A study about the Optimization of Cash Management Model

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Abstract:

This paper presents factors influencing the optimization of cash management. Cash management is more important for all businesses to strengthen financial management. Each business needs to have an adequate level of cash management to run the business. So, here the study explores the optimum utilization of cash management for small-scale businesses. Entrepreneurs need to educate about the importance of good control over cash management in order to avoid the shortage of cash or financial crises. In general, the findings are to ensure the effectiveness of cash management in order to maintain the financial sustainability of the business.

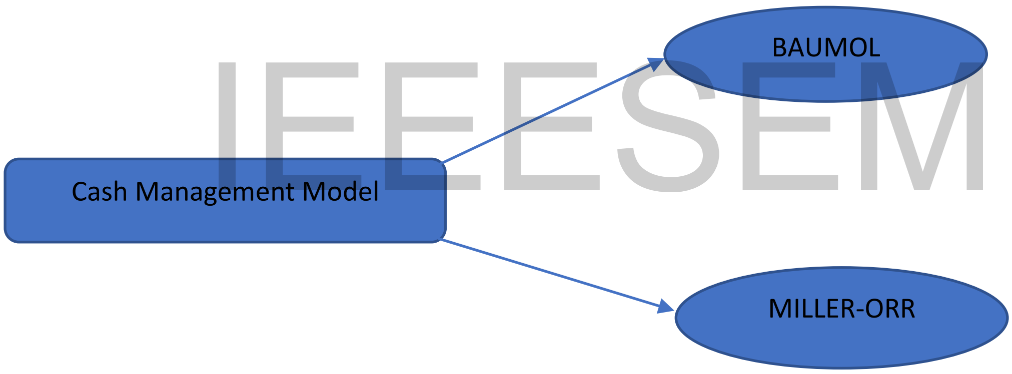
Keynotes: Cash Management, Internal control of Money**,** Cash Management Model.

Introduction:

Cash management is important to strengthen the financial stability of business. It is business strategy for maintain business in optimum liquidity and defined cash management as managing the i) cash inflows in to and out of the firm, ii) cash flows in to the firm and iii) cash balance held by at the point of time. The cash management problem originates from the lack of synchronization between cash inflows and outflows which raises two interrelated issues: i) How to finance cash requirements when cash outflows exceed inflows, and ii) How to invest a cash surplus when net cash flows are positive. The business also needs to control over the internal cash management for example, sell their goods and provide their services using cash. Good internal control also requires the separation of duties in managing cash including the separation of the cashier personnel from the accounting duties. Besides that, the business needs to appoint the person that has the skill and ability to do the budgeting.

Importance of Cash Management:

When it comes to creating and sustaining a company's financial stability, cash management is the key component. Since, cash management is primary asset used to pay obligations (whether you are individual or company, it must be managed accordingly to maximize the earnings. This impacts the future growth of the company. Maintains the cash balances while earning a return on idle cash also top concerns. Cash management concerned with management of cash in such a way as to achieve the generally accepted objectives of the firm-maximum profitability with the maximum liquidity if the firm. An effective and efficient cash management is considered to be important for the following reasons: i) Cash management ensures that the firm has sufficient cash during peak times for purchase and for other purposes. ii) Cash management helps to meet obligatory cash out flows when they fall due. iii) Cash management assists in planning capital expenditure projects. iv) Cash management helps to arrange for outside financing at favourable terms and conditions, if necessary. v) Cash management helps to allow the firm to take advantage of discount, special purchases and business opportunities. vi) Cash management helps to invest surplus cash for short or long-term periods to keep the idle funds fully employed. One of the first steps in cash flow management is measuring liquidity, this means having the amount of cash on hand to meet current financial obligations. Then, you need to develop a cash flow projection. This allows you to manage cash on a daily basis as well as long term. And utilize cash management planning for short- and long-term goals. Using historical cash flow statements helps keep track of how money was used. Keeping track of how cash was used in the past and knowing your current liquidity, will allow you to make long strides in managing cash flow. Knowing where your cash comes from and goes to is vital to being able to manage your available cash. This is essential to manage a cash flow both in the short and long term. Ensuring that outstanding debts are managed cuts down on cash shortages. Making wise investment decisions allows cash to be available when it is needed. If you tie up cash in long term stock then it is not available to invest in something short term with a good Return on Investment. Also, ensuring that you pay your payables on time keeps cash flow of suppliers moving, and prevents them from increasing your prices of necessary items. By managing your cash flow properly, you help to ensure that the economy runs smoother for everyone. The largest goal of good cash management systems is to reduce or eliminate any surprises when meeting cash requirements. Good cash management influences the efficiency of operations and reduces overall cost of doing business.



BAUMOL (1952)-EOQ Model:

William J. Baumol proposed a model similar to EOQ for cash management too. The model helps in determining the cash conversion size which means how much cash should be arranged by selling marketable securities in each transaction. It assumes that cash can be arranged through selling marketable securities which the firms hold in the time of needs. There are two types of cost involved in holding cash. Opportunity cost, Transaction cost also known as conversion cost. The purpose of the model to minimise the total cost of cash holding which is summation of opportunity cost and transaction cost.

Assumptions:

- cash use is steady and predictable
- cash inflows are known and regular
- day-to-day cash needs are funded from current account
- buffer cash is held in short-term investments.

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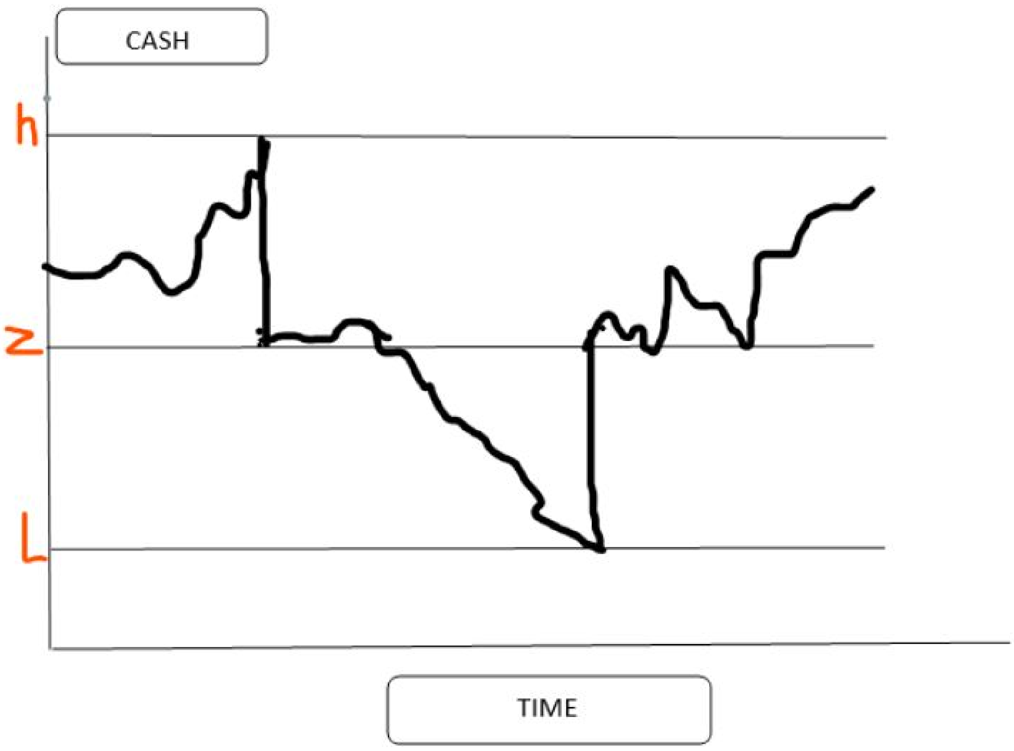
One shortcoming of this model is that it accommodates only a net cash outflow situation as opposed to both inflows and outflows. Also, the cash outflow is at a constant rate, with no

variation.

MILLER-ORR MODEL-1966:

Miller and Orr model assumes that the cashflow of the firm is assumed to be stochastic that is different amounts of cash payments are made on different points of time. It is assumed that the movements in cash balance occur randomly. Miller and Orr suggested a model with control limits, which sets control points for time and size of transfers between an Investment Account and Cash Account. The model asserts that transfer money into or out of the account to return the balance to a predetermined 'normal point whenever the actual balance went outside a lower or upper limit. The lower limit would be set by management, and the upper limit and return points by way of formulae which assume that cash inflows and outflows are random, their dispersion usually being assumed to repeat a pattern exhibited in the past.



H- Maximum level
Z- Return Point
L- Minimum level

The Miller-Orr model, will work as follows:

(i) When cash balance touched the upper control limit (h), securities are bought to the extent of Rs. (h-z).

(ii) Then the new cash balance is z.

(iii) When cash balance touches lower control limit (o), marketable securities to the extent of Rs. (z-o) will be sold.

(iv) Then the new cash balance again return to point z.

The basic assumptions of the model are:

(a) The major assumption with this model is that there is no underlying trend in cash balance over time.

(b) The optimal values of 'h' and 'z' depend not only on opportunity costs, but also on the degree of likely fluctuations in cash balances.

The model can be used in times of uncertainty and random cash flows. It is based on the principle that control limits can be set which when reached trigger off a transaction. The control limits are based on the day-to-day variability in cash flows and the fixed costs of buying and selling government securities.

Conclusion:

In the future, it is appropriate to extend the optimization procedure by including other important factors in the objective function of the optimization. However, the cash management practices are still poor in terms of the internal control of cash management practice particularly on the person who is involved in the accounting record and the preparation of cash budget. It is important to ensure that they are aware of the benefits of cash management including strengthening business efficiency, improving the performance and enhancing long term survival for business. Cash Management involves balancing act it includes Liquidity and profitability.

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