as and when required to replenish cash. This means that only those securities should be chosen for investment which is easily saleable even for large amounts without appreciable reduction in their price.

Such securities can be depended on to meet cash shortages. Government and municipal bonds as well as port trust securities meet the test of marketability as they can be disposed off in fairly big lots without forcing down their market prices, but general industrial and the like shares, except those of a few reputed companies, are not easily marketable and when it is desired to sell particularly for cash, a large block of such shares at a time of pressure, it proves difficult to do so without considerable price reduction.

Factor # 2. Safety:

Safety in investment here means free from credit risk i.e., risk arising from default of the debtor in the payment of principal or interest. The credit risk is a product of the character of the debtor, the economy which supports the obligations and the borrowing power of the debtor.

Securities of the Central Government are regarded as gilt-edged securities, as they are free from credit risk because of the great tax and borrowing powers and the greatness of the economy from which it derives its funds for the repayment of obligations.

State Government and Local Self Government securities are also risk free. The greater the degree of credit risk inherent in securities, the higher should be their interest rate to attract venturesome investors who would like premium on such securities to compensate for high financial risk.

Factor # 3. Maturity:

Besides credit risk, investments are also subject to money rate risk. Money rate risk arises from change in market price consequent upon interest rate fluctuations. If the market rate of interest tends to shoot up and the bondholders want to dispose off bonds, the price of the bond will go down because the bonds carry the rate less than the prevailing rate of interest. Money rate risk is intimately related with maturity of securities.

The shorter the maturity, the more stable the price and the vice-versa. This is essentially because one of the factors influencing the market price of a bond is the future payments computed on an annual basis. Therefore, the longer the maturity the greater is the influence of future income payments that are reflected in the price of the bond.

If, for example, the market rate of interest moves from 3 to 4 percent, the price of a 20-year, 3 percent bond would drop to Rs. 86.32; but a 5-year, 3 percent bond would drop to only Rs. 95.51. This is a sizeable difference and it explains why short-term securities are preferred against long-term obligations.

It should be noted here that money rate risk arises only when securities are disposed off before their maturity period. Where a firm can meet its cash shortages by liquidating a portion of its investment, funds should be invested in securities of different maturity pattern.

Thus, the firm should stagger its investment portfolio in such a way that a certain amount of securities mature at regular intervals. If funds released as a result of the maturity of a particular bond are not needed, they can be reinvested in those securities that best fit into the firm's investment portfolio. This will help the firm to improve its earnings and make the cash resources available as and when needed.

Factor # 4. Taxability:

Market yield of securities is also affected by tax factor. There are certain categories of securities which are exempted from levy of income tax and wealth tax. For example, in India interest on treasury saving deposit certificates, post-office cash certificates, 12-year national plan savings certificates and such other certificates issued by the Central Government are exempted from income tax.

Similarly, certain securities viz., Ten-year saving deposit certificates, Fifteen-year annuity certificates, Twelve-year National defence certificates, Post- office certificates. Post-office National defence certificates, Post-office cash certificates, Post-office National savings certificates, 61/2 Gold Bonds 1977 and 1979, Gold Bonds, 1980 and National Defence Gold Bonds, 1980 are exempted from wealth tax.

In view of the differential tax treatment, yields of different securities differ. Tax exempted securities are sold in the market at lower yield than other securities of the same maturity. Tax factor should, therefore, be considered while choosing securities for the secondary reserves.

It is worth stressing that the above factors affect each other and are functionally interdependent. Therefore, all these factors must be considered simultaneously while evaluating a security to test its suitability.

Cash Management Practices in India

India is rapidly abandoning its paper-based clearing mechanism, with the Reserve Bank of India introducing initiatives covering cheque-imaging, real time gross settlement and electronic fund transfer. This trend is expected to increase further with the introduction of the Information Technology Act, a clearing corporation, a centralised fund management service, and use of the Structured Financial Messaging Solution for intra and interbank messages.

India stride further into the new millennium riding on a wave of optimism. A decade of reforms has propelled the economy onto a new growth trajectory today. India is a mature and stable economy. There is now healthy competition among different Indian States to attract foreign investments, and India has joined the league of the fastest growing economies in the world, being next only to China and Korea.

The resurgence of the Indian economy has been sustained in the face of difficult international developments. Even as global growth has declined, India’s GDP growth has accelerated in 2002 and reached to 6% in the 2003 fiscal year. Despite the worst drought in two decades in 2002, inflation rates have declined further and interest rates have softened. The momentum of the record inflow of FDI has continued and foreign exchange reserves were at all-time high.

Indian economy is a market-driven economy. Due to the efforts taken by the Securities and Exchange Board of India (SEBI), the equity markets are matures, regulated and offer a wide range of equity and debt-linked products. India has a well-established legal system with an independent judiciary. Indian corporates have had increased access to global capital markets. This has driven conformity with international accounting standards, greater transparency and a focus on corporate governance. The government has accelerated the disinvestment process, demonstrating its commitment to the economy.

The banking structure in India is complex and spread over a wide geographical area. There are about 65,000 bank branches, and the central bank is the RBI.

The Composition of Banks in India is:

Scheduled commercial banks – 296,

Foreign banks – 42

Public sector banks – 27

Private sector banks – 31

Regional rural banks – 196

Schedule cooperative banks – 67

The Central Board of Direct Tax (CBDT) is the governing body for the direct taxes in India. Similarly, the Central Board for Customs and Excise (CBCE) is the main governing body for indirect taxes.

India had traditionally a paper based clearing system. As of 2002, India has -about 1,047 clearing houses and 65,000 bank branches. The total value of the cheques processed through these centres surpassed INR 1,21,000 bn in the year 2001-02. The paper based clearing system passes such inherent issues as a high cost of processing fragility of the system and security risks. For these reasons, the RBI has been emphasing the need for upgrading the technological infrastructure in India.

Following are some of the initiatives:

1. **Cheque-Imaging:**

In some countries, cheques deposited in banks are scanned and stored with the bank. Instead of sending physical cheques to the clearing house, the scanned copy of the cheques are transmitted. This level of cheque-imaging reduces clearing cycle, enables faster returns-processing better customer service and availability of images for audit trails.

In India, 15 clearing houses, now have cheque-imaging. However, the images are now stored only for reconciliation and resolving clearing house differences. The legal framework is undergoing changes to adopt cheque imaging.

The Negotiable Instruments Act was amended in 2002, and has extended the definition of a cheque to include electronic cheques and the electronic images of truncated cheques. The act now also defines the material alternation of an electronic image of a truncated cheque. Availability of adequate technical infrastructure at cleaning houses and banks is a prerequisite for expanding the network and exploiting the full benefits of cheque-imaging.

2. **Real-Time Gross Settlement—(RTGS):**

It is a payment mechanism that eliminates settlement risk by settling payments in real time. This is in contrast to the existing net settlement system, where interbank settlement takes place at the end of the batch.

The RBI has implemented a national RTGS system that allows all banks in India to make secure inter-bank payments across the country. The RTGS work flow involves transaction queuing and processing on a first-in-first out basis. RTGS provide significant benefits to individuals and businesses by allowing instant transfer of funds between banks thus expediting electronic payments.

3. **Integration with Enterprise Resource Planning System (ERP):**

Organisations are migrating from their existing accounting procedures to enterprise resource planning system. This has fuelled the need to integrate the banks cash management systems with corporates *ERP packages and key cash management providers now offer complete integration of cash management solution with ERP system.

Such integration offers the following benefits:

(a) Reduces manual processing and cost thereof.

(b) Enables comprehensive management control by setting user restrictions.

(c) Streamlines the reconciliation process.

(d) Improves management information.

(e) Allows straight-through processing (STP).

Straight-through processing (STP) has historically been regarded as an area focused on by banks for streamlining their processes. Corporates now appreciate the role of STP as an integral part of their internal accounting work flows. Manual practices involve costly multiple data reentry from paper documents and other sources that are susceptible to errors, discrepancies, delays and possible fraud. STP enables orders to be processed, confirmed, cleaned and settled in a shorter-time period, more cost effectively and with fewer errors.

4. **Electronic Banking:**

The Government has supported the growth of e-commerce in India by enacting the Information Technology Act 2000. There are more people connected to the Internet in India today than in past owing to improving personal computer penetration, availability of brand width and power.

However, despite the growing internet population, India is still witnessing modest e-commerce activity. E-commerce activity was estimated to be in the region of about US$ 300 m, almost half that of China. Business-to-business e-commerce implementation is low-except in certain verticals such as the automobile sector and banking and finance.

With recent technological advancements, the implementation of Internet banking and electronic banking has increased greatly. The private sector and foreign banks in India are at the forefront in offering online banking services on internet.

This service is in addition to existing offsite delivery channels such as automated letter machines, electronic banking and mobile banking. Reports for the collections products are being offered on the internet by selected banks. Customers can now view the clearing status of their cheques and cheque images over the internet.

Going forward, the utilization of electronic banking will further increase as technological advances and enabling legislation make the process more secure.

Regulatory Changes and their Impact on Cash Management:

1. **Information Technology Act 2000**:

Business and consumers are increasingly using computers to create, transmit and store information in electronic format instead of traditional paper documents.

Since e-commerce eliminates paper based transactions the need for legal changes became a necessity. The Indian Parliament gave its assent to the Information Technology Act on 9 June 2000.

The Act deals with defining the common terminology used in respect of computers, giving legal recognition to electronic records and digital signatures. The act further defines when digital signatures or electronic records can be termed secure for transmission over the internet.

The government has also framed the Information Technology (Certifying Authority) Regulations 2001. This regulation primarily controls the activities of certifying authorities (authorised to grant licences to issue digital signatures).

India now has four certifying authorities i.e.:

(a) Safe Scrypts.

(b) The National Information Centre.

(c) Institute for Development and Research in Banking Technology (IDRBT).

(d) Tata Consultancy Services.

2. **Centralized Funds Management Service**:

The Centralized Fund Management Service (CFMS) introduced by the RBI, enables commercial banks to obtain the funds position of their accounts with the RBl's Deposits Accounts Department (DAD) at 17 locations in India.

Bank will not only be able to enquire about their funds balance in DAD accounts, but also transfer funds across their DAD accounts in different cities. CFMS allow banks to reduce their cost of fund by better management of fund flows.

3. **Clearing Corporation of India LTD**:

Recognised the need for upgrading the country's financial infrastructure in respect of the clearing and settlement of debt instruments and Fx (FOREX) transactions, the RBI initiated the more to set up the Cleaning Corporation of India Limited (CCIL). The primary objective of setting up the CCIL has been to establish a safe institutional structure for the clearing and settlement of trades in Fx money, and debt markets so as to bring efficiency into the transaction settlement process, and insulate the financial system from stocks emanating from operations-related issues. The CCIL was incorporated in 2001 and commenced operations from 15 Feb. 2002.

4. **Structured Financial Messaging Solution:**

The Structured Financial Messaging Solution (SFMS) is the communication protocol introduced by the RBI for intra-bank and inter-bank messages within India. It incorporates templates and fixed message formats for affecting STP among member banks SFMS is broadly similar to SWIFT message formats. These message formats will be used for RTGS and other interbank communication.

SFMS protocols will facilitate STP in the Indian banking industry for domestic payments and transactions, reducing transaction costs for customers.

5. **Latest Cash Management Products:**

In India Cash Management has predominantly been associated with collections products. Subsequently, cash management provides have diversified their product portfolio to include payments, account services and delivery management. This enables corporate treasurers to concentrate on their core functions and outsource non-core activities to banks. Banks are increasingly shifting towards enabling their cash management operations to use more STP.

6. **Electronic Fund Transfer**:

The RBI introduced the Electronic Fund Transfer (EFT) system in 2001. EFT allows the electronic transfer of funds across 14 locations and 13,000 banks branches in India. It eliminates the burden of writing cheques and allows the transfer of funds within 24 hours anywhere within its current coverage.

The system eliminates virtually all incidences of fraud and forgery that are typically involved with paper-based instruments. Current RBI guidelines for EFT stipulate that all banks have to participate in inward EFT (credit to customer's accounts for EFT payments). But participation in outward EFT (sending payments on behalf of customers) is optional.

7. **Special Electronic Funds Transfer**:

In April 2003 the RBI introduced the special electronic funds transfer (SEFT) system, which is the enhanced version of EFT. SEFT now covers 97 cities, 24 banks and 2,500 bank branches across India.

The coverage of SEFT is much larger than that offered by EFT. SEFT gives banks the options to select branches where they can offer SEFT. All branches that participate are SEFT need to be networked with the service branch in Mumbai, which intact as the one point of contact with the RBI for SEFT.

Since, all banks branches participating is SEFT are networked, timely credits will be available to beneficiaries (unlike for EFT, wherein there is a possibility of delayed credit of the beneficiary bank is not networked).

8. **Payment Outsourcing**:

Cheque and drafts remain a popular payment method in India, but involve time-consuming and laborious manual processes. Payment out servicing to banks allows corporates to focus on their core competencies, reduce overheads costs and benefit from speed, accuracy and enhanced security and fraud control.

9. **Electronic Invoice Presentment & Payment:**

Cash management providers in India have started offering electronic invoice presentment and payment (EIPP).

EIPP offers the facility of presenting the invoice by supplier to their client over the internet. The product also provides the facility to the client to view, dispute and pay the invoice electronically through payment gate ways.

10. **Continuous Linked Settlement:**

The Continuous Linked Settlement (CLS) service offered by CLS Bank provides a global infrastructure for multi-currency payment cleaning and settlement services. It is a real-time cross broader settlement system that eliminates settlement risk caused by delay arising from time-zone difference by the simultaneous setting of Fx payment instructions.

CLS enables banks to expand their Fx businesses with CLS participating contemporary banks by making it possible to increase limits due to reductions in settlement risk moreover its delivers the benefits of STP. Large foreign banks that are settlement bank for CLS have been marketing the service to major Indian banks with cross-border flows. However CLS has yet to gain momentum in India.

Features of Instruments of Collection in India

Instrument	***Pros***	***Cons***
1.Cheques	• No charge • Payable through clearing • Can be discounted after receipt • Low discounting charge • Requires customer limits which are inter-changeable with overdraft limits	•Can bounce •Collection times can be long •Collection charge
2.Drafts	• Payable in local clearing • Chances of bouncing are less	•Cost of collection •Buyers account debited on day one
3.Documentary bills	• Low discounting charge • Theoretically, goods are not released till payments are made or the bill is accepted	•Not payable through clearing. •High collection cost •Long delays
4.Trade bills	• No charge except stamp duty • Can be discounted. • Discipline of payment on due date.	•Procedure is relatively cumbersome •Buyers are reluctant to accept the due date discipline.
5.Letters of credit	•Good credit control as goods are released on payment or acceptance of bill. •Seller forced to meet delivery schedule because of expiry date.	•Opening charges •Transit period interest •Negotiation charges •Need bank lines to open LC. • Stamp duty on usance bills