Management Second Partial

1° BEMACS

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What is Strategy ?

Strategy: The set of goal-directed actions a firm takes to gain and superior performance relative to competitors.

- compete to be the best → this is relative to the type of competition you are having (quality, final price, …) •compete to be unique

A good strategy has **3 elements:**

Diagnosis	**Guiding Policy**	**Coherent actions**
→ identifying a competitive challenge through analysis of the firm's external and internal environment	Formulate the firm's corporate, business and functional strategies	Implement a set of coherent actions to implement the guiding policy

Competitive Advantage

Competitive Advantage: Superior performance relative to other competitors in the same industry or the industry average. Business strategy aims at achieving competitive advantage.

- Differentiation: delivering superior value while containing the cost to create it
- Cost Leadership: offering similar value at a lower cost

Companies with a good strategy are able to provide products or services to consumers at a price point that they can afford while keeping their costs in check, thus making a profit at the same time. Both parties benefit from this trade as each captures a part of the value created

External Analysis

Analysis of external environment: it changes continuously, many firms are unable to see the changes that are coming. Many firms are unable to see the changes that are coming or already happening.

- Macro environment: all the dimensions that are outside of the firm
- Industry environment: competitive environment of the firm

PESTEL Framework

Pestel Framework: A framework that categorises and analyses an important set of external factors Political, Economic, Social, Technological, Ecological, and Legal) that might impinge upon a firm and threats for the firm.

- Political: result from processes and actions of government bodies that influence firm decisions and behaviour
- Economic: Includes macroeconomic factors such as growth rates, employment rates, interest rates, price stability and currency exchange rates

- Socio-cultural: Capture society's evolving cultures, norms and values
- Technological: Capture the application of knowledge to create new processes and products
- Ecological Environmental factors): involve broad environmental issues such as resource constraints, climate change and ecological crisis. These factors can present both threats and opportunities for organisations
- Legal: include official outcomes of political processes as manifested in laws, mandates, regulations and court decisions

The Industry Life Cycle

4 stages:

Introduction 2. Growth 3. Maturity 4. Decline

There are always opportunities for firms that can innovate products, services, and adapt to the changing tastes of customers. During the life cycle, many things can change such as technologies, distribution channels, suppliers, competition, …

!!! The life cycle is not always respected some industries respect the

- typical up and down shape
- some industries might decline first and then increase their sales, therefore not respecting the typical shape
- some industries might be continuously declining or continuously rising

The Industry Value Chain

The industry value chain: The consecutive chain of supplier-buyer relationships in an industry. The chain is the sequence of firms or other organisations involved in producing and delivering a product or service. The sequence begins with basic suppliers of raw materials and extends all the way to the final customer.

Each stage adds its own value. The total value of the chain is appropriated by the firms in the different stages.

The Five Forces Framework

Industry effect: Average profitability of an industry

→ depends on the five forces of the industry

Firm effect: Profit differential of a company

→ depends on a firm's competitive advantage

If the **profit differential** (the Return on Assets RoA of a company minus the RoA of that company's industry) is higher than the industry's RoA it corresponds to a **competitive advantage**

Created by Michael Porter, the purpose of the framework is to understand whether an industry is profitable. Industry profitability is linked to the strength of competitive pressure. The innovative idea was that competitive pressures do not only come from rivals but also from broader forces.

 An industry is profitable when:

- rivalry is low high entry barriers little threat
- from substitutes suppliers have little
- bargaining power buyers have little
- bargaining power
-

 Threat of Entry

- If the profitability is high, new competitors will try to enter the industry leading to more intense competition and lower profitability
- **Barriers block entry**, the industry profitability is preserved. Barriers can be:
  - Economies of Scale product differentiation capital requirements government
  - policies
  - new entrants may find workarounds to overcome the barriers
  -
- **Power of Suppliers**
- Industry suppliers reduce industry profit potential by demanding higher prices or reducing the quality of the input or service delivered
- The **bargaining power of suppliers** is high when:
  - Suppliers offer products that are differentiated
  - Suppliers do not depend on the industry for a large part of their revenues
  - Large switching costs
  - There are no good substitutes

 Power of Buyers

- Buyers demand lower prices or higher product quality which increases production costs for the industry
- The **bargaining power of buyers** is high when:
  - Few buyers
  - Undifferentiated commodities
  - Buyer's face low or no switching costs
  - Buyers can credibly threaten to backwards-integrate into the industry

 Threat of Substitutes • substitutes: products or services available from outside the given industry that come close to meeting the needs of current customers

- a high amount of substitutes limits the price that competitors can charge
- Threat of substitutes is high when the buyer's cost of switching is low and the priceperformance trade-off is attractive

- How to distinguish rivals vs substitutes:
  - Nature of the product or of the technology
  - How revenues are obtained Consequences:
  - Rivals are in the same industry and have an interest in cooperating
    - Substitutes are from other industries and have no interest in cooperating
    -

Rivalry among existing competitors • rivalry: the intensity with which incumbents fight each other for market share Rivalry reduces industry profitability because competitors may use:

- Lower prices
- Better quality

- Factors that make rivalry stronger:
  - There are many firms equal in size and capability
  - The market growth is slow
  - High fixed costs
  - Lack of differentiation opportunities
  - High exit barriers

Sixth force: Strategic role of complements • complement: a product, service, or competency that adds value to the original product offering when the two are used together simultaneously

- complements increase demand for the primary product, enhancing the profit potential **Measuring concentration**

→ concentration reduces rivalry among incumbents

 It makes them stronger against suppliers and buyers

Concentration ratio: $CR_n = MS_1 + MS_2 + ... + MS_n$ **Herfindhal index:** $HI = MS_1^2 + MS_2^2 + ... + MS_n^2$

Concentration ratio: total market share of the largest n companies

- 0 0.40 not concentrated
- 0.40 0.70 moderately concentrated
- 0.70 highly concentrated

Herfindhal index: n is all the companies, market shares are squared before being summed to increase the weight of bigger firms

- 0 0.15 not concentrated
- 0.15 0.25 moderately concentrated
- 0.25 highly concentrated

Core Competencies of the firm

→ **Core competencies:** enable a firm to gain and sustain competitive advantage by differentiating its products and services from rivals, creating higher value for the customer, and offering lowercost products. They are unique strengths embedded deep within the firm.

→ **Core competencies, resources,** and **capabilities** are key to competitive advantage's creation and sustainability

Resource-based view and the VRIO Model

 Core competencies must be constantly nourished through:

Resources:	**Capabilities:**	**Activities:**
Any assets that a firm can draw on when formulating or implementing a strategy They can be tangible or intangible	Organisational and managerial skills necessary to deploy a diverse set of resources	Distinct and fine-grained business processes that enable firms to add incremental value by transforming inputs into goods and services

→ **Resource-based view:** this theory argues that internal resources are essential to achieve and sustain competitive advantage

Resource heterogeneity:	**Resource immobility:**
Bundles of resources, capabilities and competencies differ across firms	Resources do not move easily (stickiness) from firm to firm

→ **VRIO Model:**

- **V**aluable: Valuable resources enable a firm to increase its economic value creation
- **R**are: If one or few firms possess it
- Costly to **I**mitate: Direct imitation or Substitution
- **O**rganized to capture value: An effective organizational structure and coordinating systems

→ if the Resource, Capability, or Competency is valuable, rare, costly to imitate and organized to capture value then the *Competitive Advantage is Sustainable* → **To protect Rare and Valuable resources from imitation:**

- Better expectation of future resource value
- Intellectual property protection: Patents, design, copyrights, trademarks, trade secrets,…
- Social Complexity: different social and business systems interact and are combined. Depend on organisational culture, which is difficult to replicate
- Causal ambiguity: Cause and effect of a phenomenon are not apparent. For example it is difficult to pinpoint Apple's success Steve Jobs? Timing? …)
- Path Dependence: Decisions made in the past limit the options one faces. Time compression diseconomies make it difficult for rivals to replicate a resource quickly

The Value Chain

 The internal activities a firm engages in when transforming inputs into outputs. Each activity adds incremental value and incremental costs.

- **Primary:** add value directly → reduce costs or increase value
- **Support:** add value indirectly → make primary activities more efficient

Strategic Activity Systems

 They are ways of representing how activities connect to the strategy of the firm identify **strategic**

- **themes** of the competitive challenge
- identify **interconnected activities** that allow the firm to put the strategic themes into practice Used for:
  - making strategic themes explicit
  - check whether themes are supported by corresponding activities spot
  - activities that do not support any strategic theme identify new activities
  - based on a changing environment

SWOT Analysis

→ a technique used to identify **Strengths, Weaknesses, Opportunities** and **Threats** related to a competitive challenge or a project

→ used to identify **internal** and **external** factors that are favourable or unfavourable **internal:**

- strengths and weaknesses **external:** opportunities and threats
-

Business-level strategy

 The goal-directed actions managers take in their quest for competitive advantage when competing in a single product market

- **Cost-leadership Strategy:** It seeks to create the same or similar value for customers at a lower cost
- **Differentiation Strategy:** It seeks to create higher value for customers by delivering products with unique features at similar costs but higher prices

Competitive Scope: whole

- market
- customer segments → niche strategy

	Cost	**Differentiation**
Broad	Cost leadership	Differentiation
Narrow	Focused Cost Leadership	Focused Differentiation

Cost-leadership strategy

Reduce the firm's cost to manufacture a product or to deliver a service below that of its competitors while offering adequate value low cost while maintaining relative parity in product features that

- customers value
- Standardization is used to obtain economies of scale and efficiency
- Continuous drive to lower costs
- Vulnerable to imitation and intense price competition by rivals of similar size Emphasis on costs may
- lead to overlook customers' needs

Characteristics of the (niche) focus advantage:

- Cost focus: cost advantage in the target market
- Differentiation focus: differentiation in the target market
- A single or a few buyer segments
- May lead to a large market share
- Less rivalry by peers but lower bargaining power towards suppliers

Differentiation strategy

Add unique features that will increase the perceived value of goods and services in the minds of consumers so they are willing to pay a higher price continuous development of differentiating features

- vertical (better quality) or horizontal (different quality) differentiation many ways of
- differentiating
- the differentiator charges a premium price → customers will be relatively price insensitive if they value
- the differences • vulnerable to erosion over time

Corporate strategy

The decisions that senior management makes and the goal-directed actions it takes to gain and sustain competitive advantage in **several industries and markets** *simultaneously*

Why do firms need to grow ?

- To increase profitability
- To lower costs Economies of Scale
- To increase market power
- To reduce risk To motivate
- management

Growing along 3 dimensions:

Vertical integration	Diversification	Geographic scope
→ Along the industry value chain	→ of products and services	→ in terms of regional, national, or global markets

Concepts that guide corporate strategy

- Core competencies: unique strengths embedded deep in a firm that allow differentiation of its products and services
- Economies of Scale: occur when a firm's average cost per unit decreases as its output increases
- Economies of Scope: arising from producing two or more outputs at less cost than producing each individually
- Transaction costs: costs associated with an economic exchange

Transaction Costs

→ All internal and external costs associated with an economic exchange, whether it takes place within the boundaries of a firm or in markets **internal costs:** pertain to organizing economic exchange within the firm

- **external costs:** costs of searching, negotiating, and enforcing contracts with firms or individuals in the open
- market

Make → Vertical integration

firm activities should be pursued in house

when: $C_{in\text{-}house} < C_{market}$

Buy → Contracts

goods and services should be obtained externally when: $C_{in\text{-}house} > C_{market}$

	Firm	**Market**
Advantages	→ Command and Control → Coordination → Community of knowledge	→ High-powered incentives → Flexibility
Disadvantages	→ Administrative costs → Low-powered incentives → Principal-agent problem	→ Search costs → Opportunism → Incomplete contracting → Enforcement of contracts

Low Integration

 Arm's length market transactions

- Short-term contracts: transactional and flexible, used typically when the product/service is standardized

Moderate Integration

 More commitment and coordination between firms, but not full ownership

- Long-term contracts: more stable relationships, such as licensing(one firm allows another to use its IP or franchising(a franchisor provides branding and systems to a franchisee)
- Equity alliances: firms take a partial ownership stake in each other to align incentives and share resources
- Joint ventures: two or more firms create a new entity and share ownership and control

High Integration

 Activities performed in house

- Parent-subsidiary relationships: the firm owns and control the activity directly, ensuring full integration and control

Short-term contracts:

→ contracts to be awarded with a short duration, generally less than one year • a firm sends out requests for proposals to several companies, which initiates competitive bidding for contracts

- the buying firm can often demand lower prices due to the competitive bidding process but suppliers have limited incentives to provide quality and innovation

Strategic alliances:

→ voluntary arrangements between firms that involve the sharing of knowledge, resources, and capabilities with the intent of developing processes, products, or services • include long-term contracts, equity alliances and joint ventures

Parent-subsidiary relationship:

→ describes the most-integrated alternative to performing an activity within one's own firm boundaries

→ the corporate parent owns the subsidiary and can direct it via command and control

Vertical Integration

→ the firm's ownership of its production of needed inputs or of the channels by which it distributes its outputs

- **backward integration:** moving ownership upstream to the originating inputs of the value chain **forward**
- **integration:** moving ownership of activities downstream and closer to the end

customer

Benefits lowering costs improving quality facilitating

- scheduling and planning facilitating investments in
- specialized assets (unique assets with high
- opportunity cost: they have significantly more
- value in their intended use than in their next best
- use — can be site specific, physical-asset specific and human-asset specific)
- Securing critical supplies and distribution channels

Risks increasing costs reducing quality

- reducing flexibility increasing the
- potential for legal repercussions
-
-

Corporate diversification

→ **diversification** is defined as an increase in the variety of products and services a firm offers or markets and the geographic regions in which it competes

Product	**Geographic**	**Product-Market**
a firm that is active in several different product markets	a firm that is active in several different countries	a company that pursues both a product and a geographic diversification

Types of diversification

- Single business: 95% of revenues from one business, low level of diversification
- Dominant business: 70% x 95% of revenues from on business, some diversification
- Related diversification: 70% of revenues from the first business and the other business are linked to it
  - Advantages: cost savings that from activities that complement each other, complementarities in revenue streams, leveraging competencies, increased market power
  - Risks: loss of focus, may be hard to transfer competencies, complexity and coordination problems, the costs tend to be larger the less related the businesses are
- Unrelated diversification: 70% of revenues form the first business and there are few, if any, linkages among businesses
  - Advantages: general management capabilities, BUs receive benefits from useful activities at the corporate level, diversification of risk
  - Risks: loss of focus, may be hard to transfer competencies, complexity and coordination problems, the costs tend to be larger the less related the businesses are

Diversification and firm performance:

- firms that pursue unrelated diversification are often unable to create additional value and suffer a diversification discount
- firms that pursue related diversification are more likely to improve their performance and experience a diversification premium

Corporate Portfolio Management

→ a diversified firm needs to optimize cash flows at the corporate level, such firms hold a portfolio of businesses that may:

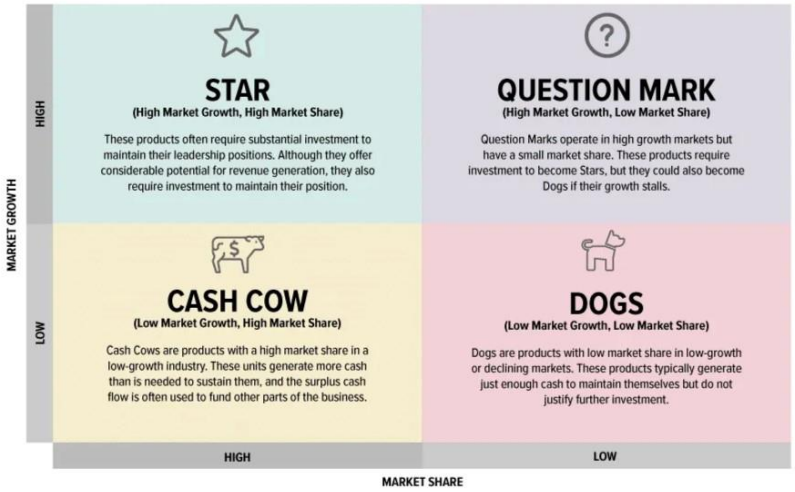
- generate cash flows absorb
- cash

BCG Matrix

→ relative market share = $\frac{\text{leader's market share}}{\text{market share}}$

 A high relative market share implies EoS and cost efficiencies → cash generation

 High market growth rate implies investments → cash usage



Variable and fixed costs

→ being efficient (low costs) also depends on **structural determinants of costs:** standardization of products, technologies, size of plants EoS, volumes of production (fixed-cost absorption), length of experience (economies of learning), diversification of business, degree of vertical integration, …

Variable costs: change in direct proportion to a change in volume direct labour costs

- $VC_{total} = VC_{per\ unit} \times Volume$
- **Fixed costs:** remain unchanged as volume changes. They exist even when no production occurs.
- They usually are depreciation, maintenance, R&D, advertising, some labour costs (indirect labour costs)
- do not vary with volume

$FC_{per\ unit} \propto \frac{1}{Volume}$

Economies of Scale (EoS)

→ costs per unit decrease as the size of the production facilities increase

→ **Fixed-cost absorption economies:** costs per unit decrease when fixed costs are divided across a larger volume

→ **Learning Curve:** costs per unit decrease as the cumulative experience in producing a good increase

Sources:

- Indivisibility of inputs: when the process needs several machines with different capacities in different stages, you need a large size to use all of them at full capacity (*principle of multiples*) Specialization: large plants can employ
- specialised labour, which is more efficient
- Geometric properties of containers: their cost varies with their surface (x2), their capacity varies with their volume (x3)
- Greater efficiency of larger engines or plants: it is not technically viable to produce certain products on a small scale, so firms have to buy big plants
- Market power: larger firms can obtain lower prices from suppliers as a result of buying in bulk

Risks:

- Diseconomies of Scale: due to technical constraints, a large facility becomes difficult to manage
- Range of variation: increases/decreases in volumes may not increase/decrease linearly
- Quality: as size/quantity increases quality may decrease
- Rate of utilisation: EoS are valid for a given level of utilisation

Fixed-Cost Absorption

→ they result from dividing fixed costs across a larger units of output produced. Fixed-cost absorption depends entirely on the increase in the rate of utilisation. These economies are higher is fixed costs represent a larger fraction of total costs

Economies of Learning

→ unit cost reductions which occur as additional units of a given output are produced due to the accumulation of experience

→ they depend on the cumulative volumes of productions realised from when the first unit was produced until a specific point in time the decrease in cost in constant each time the cumulative production doubles the hours

- required to produce the most recent unit decrease by approximately the same percentage
- Crawford 1947 "the cost of some doubled unit equals the cost of the undoubled units times the slope of the learning curve" ○ a curve that depicts a 20% cost reduction for every doubling of output is called an 80% experience curve, indicating that unit costs drop to 80% of their previous level

Source of the economies of learning

- Enhanced skill: experience allows people to improve their work and perform assigned tasks more quickly
- Better selection of materials: understanding which resources are most appropriate for each activity
- More efficient coordination: people must learn to work together with different departments, and work in teams
- Higher programmability of activities: experience makes events more predictable, response time to events is quicker and more effective

- Simplification of products and processes: with experience people can also find possible ways to make production simpler and therefore more efficient

Strategic implications of the learning curve • low costs can be achieved by 1 building cumulative volumes faster than rivals. This can be done by following an aggressive pricing policy and keeping capacity ahead of demand. 2 Decreases in selling prices are possible by the decreasing costs. 3 Increase in market share, leads to a faster ride down the learning curve

- low costs can also be achieved by 4 trying to have a steeper learning curve, investing in productivity improvement. 5 As costs decrease, prices are held constant, so the additional profits can be reinvested to improve product/production process

Revenues

Total Revenues = price × volume

Price

→ decided by the company

- competitors' pricecustomer interest
- CPUproduct's price
- target profit/market shareprice and characteristics of
- Elasticity of demand •

Volume

→ decided by the market

- substitute/complementary goods

market conditions

Break-even point

Operating income: crucial economic result that reflects fundamental firm choices and external market conditions

Contribution margin and profit

	Per Unit $	**Total $**
Revenues	10.00	120'000
Variable costs	6.00	72'000
Contribution margin	4.00	48'000
Fixed costs		30'000
Profit		18'000

Break-even analysis

→ widely used framework that illustrates and models the relationship between the volumes produced and sold by a firm and its operating income relationship between volumes and financial results effect of fixed-

- costs absorption
- if volumes increase/decrease, how will it affect earnings minimum
- volume needed to be sold to cover all costs effect of
- internalisation/externalisation on cost, structure, …
-

Operating income equation

- Operating income (π) = total revenues (TR) − total costs (TC)
- Total revenues (TR) = price (P) × Volume (Q)
- Total costs (TC) = total variable costs (TVC) + total fixed costs (TFC)
- Total variable costs = variable cost per unit (VC) × volume (Q) → with

these we obtain that:

$$\pi = (P \times Q) - (VC \times Q + TFC) \quad \pi = (P \times Q) - (VC \times Q) - TFC \quad \pi = (P - VC) \times Q - TFC$$

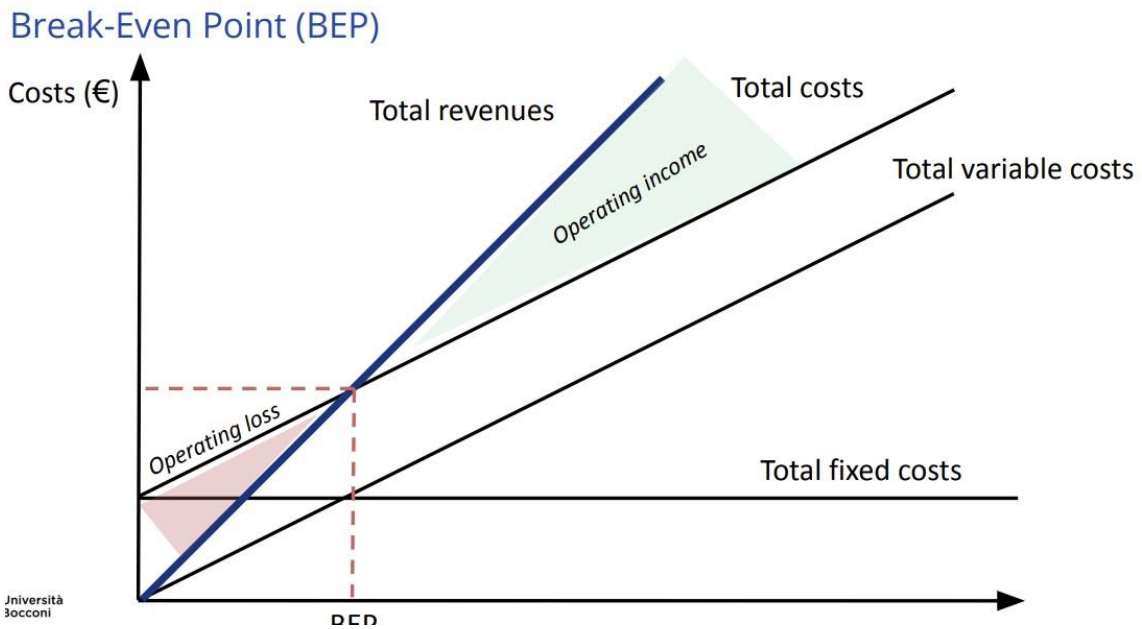
- P − VC: unit contribution margin, it measures the additional profit
- (P − VC)Q: total contribution margin, profit before including fixed costs

Break-even point

→ the volume in which total revenues equal total costs, the fixed costs divided by the unit contribution margin

$$BEP = \frac{TFC}{P - VC}$$

→ the total contribution margin must be large enough to cover fixed costs, beyond that there is positive and increasing income. The operating income is then used to pay interest and taxes and generate net income for shareholders



Break-even Revenue

→ the amount of revenue that makes operating income equal to zero

$$BER = BEP \times P$$

→ contribution margin %

$$CM\% = \frac{CM \text{ (per unit)}}{P} = \frac{CM}{TR}$$

$$BER = \frac{TFC}{CM\%}$$

Profit point

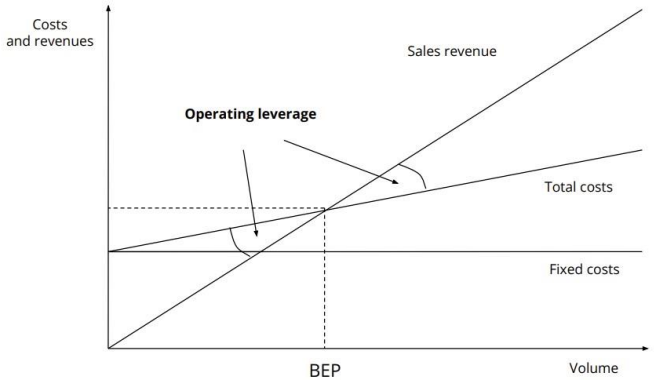
→ the volume/revenue that covers all costs and provides an adequate net income

- Target Operating Income TOI Interest Taxes Target net income
- Profit point = TFC TOI/CM%
- Profit point in revenues = TFC TOI/CM%

The Operating Risk

→ the variability of operating income due to different volumes not

- necessarily bad amplifies losses (left of the BEP boosts profits
  - (right of the BEP
  - depends on BEP (the higher, the riskier) and operating leverage (differential gap between revenues and total costs above and below BEP



Determinants of operating leverage

→ it reflects a firm's cost structure, i.e. the relative weight of variable vs fixed costs rigid: high ratio of

- fixed costs to total costs, high risk, high operational leverage flexible: low ratio of fixed costs to
- total costs, low risk, low operational leverage

Operating elasticity

→ (total variable costs at BEP / TFC standard measure of operating leverage, the higher the elasticity the

- lower the leverage reflects the fact that BEP is a significant volume at which you compare VC and FC
- (elasticity varies with volume)
  - The BEP is used as a reference point because it's where the balance of cost behaviour is most informative for understanding leverage and cost structure flexibility

Make or Buy decision

→ when a company has to make a decision whether to buy (pay for a product/service) or make (produce/give that product/service) • the company should look at BEP, Operating risk and estimates of future revenues

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