

CASH MANAGEMENT

CM-1

- sufficient cash is available in each division, surplus/shortage, surplus - invested, optimum level
- Cash mgmt techniques :- (a) optimum level (b) cash budgeting (surplus/shortage).

Cash Budget:

Part _____ Period _____

Opn bal
(+) Receipts
Total Receipts

Payments
(-) loan
(+) loan taken
= closing balance.

Debitors Colln / Creditors Pymt

= Opn bal
(+) U. sales/purchase
(-) U. bal.

Purchases

= COGS
(+) U. stock
(-) Opn stock.

Cash Management - optimum level of cash

- (a) Baumol's EOQ model (b) Trial & error (c) Miller-Orr model.

Baumol EOQ $= \sqrt{\frac{2AB}{C}}$ = amt of mkt secu to be converted to cash.

A: annual cash req C: carrying cost
B: converting mkt secu - (amt) = 1 Re x int rate.

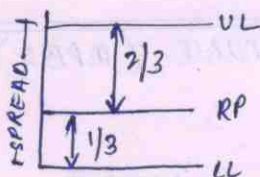
Trial & error method: (lots)

TC = conversion + carrying cost.

conversion = no. of con $(\frac{AR}{LS} \times C_{pec} \times con)$

carrying cost = $\frac{1}{2} \times lot\ size \times C_{cpa}$.

Miller-Orr model:



spread = $3 \times \sqrt[3]{\frac{3/4 \times \sigma^2 \times conversion\ cost\ per\ trans}{daily\ int\ rate}}$

σ^2 = variance $(sp)^2$ of cash flow

daily int rate = int rate / 365

inv (sold) = $1/3$ spread.

inv (made) = $2/3$ spread.

Return point = $LL + (\frac{1}{3} \text{ spread})$
= 0 (mostly)

Upper limit = $LL + \text{spread}$.

Float

• delay in receipt of cash (time gap).

Float

Concentration Lock Box system

money saved = int earned on cash released
= cash rel x int rate.

cash released = no. of days saved x daily receipt.

Cash cycle

CC = $RMHP + WIPHP + FQHP + DCPI - CPP$.

• as low as possible.

Cash \uparrow = $\frac{\text{no. of days}}{C.C.}$
= $365 / C.C. \text{ (days)}$
= $12 / C.C. \text{ (months)}$

cash to be held = CC days x daily expenses.