

Financial Management : 1.Financial Analysis

1. Financial management refers to the **management of the financial resource** and **financial obligation of a firm** in order to achieve the firm's goals.

4 Major decision and function of financial management:

- **Investment decision** 投資評估: where to invest
 - ☆factor affecting long-term investment (1)financial factor(NPV) (2)non-financial factor(human)
- **Financing decision** 融資: how to obtain capital or funding
 - ☆Debt-financing: borrowing short-term or long-term debt to support firms
 - ☆ equity financing: #issuing share #internal financing e.g. use of retained profit**Debt+equity=Assets**
- **Dividend decision** 分錢: how much should be paid out in dividends and in what forms (Distribution of profit) e.g. 派息俾股東——派幾多?自己保留? [Dividend vs retained profit]
- **Working capital decision**(營運資本管理): how to manage funding for daily business operation
 - ☆refer to daily operation E.g. *inventory management *credit policy(account payable/ receivable)
- Budgeting (no budgeting when planning~easy to over-budget)

2. The **ultimate goal** of a firm is to **maximize stockholders' wealth**

3. Profitability ratio:

- Measure the **earning power** of the firm
- **Gross profit ratio** = $\text{Gross profit} \div \text{Sale} \times 100\%$
Gross profit = net sales-cost of good sold ~
- **Net profit ratio** = $\text{Net profit before tax} \div \text{Sale} \times 100\%$
Net profit= gross profit-expenses+revenue
Remark: you can find information in income statements to find net/gross profit ratio
- **Return on capital employed** =
 $\text{Net profit before interest and tax} \div \text{Average capital employed} \times 100\%$
 - ☆calculation of capital employed
 - (1) sole proprietorship: capital balance
 - (2)Limited company:Non-current liability+shareholders' fund(detail in gearing ratio)
 - ☆**measuring the ability to earn a return by utilizing capital**(放一蚊落去會有幾多 return)
- Remarks: Use closing capital when there is one-year data is given

4. Liquidity ratio:變現能力

- ✓ **Measure the firm's ability to repay short term debt**
- **Current(working capital) ratio** = $\text{Current assets} \div \text{Current liabilities} : 1$
- ✓ E.g. 2:1 =one dollar current liability backup by two dollar current asset
- ✓ Ratio is too high: so many idle current asset——miss investment opportunities
- ✓ Ratio is too low : poor liquidity ——maybe go bankrupt

- Quick ratio = $(\text{Current assets} - \text{Inventory}) \div \text{Current liabilities} : 1$
- ✓ It is a stricter measure because inventory has lowest liquidity
- ✓ Measure the ability to **repay immediate debts** by **liquid asset**
- ✧ Remark: if the ratio is greater than 1—— the firm has the ability to pay short term obligation

5. Solvency ratio (償債能力) :

- ✓ **It measure firm's use of financial leverage**
- **Gearing ratio** = $(\text{Non-current liabilities} + \text{Preference share capital}) \div (\text{Non-current liabilities} + \text{Shareholders 'fund})$
- ✓ Type of shareholders (1) ordinary shareholders (2) preference shareholders
- ✓ So type of shareholder's fund (1)ordinary shareholders capital (2)preference shareholder's capital (3)retained profit
- ✓ Non current liability :一年以上 liability
- ✓ Non-current liability +shareholders fund= capital employed(as stated in profitability ratio)
- ✓ Gearing ratio measure capital 裏面唔係自己人 ratio, **so the higher the gearing ratio, the greater the solvency risk**

Non-current liabilities + Shareholders 'fund Debt ratio = $\text{Total liabilities} \div \text{Total assets}$

- Debt-to-equity ratio = $\text{Total liabilities} \div \text{Owners' equity}$
- Interest cover = $\text{Earnings before interest and tax (EBIT)} \div \text{Interest expense}$

6. Management efficiency ratio:

- ✓ **Measure how efficiency the firm utilize its assets**
- Inventory turnover [_ times] = $\text{Cost of goods sold} \div \text{Average inventory}$
- Trade receivables turnover [_ times] = $\text{Credit sales} \div \text{Average trade receivables}$
- Trade payables turnover [_ times] = $\text{Credit purchases} \div \text{Average trade payables}$
- ✓ Not more of it is preferred, the times should be similar to industry average
- Total assets turnover [_ times] = $\text{Sales} \div \text{Total assets}$
- ✓ Remarks: assume all credit purchase/sales
- ✓ For some average data, if there is only one year data, use closing balance
- ✓ If trade payable turnover is greater than trade receivable turnover, there may be some liquidity problems

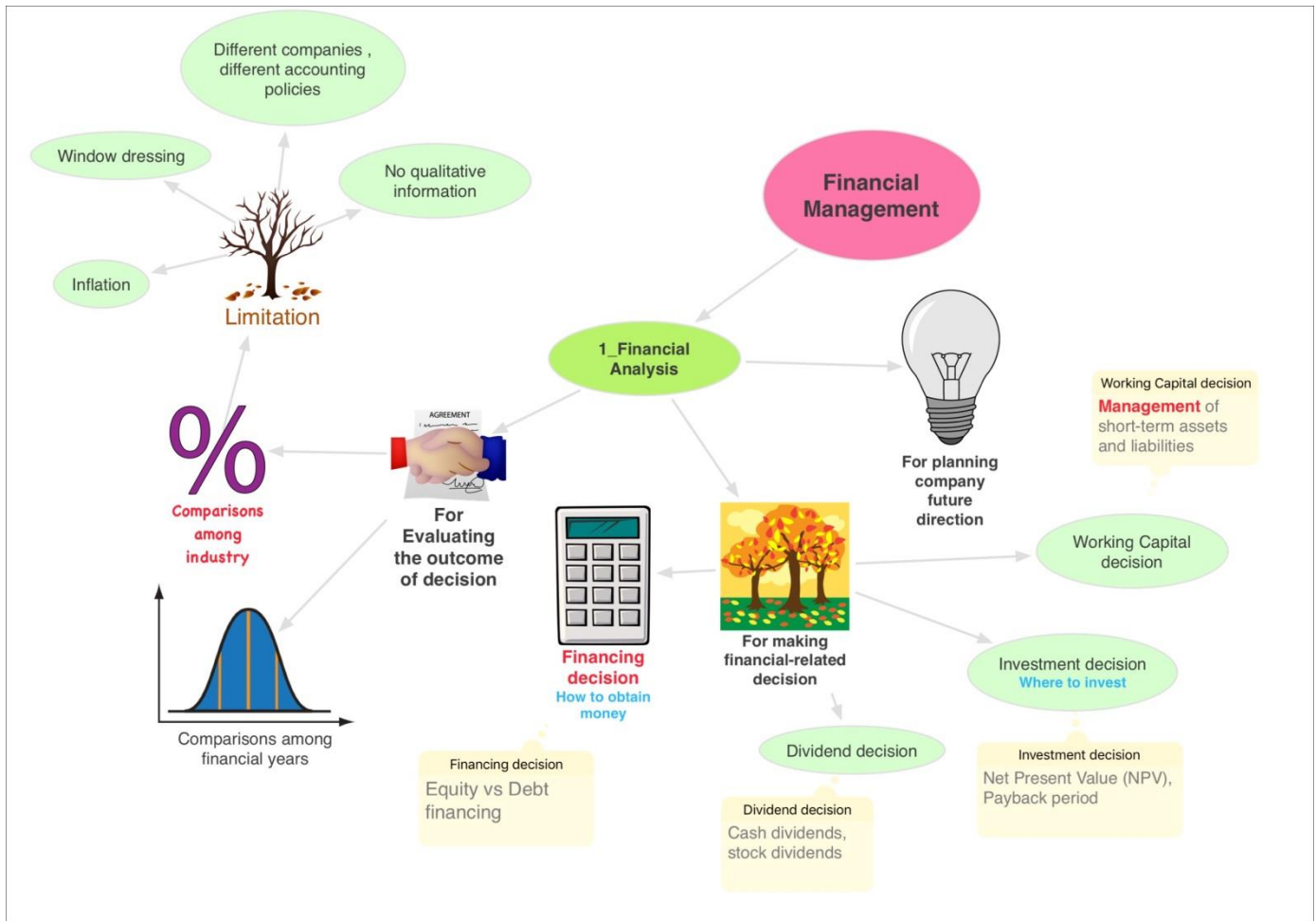
7. Ratio analysis includes **cross-sectional analysis** and **time-series analysis**.

- Cross-sectional analysis refers to the use of certain benchmarks to assess the performance of a firm in a given period.
- Time-series analysis refers to the use of trends in accounting ratio over time to assess the performance of a firm.

8. Limitation of ratio analysis

- **Ratios cannot capture certain qualitative information about a firm**
- ✓ Only reflect quantitative information
- ✓ Lack of qualitative information for example staff morale, staff management style, customer relationships
- Past data may not reflect a firm's future financial condition

- Various accounting practices make comparison of ratios form different firms difficult
- ✓ Each firm use their own accounting policy to prepare financial statements, therefore it is difficult to make intra-company comparison
- Difficult to identify industrial norms for firms with a unique mix of businesses
- Ratio analysis only helps reveal the source of a potential problem/success on the surface



Financial Management : 2 Budgeting

1. A budget is a **forecast of future income and expenses** . It is a **quantitative expression of a plan**.
 - Forward-looking[past figure + prediction]
 - Clear[presentation + responsibilities]
 - Seek improvement 尋求改進
 - Well-organized process[all department]
 - Comparison[actual]
 - Attainable
 - Fine-tune

2. **The purposes of budgeting**
 - ✧ **Use of management functions**
 - **Planning** : a)financial resources b)forecast profit/loss c)prevent possible financial difficulties
 - ✓ Forecast figures provide **directions** for formulating action plan
 - **Coordinating(Organizing)**: interrelated → communication of department managers
 - ✓ Budget information assists **resources allocation** and integration across various department
 - ✓ Resources allocation: form **master budget**(DEF: It links together and summarizes all of a firm's budget)
 - **Leading**: qualified indicators become specific **target** for employees
 - **Controlling** : a)monitor & evaluate by comparison (i.e. compare actual spending)
 - b)identify underperforming department →remedy
 - ✓ Budget figures serve as **performance standards**

3. **Usefulness**
 - Encouraging all department to plan ahead (未雨綢繆)
 - ✓ In other word, it is a base for long-term planning
 - ✓ Discover potential opportunities and problems(SWOT analysis)
 - ✓ E.g. a market have potential opportunities ——more budget for expansion
 - Improving communication and **coordination** within a firm
 - ✓ Improve departmental communication by **consensus**
 - ✓ Resources allocation ——more effective use
 - Providing benchmarks to evaluate the performance of department and employee
 - ✓ Use performance standards
 - ✓ Take corrective actions to **avoid overspending**/ underspending(better utilize of resources)
 - Saving management time and effort

4. **Limitation**
 - Difficult to forecast the ever changing business environment
 - ✓ Budget may not be able to catch up accordingly even if there is flexible budgeting(i.e. review and update regularly)

- Cannot be a substitute for sound management decision
 - May hinder employees from achieving excellence
 - ✓ Discourage employees from exceeding target as there is possibility of receiving higher target next year if they exceeded budgeted goals
 - Adequate training for budgeting staff is need
 - ✓ Budgeting staff may have made unrealistic estimates(underestimate/overestimate)
 - Costly and time consuming
5. **Budgeting Variance**-difference between budgeted and actual amounts [**unfavorable : revenue↓/cost↑**]
- Consider : too small amount / adverse effects → cost effectiveness of investigation & correction
 - **Reason** : (a)poor budgeting [e.g. too optimistic] (b)uncontrollable factors [e.g. financial tsunami]

I. Causes :

| Budgeting variance | Causes |
|---------------------------|---|
| Sale variance | (1)selling price e.g. tackle competitors (2)sales volume E.g. one off massive promotion/event (3)product mix[price] |
| Material variance | (1)material price : unexpectedly high inflation/small discount [e.g. smaller purchase] (related to suppliers supplied) (2)usage : lower quality/less skilled workers[handle inputs]/theft ✓ Wastage |
| Labor variance | (1)labor wage : skills >necessary/labour union's request (2)labor efficiency : unsuitable /lack of training/low morale/work slow for overtime pay |

Remarks: All causes and changes are **unexpected**

II. Solutions

(a) **Sales-volume[competitors] :**

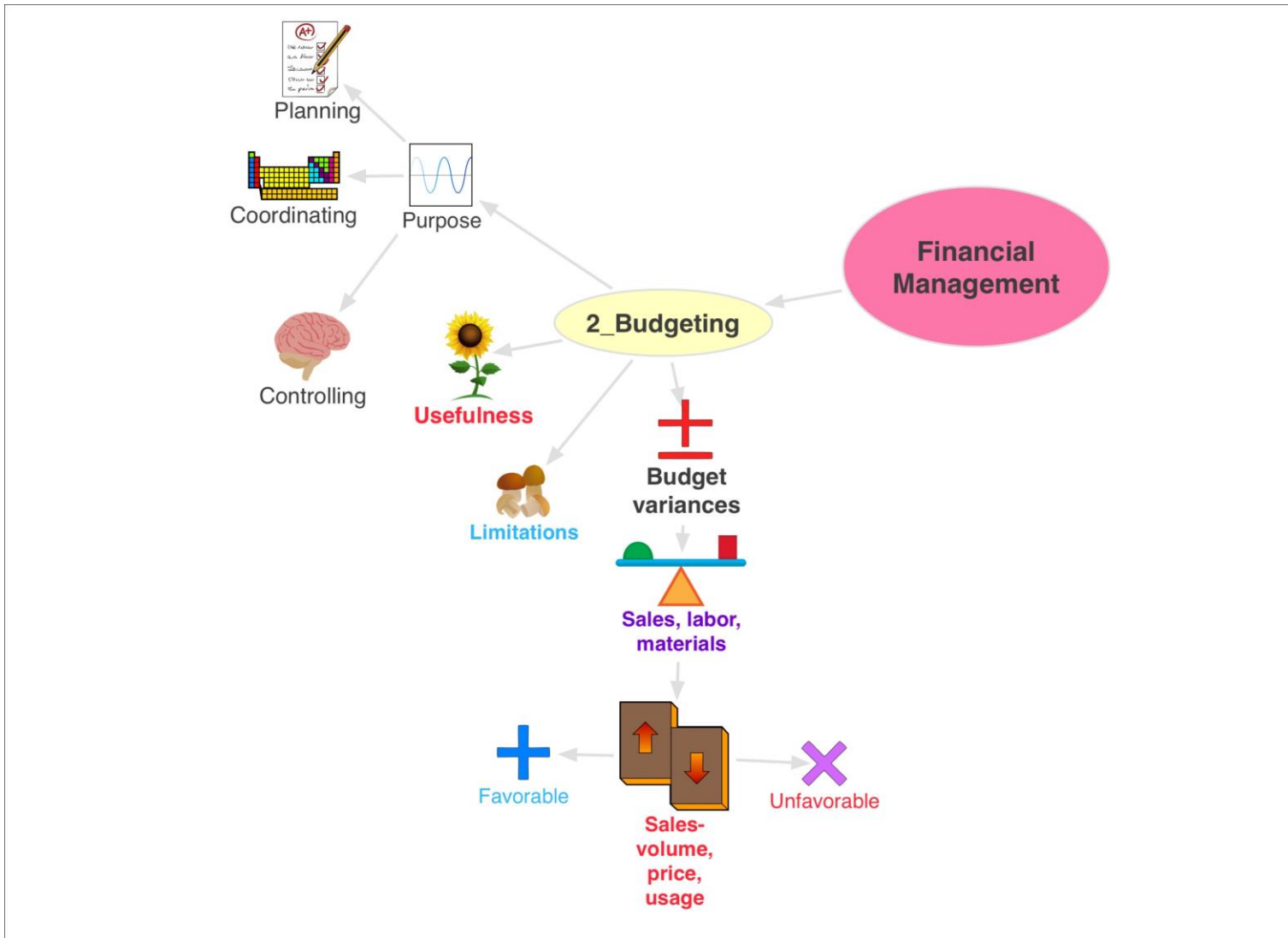
- More promotional tactics
- ✓ More advertisement for **brand recognition**
- ✓ Sales promotion with greater discounts (increase sale volume in a short period)
 - deeper discounts/aggressive pricing

(b) **Price[input/output] :**

- Bulk purchase for discount/cheaper materials in long-run/take over supplier
- Global sourcing for cheaper material
- Offer more fringe benefits (non- monetary compensation)

(c) Usage[efficiency] :

- Minimize wastage
- E.g. long labor hours →staff training/better machines
- Refine production process



Financial Management : 3 Sources of Financing

Key on this chapter

- ❖ **Source of financing(comparison)** 1. **Debt and equity financing** 2. short-term and long-term financing
3. internal and external financing

| | | | |
|----------------------|---|---------------------|---|
| Debt financing | Funds obtained from sources other than owner | Equity financing | Funds supplied by the owners |
| Short-term financing | Capital supplied for a period less than 1 year | Long-term financing | Capital supplied for a period more than 1 year |
| Internal financing | Funds obtained from firm's internal cash flow e.g. retained profit | External financing | Funds obtained from sources outside firm |

- ❖ **Principal of selecting financing methods**

A. Short-term vs Long-term

- **Short-term** [refinancing-replacement of existing debt obligation with new one]
 - Issue commercial paper : well-know banks & corporations
 - Short-term bank loan : small amount
 - Overdraft : withdrew > deposited [current account]
 - Accrued expenses : deferred payment for expenses [no interest cost]
 - Trade credit : deferred payment allowed by suppliers for purchases [within credit period]
 - Factoring accounting receivable: sell A/R to financial institution at lower price[receive cash earlier]

- **Long-term**
 - **Common stock** : Ltd.[≠preferred stock]
 - **Bonds** : Ltd.[may default : high interest rate]
 - **Issue share**
 - **Long-term bank loan** : larger amounts
 - **Use of retained profits**: undistributed
 - **Hire purchase**: rent goods & pay by instalment over a period [for expensive assets]
 - no ownership until full payment
 - leasing (租)** : similar but never own good

| | Short-term: capital for period | | Long-term: capital for period | |
|--------------------|---|---|---|--|
| Meaning | Sources of financing that provide capital for a period of less than one year . | | Sources of financing that provide capital for a period of more than one year . | |
| Use | Short-term needs | | Financing fixed assets | |
| Cost | Lower [Adv.] (Interest payments) | | Higher [Disadv.] (Higher Interest rate) | |
| Flexibility | Higher [Adv.] | Simpler application procedure (X collateral) | Lower | Still pay even no longer need [Disadv.] Stricter screening application Collateral required |
| Risk | Higher refinancing risk | | Lower refinancing risk with a stable funding period | |
| Risk | Higher | Frequent refinancing needed [Disadv.] | Lower | Stable sources of capital [Adv] |

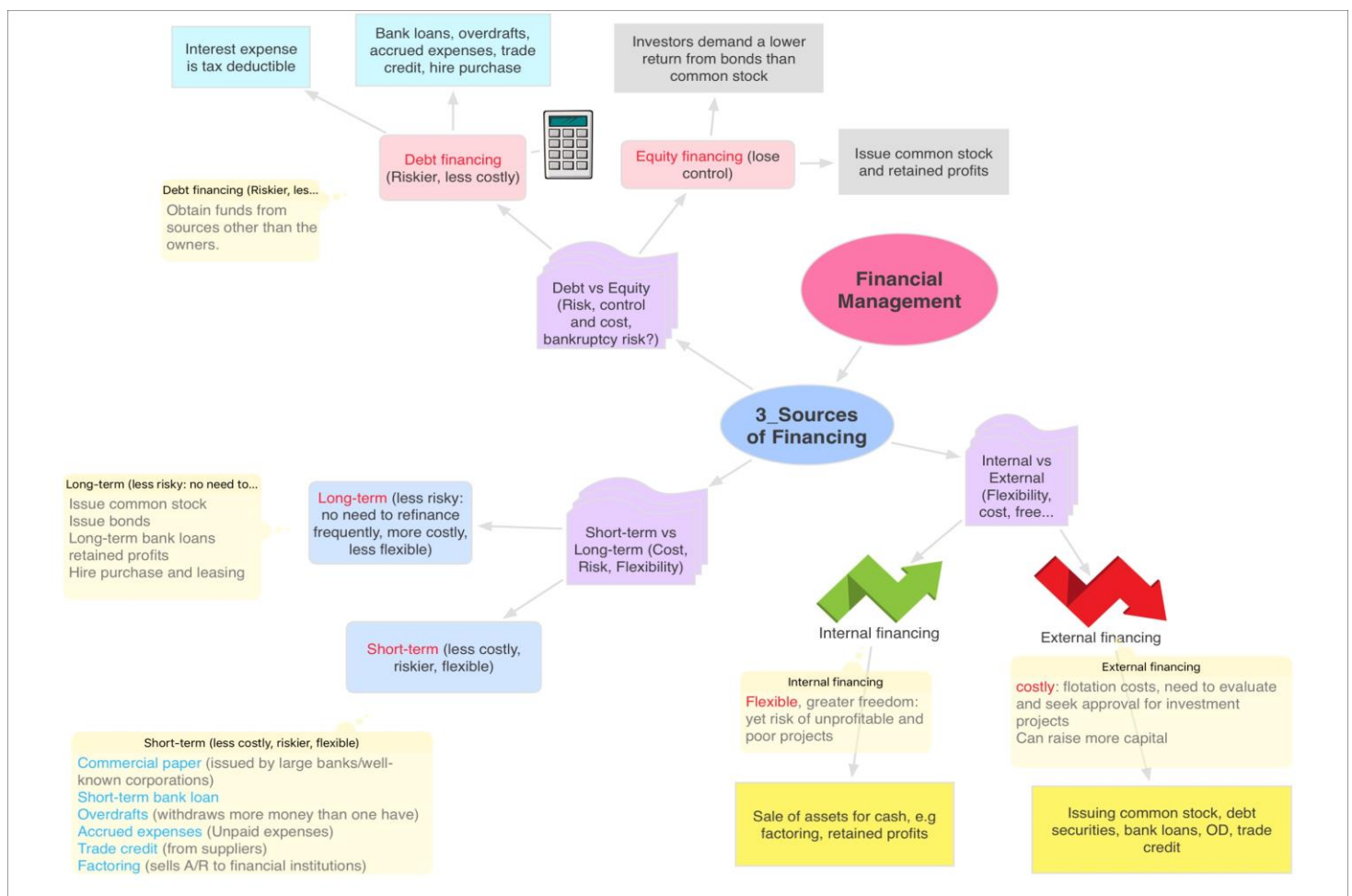
| | Internal [retained profits] : internal cash flows | | | External [common stock] : sources outside firm | | |
|---------------------------|---|----------------------------------|---------|---|---|---------|
| Example | Use of retained profit Factoring account receivable Liquidation of fixed assets | | | Issue share/bond Borrow bank loan | | |
| Use | Whenever available | | | Only when internal is insufficient | | |
| Cost | Lower (No issuing cost) | | Adv. | Higher [transaction cost/interest] | | Disadv. |
| Flexibility | Higher | No need approval | Adv. | lower | Approval/laws | Disadv. |
| Freedom [decision] | Yes | No need approval/no extra owners | Adv. | No | Need approval/extra owners | Disadv. |
| | | Careless → waste | Disadv. | | Purpose disclosure +approval → careful | Adv. |
| Capital raised | Less | | Disadv. | More | | Adv. |

Debt vs Equity [Debt : all except common stock &retained profits]

| | Debt [bonds] : sources other than other | | | Equity [common stock] : owners | | |
|--------------------------------|---|---|---------|---|--|---------|
| Use | Low risk of bankruptcy [inexpensive : low cost] | | | High risk of bankruptcy [avoid high interest] | | |
| Risk [financial burden] | Higher | -periodical interest -repay principal at maturity | Disadv. | Lower | -variable & not guaranteed -no maturity | Adv. |
| Control | Unaffected | Creditor :no voting right | Adv. | Reduced | -stockholders : voting right -risk : being taken over | Disadv. |
| Cost | Lower | - return demanded [secured interest & repayment priority] -tax deductible interest | Adv. | higher | Distribution of net profit _can't reduce tax | Disadv. |

Remarks: Debt financing

- ✓ Maturity date
- ✓ Interest



Financial chapter 4-capital investment appraisal

Capital investment: long term investment related to production or operation: fixed asset -> productivity up
-> profitability up

A. factor to consider (investing)

Financial (timing: lack cash-> spread over year)

- cost [cash outflow]:** amount + timing (initial [purchase, install]+ subsequent (maintenance)
- Income [cash inflow]:** amount + timing (indirect income: cost of reduction relative to old assets)
- Duration:** lock up capital for long time-> give up other projects.
- Time value of money(cost of capital)** *-a dollar received Today is worth more than to receive future*
(solution find PV of cash flows-> higher discount rate = lower return)
- Uncertain future cash Flows**->demand for higher return->X invest if<required return.
- Initial cash outlay:** purchase price
- Opportunity cost: consider alternative with highest return

Non-financial[may ignore profitability]

- Strategic goals** (eliminate threats, leadership)
- Regulatory compliance:** environment and Safety ->best invest to avoid being sued and fined.
- Industry standard:** quality ->competitiveness -> consumers' confidence
- business image**
- Staff morale:** workplace (equipment)->unquantifiable impacts

B. Capital investment appraisal- analyzing best capital investment projects[budgeting]

Cash Flows (CF): cash receipts and payments during investment period -> additional cash Flows instead of profits: actual amounts -> no accounting principles (no depreciation)

Depreciation: systematic allocation of cost of non- current asset over its useful life.

1. **Account rate of return-** average annual **net profit** generated per dollar for average investment.

✓ Use **accounting approach** to calculate the **return rate** of the project

Rule a) target rate (comparison): acceptable when \geq

b) Mutually exclusive: choose higher ARR

2. Payback period

✓ **Evaluate the number of years required to recover the investment**

Rules: a) set minimum period allowed (comparison): acceptable when \leq .

b)two mutually exclusive project: choose shorter period.

C)**Shorter** the payback period, **better** the project to be

Initial cost/ cash flow per year [If constant CF]

Initial cost over cash Flows from year 1 to (x-1)+ remaining cost/cash flow from year X [year X: total CF \geq cost]

3. **Net present value**-present value of Future net cash inflows, less the initial outlay.

= total PV of annual net cash inflows + PV of residual value - initial cost.

$$NPV = -C_0 + \frac{C_1}{(1+r)^1} + \frac{C_2}{(1+r)^2} + \dots + \frac{C_T}{(1+r)^T}$$

- a) NPV < 0: rejected project
- b) NPV ≥ 0: accept project
- c) mutually exclusive (all positive) : choose higher NPV

C_0 : Initial cash outlay
 (↑ → NPV ↓)
 $C_1 \dots C_n$: Net cash flow
 (cash inflow / cash outflow)
 (↑ → NPV ↓)
 r : Discount rate / cost of capital
 (↑ → NPV ↓)
 n : projected life
 (↑ → NPV ↑)

✓ Use **discounted cash flow** to assess whether the project brings an **increase in net worth**

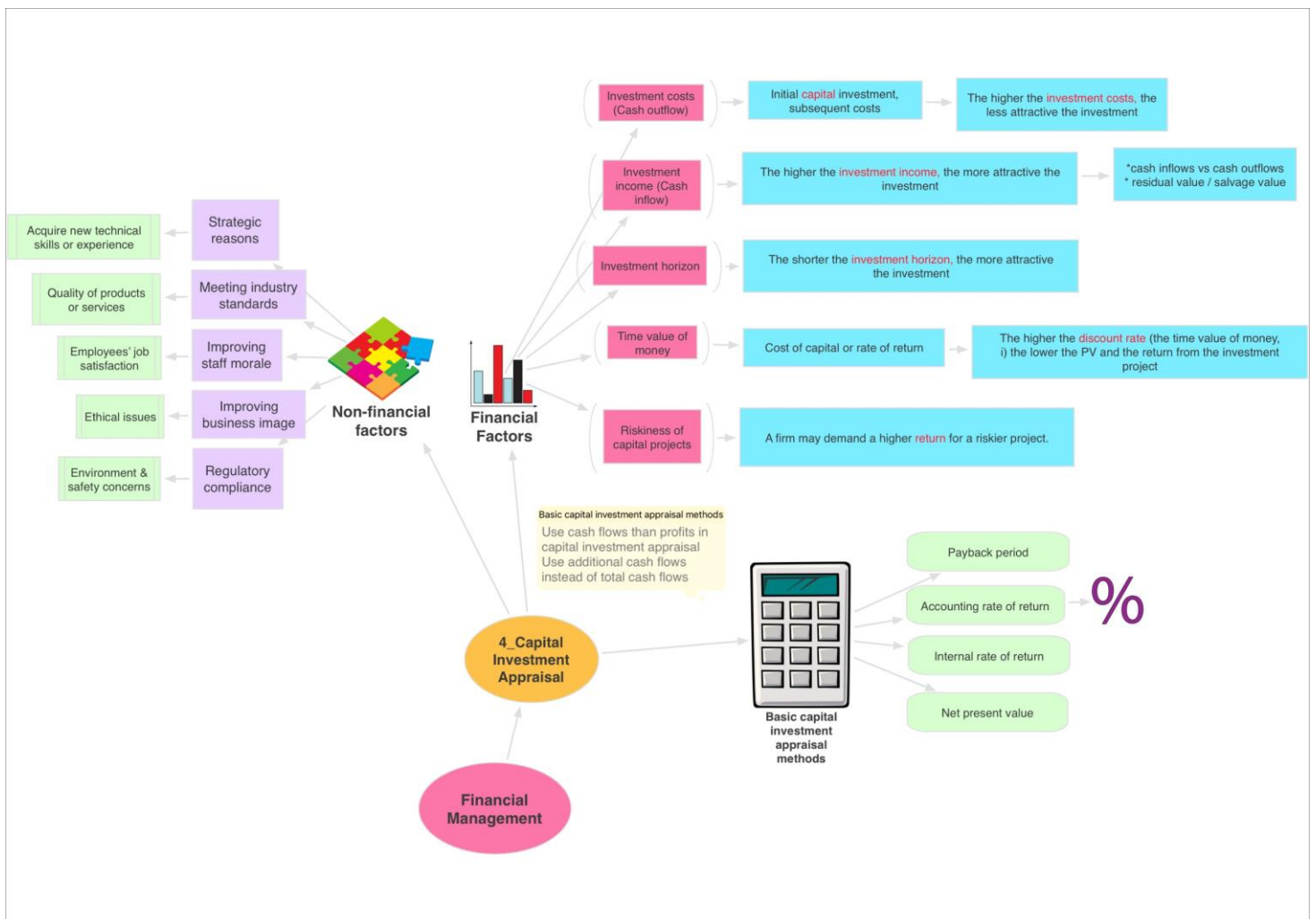
4. **Internal rate of return**: discount rate at Which NPV is zero

NPV: \$ vs IRR: %

- Rules**
- A) IRR ≥ required rate of return: accept
 - B) Mutually exclusive: choose higher IRR
 - C) Comparison between 4 methods

| | Pros | Cons |
|-----------------------|--|---|
| ARR | <ul style="list-style-type: none"> ✓ Easier to use ✓ simple calculation (vs IRR/NPV) ✓ easy to understand | <ul style="list-style-type: none"> ✓ Profits use instead of cash flow ✓ ignore time value of money |
| Payback period | <ul style="list-style-type: none"> ✓ Easier to use ✓ Simple calculation ✓ Easier to understand (years) ✓ Identify riskiness (longer=riskier) ✓ Cash for reinvestment +(with shorter period) | <ul style="list-style-type: none"> ✓ Ignore time value of money (Vs NPV/ IRR) ✓ Ignored cash Flows after payback period (VS NRV/IRR) ✓ Random and subjective criteria for target |
| NPV | <ul style="list-style-type: none"> ✓ Most reliable | <ul style="list-style-type: none"> ✓ Difficult calculation (estimation) |

| | | |
|------------|--|---|
| | <ul style="list-style-type: none"> ✓ Consider time value of money (Vs ARR and payback period) ✓ Considered all cash Flows (Vs payback period ~more comprehensive) ✓ Directly linked to firm value | <ul style="list-style-type: none"> of cost of capital/discounted rate ✓ Difficult to understand (no%) |
| IRR | <ul style="list-style-type: none"> ✓ Consider time value of money ✓ Considered all cash Flows ✓ Easy to understand (%) | <ul style="list-style-type: none"> ✓ Difficult calculation(trials errors, assumptions) Or multiple IRR may appear when cash flow change from positive to negative ✓ can't reflect actual increase in firm value(vs NPV) |



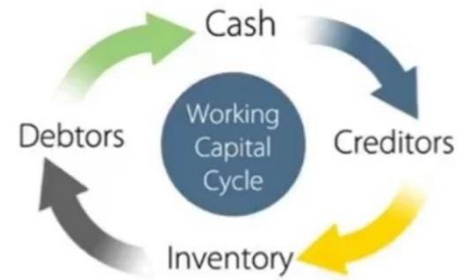
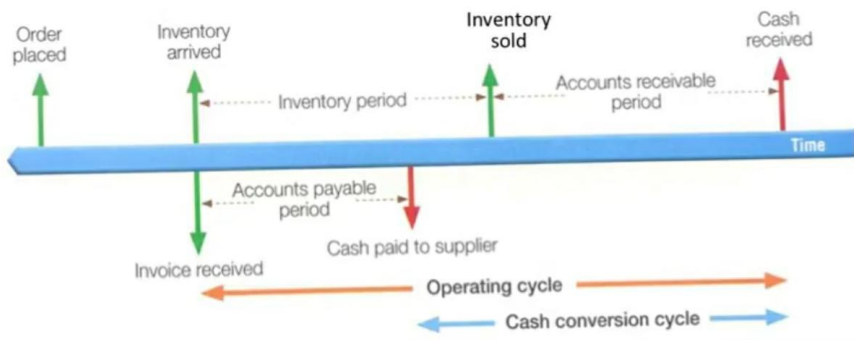
Chapter 5-working capital management

Working capital Management: simultaneous management of current asset and liabilities

Net working capital = current assets - current liabilities

Cycles: shorter = higher management efficiency & liquidity

Operating Cycle & Conversion Cycle



Operating cycle and cash conversion cycle

Operating cycle: number of days a firm needs to transform its inventory to cash

Cash conversion cycle: period between cash disbursements and cash collection

A. Cash management cash -collection and disbursement 支出

I. **Goal (holding cash)**: adequate cash for operations at minimum level of idle cash (cost)

Benefits: transaction and meet unexpected needs, lower risk of cash shortfall, higher liquidity

Costs: can't invest, forgo interest income, lower profitability

Management of Float

II. **Float lag** between time of cheque being sent by payers and Money being sent by recipient

(because of taking time to deliver by Email and process for banking system - > available to use after clearance)

Cheque clearance exchanges of cheque and settlement of cheque payments between banks

Correction float [inflow: receive] vs **disbursement float** [outflow: draw]

payers: prefer lengthening disbursement float - > much cash for longer time

recipient: prefer shortening collection float - > much cash for shorten time.

III. Principles

a) **speed up cash inflows (receive cash from customers)**

shortening collection float

- ↓delivery time: payment collection centers in Major cities (cut mail delivery)
- ↓clearing time for cheque deposit before daily cut off time at bank

Encouraging cash payments

- ↑cash payments [instant cash and decrease service charges (credit card operators)]
- Membership card accumulate points for redeeming gifts by paying by cash / octopus
- Express check-out counter for cash purchases

b) delay cash outflows (as long as not upsetting suppliers)

Higher disbursement float (keep the cash for longer)

- delivery time↑: disbursement centers in remote cities
- clearing time↑: Friday payment - > cheque can't be deposited and cleared over weekend

c) match timing & account of cash inflows and outflows

- sufficient to meet cash outflows

IV. Cash budgeting project for both cash receipts and payments

- **Cash budge:** foresee future cash balance
- Ending Cash Balance = cash expected to hold at the end of period
- Minimum Cash Balance required = cash desired to hold
- Cash surplus(/deficiency) = ending - minimum(+ =surplus,- =deficiency)

a) Actions to deal with cash surplus or deficiency

Surplus: invest in marketable securities (MS) -> lower cash Balance ->lower opportunity cost ↓

☆MS-short term investment that can be easily & quickly converted into cash

Deficit: additional financing needed eg short term bank loan

b) Importance

Surplus: plan for short term investment-> more time to analyse project

Deficit: plan for short term loan->more time to analyze financial options

B) account receivable management-formulation of accounts receivable policy(credit policy)

I.elements

a) **Credit standard**- minimum level of credit worthless of customer to obtain credit from firm to avoid bad debt (A/R uncollectable)

5Cs

capital: amount & quality of capital Invested by customer in own firm

capacity: repayment ability (cash flow, payment history)

collateral: physical/ financial assets -> greater value than loan ->secure

conditions: economic environment and intended purpose of loan.

character: subjective judgment of customers' character-> trustworthiness of customers (personal history, experiences)

b) credit terms: states repayment conditions for purchasing on credit.

credit period: time period within which debtor has to settle payment

cash discount: discount given to debtor for paying within cash discount period

Cash discount period: time period in which debtor has to pay for (<credit period->encourage early payment

c) Collection policy: guidelines on actions for collecting overdue A/R before becoming bad debt

(friendly reminder/ Warning letters/ visiting office/ collection agency/ legal action)

➤ **Lenient Credit policy**

- ✓ **More credit sales with a longer credit period and lower credit standard**
- ✓ Sales increase due to greater payment flexibility
- ✓ More fund tie up in account receivable due to longer collection period
- ✓ Higher debt-collection costs as well as default risk

➤ **Stricter credit policy**

- ✓ **Limited credit sales with a shorter credit period and higher credit standard**
- ✓ Lower collection cost and smaller bad debt loss
- ✓ Sales may get hurt since customers are either denied credit or given small credit

II. Factors affecting formulation of A/R policy

| | Granting trade credit | Credit standard ↓ | Credit period ↑ | Credit discount ↑ |
|----------------|---|-------------------|-----------------|------------------------------------|
| Sales | ↑ | | Volume ↑ | |
| | -Flexible -Settle later->attractive | Easier | Attractive | Attractive (purchasing price -) |
| Liquidity | ↓(pay later) | | - | ↑(earlier) |
| Profitability | ↓ | | | |
| | Uncertain [Sales vs bad debt & opportunity cost] | | | |
| | Forgo potential loss | ↑ | ↑ | ↓ |
| A/R & bad debt | ↑ | | | ↓ |

C) account payable management- formulation of account payment policy [discount: implicit cost]

☆ **A/P policy:** governs procedure for making credit purchase and repaying A/P

a) Taking discount (repay earlier): when borrowing rate < annual rate of cash discount

-Purchasing costs ↓ X loan interest ↑ [need \$ because of lost short term financing] & forgo investment return

b) giving up discount(keep cash):when borrowing rate >annual rate of cash discount

D) inventory management: management of raw materials ,work in progress and finished goods

☆a) adequate lv: Unexpected demand to avoid loss of sales(stock depletion and production stoppage)

☆b) minimize order (storage), liquidity+

I. Economic Order Quantity Model (EOQ)

Finding optimal order quantity to minimize total inventory costs

Ordering costs – costs of placing order for inventory from suppliers [per order] ($F \times \frac{D}{Q}$)

● Eg Shipping cost

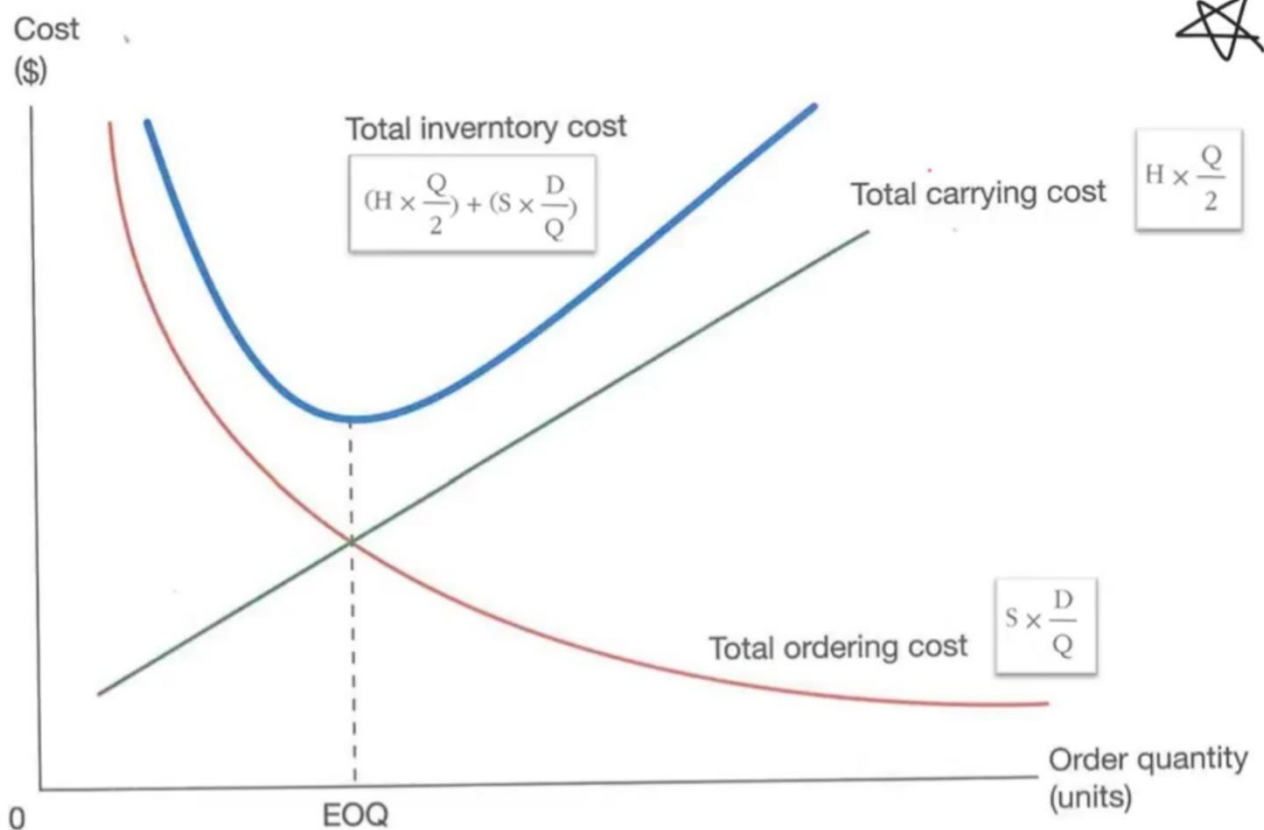
Carrying costs – costs of holding inventory for certain time period [per unit] = $C \times \frac{Q}{2}$

☆ storage / insurance / loss [deterioration & obsolescence] / opportunity costs of tying up money

☆ $Q \uparrow$ avg. inventory held $\uparrow \rightarrow$ annual carrying costs \uparrow

EOQ [order Q with min. total inventory cost] : total ordering \$ = total carrying \$

☆ D = Annual Demand, F = Ordering \$ per order, C = carrying \$ per unit



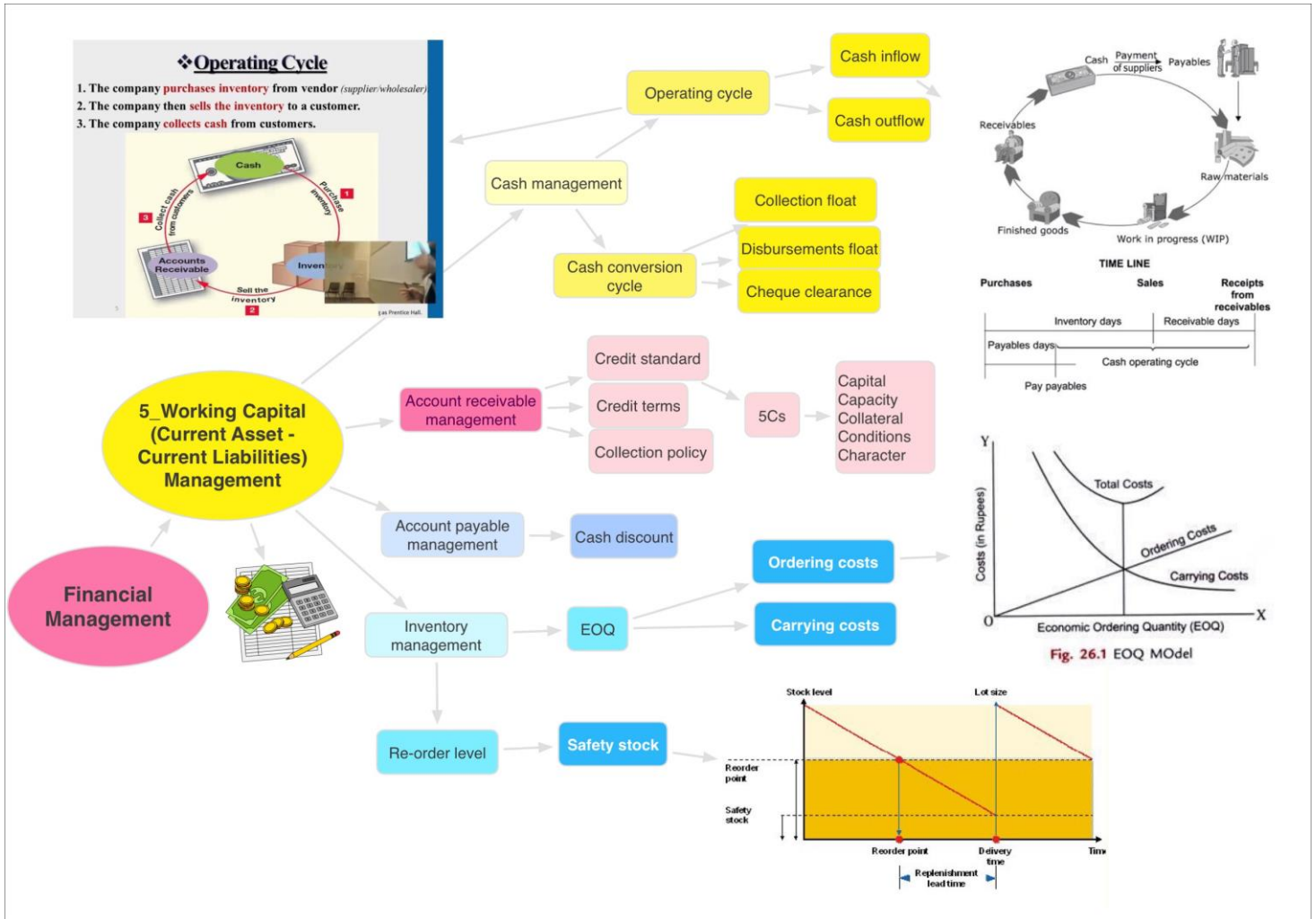
$$\star \text{ Total Inventory Costs} = (F \times \frac{D}{Q}) + (C \times \frac{Q}{2})$$

$$\star Q^* = \text{EOQ} = \sqrt{\frac{2DF}{C}}$$

II. Re-order level – inventory level at which a firm should restore its inventory

$$\star = (\text{Daily Usage} \times \text{No. of Days for Delivery [lead time]} + \text{safety stock})$$

☆ sales ↑, delay of inventory delivery, production stoppage of inputs



Chapter 6 Risk Management

Risk Management- identifying and assessing risk faced by firm, and developing measures to minimize losses

☆ **Risk:** uncertainty of possibility of suffering loss

A. Process

- i. **Identifying** (e.g ratio analysis)
- ii. **Measuring:** lower frequency [probability of loss] \approx higher severity [extent of loss] e.g tsunami
- iii. **Controlling:** most cost effective measure [potential loss vs costs of Risk control]

B. Types

i. Pure vs speculative

a) **pure risk-** only involved possibility of loss or loan loss

- i) **personal:** possibility of illness /injuries /death (e.g. owner / key employee)
 - ii) **property:** possibility of property being damaged / destroyed / stolen (e.g premises, inventory, cash)
 - iii) **liability:** possibility of being legally liable to compensate for damaging ppl's property/injuring ppl
- ☆ [accidents (hospital: medical, phone manufacturer: explosion, construction: industrial)]

b) **Speculative risk-** include the possibilities of loss and gain

e.g. interest rate, exchange rate ,public policy

ii. 2. Insurable vs non insurable

Insurance - individual or firm transfer risk kr loss to insurance company in exchange for a fee

Insurance: losses covered in insurance policy and covered amount

Five conditions of insurable risk

- a) **non speculate:** otherwise guaranteed to gain from speculation.
- b) **Accidental and uncontrollable:** no accurate prediction& not intentionally cause by insured.
- c) **Probability of occurrence can be estimated:** predict number of claims and premium to ensure profitability
- d) **Infrequent and significant enough loss:** otherwise administrative costs> Premium income
- e) **Acceptable number of insured at same time:** otherwise unaffordable to compensate(war)

C. controlling[factor to consider :cost of control , balance of strategies]

i. Risk avoidance :eliminating risk of loss[non engaged]

Loss frequency-

Loss Resort: always not taking risk->profitability-

ii. Risk reduction- reducing risk of loss(education and training)

Loss prevention: frequency-

Loss reduction: severity-(fire-> fire automatic sprinkler system to reduce damage)

iii. Risk assumption -bearing risk of loss[set aside an amount to cover potential losses]

·self-insured

·won't affect loss frequency/severity

- Foreign insignificant and bearable losses without other strategies-> a necessary cost of Risk control-

iv. Risk transfer: transferring risk or loss to another party[insurance, contract]

Eg: hold harmless provision

D. company available insurance for business

a) Motor insurance: protect drivers and third parties Against losses from car thefts & accident

- Third Party Insurance for auto mobile: compensation for damages of third parties
- Comprehensive insurance=1+ damages of insured own vehicle

b) Fidelity guarantee insurance: compensate employer for loss due to dishonest employees

Eg: cashiers: handle much money → probably for fraud / theft

c) Library insurance

- public library insurance: compensation for damages to public
- employees compensation insurance: compensation for injuries/death of employees at work

