# **EFR summary**

# Organisation & Strategy, FEB11006X 2024-2025



## Lectures 1–3 Week 1







#### Details

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## Organisation and Strategy - IBEB -Lecture 1, week 1

## Organization

Social **entity** with identifiable boundaries that functions on a continuous basis to reach common long-term goals (Robbins & Barnwell).

• Entity - each person should know whether he/she is a member of the organization or not.

## Strategy

- Deliberately **choosing** a different set of activities to reach a firm's goals (Porter).
- The **framework** of a firm's business activities that provides **guidelines** for **coordinating** activities so that the firm can cope with and influence the **changing** environment. (Itami)

## Relevance of organization and strategy

- Every organization needs a strategy to reach their long term goals
- Strategies determine the success or failure of an organization
- Understanding how firms function will also help us understand how firms compete among themselves

## Five-power model

A common thread of this course will be the **five-power model of Porter**. We will analyse it now.



- Internal rivalry is about the fight for market share within a market between firms.
  - Therefore, it is important to **define the market** in terms of **products** and **geographics**.
  - It is also important to distinguish between price and non-price rivalry.
    Price rivalry is rivalry by changing the prices of products. Non-price rivalry can be via advertising or improving products.
- **Entry** of new firms often decreases market share of other firms and increases internal rivalry in a market.
  - It is important to distinguish between exogenous and endogenous entry barriers.
    - Exogenous entry barriers are entry barriers which the firms inside of the market don't influence, for example regulations.
    - Endogenous entry barriers are entry barriers which the firms inside of the market do influence, for example successful advertising which created brand loyal consumers.
  - Examples of entry barriers are:
    - Government protection
    - Brand loyal consumers
    - Access to essential inputs and locations
    - Minimum efficient scale of production
    - Learning curves
- Substitutes & complements:
  - **Substitutes** erode profits and raise internal rivalry, for example, SMS vs. WhatsApp.
  - **Complements** can raise the industry demand, for example, apps and smartphones.
  - There are a few important things to keep in mind with substitutes and complements:
    - Identifying substitutes and complements is on basis of quality and characteristics:

- Substitutes (or complements) need to be on the same price-value. A 300 euro phone isn't a substitute for a 10000 euro phone.
- The price-elasticity also influences the degree of complements and substitutes.
- Supplier (upstream) / Buyer (downstream) Power
  - A high(supplier)/low(buyer) price erodes the profits of an industry.
  - Suppliers/buyers have **indirect bargaining power** if the upstream/downstream market is competitive.
  - Suppliers/buyers have direct bargaining power if the upstream/downstream market isn't competitive, for example relationship specific investments.
  - Important factors on the bargaining power of buyers and suppliers:
    - Concentration of an industry (how many suppliers/buyers account for the market)
    - Purchasing/selling volumes
    - Availability of substitutes (alternative inputs)
    - Threat of forward integration: if the threat of a takeover by the supplier is believable it has more power. (Or if the threat of your firm taking over the buyer is believable, the buyer has less power.)

In the five-power model the focus lies on fighting for a bigger market share. An alternative perspective is that of **Co-opetition and Value Net**: working together for a bigger market.

## Horizontal boundaries of the firm

In different markets there can be:

- A domination of a few big players
- Lots of small players
- A few big players and lots of small niche players.

Economies of scale, economies of scope and learning effects help us understand why this is the case.

We are now going to look at the horizontal boundaries of a firm, this is mostly relevant to the internal rivalry part of the five-power model.

## Economies of scale

**Economies of scale:** When a production process of a specific good/service exhibits economics of scale over a range of output, the average cost declines over that range.

- If Y(output) increases, then AC(average cost) decreases over that range.
- Over that range is MC(marginal cost)<AC

**Diseconomies of scale**: the exact opposite of economies of scale: MC>AC.



Economists used to believe that AC curves are U-shaped, i.e. at low quantities they exhibit economies of scale and after a certain point diseconomies of scale. But in reality we sometimes see that the real AC curve is more like the illustration on the right. The AC curve exhibits economies of scale up to a certain point. This point is called the **minimum efficient scale**. After this point the AC stays constant.

Keep in mind that economies of scale is about producing a certain production volume on a given moment in time. The AC in a restaurant can decrease over the years, because the chefs are getting better, but it will always be cheaper to serve 5 people instead of 2.

### Learning curves

There can be advantages to learning: the AC decreases through accumulated experience over time (not necessarily in a given point of time). The **learning curve** is illustrated below:



### Sources of economies of scale

- Indivisibility and spreading of fixed costs.
  - When inputs of production aren't divisible the costs are fixed. Examples include machines, vehicles or a lecture hall. When there is a bigger production volume we spread these fixed costs over a bigger quantity. This makes the AC decrease.  $AC = \frac{TC}{Q}, Q \Uparrow \Rightarrow AC \Downarrow$ .
    - These economies of scale are likely when a firm is capital intensive. Firms can sometimes choose how **capital intensive** vs.
       **labor intensive** they want to produce based on their production volume.
  - Keep in mind that the short-run economies of scale aren't the same as long run-economies of scale. In the long-run firms can choose the short-run AC function (and methods corresponding to that function) to minimize their cost at a given quantity produced. This is illustrated below, where the lowest line at each represents the LAC function.



- Higher productivity of variable production costs.
  - Specialisation: this leads to a lower average cost, although it requires investments (education, training, experience, ...). This is only rewarding when the market is big enough to earn back your investment.
    - "The division of labor is limited by the extent of the market"-Adam Smith.
- Other sources:
  - Economies of Density: saving costs by making more intensive use of a (transport)network. For example food delivery services in a city vs. in a town.
  - **Purchasing**: firms can get bulk discount for purchasing big quantities.
  - R&D: The development of new products is connected to high fixed costs.
    If more products get sold we can spread these R&D costs.
  - Advertising: formatting advertisements, negotiating with the media, ... leads to a lot of fixed costs. For big firms there are lower advertising costs per final consumer.
  - Physical properties: the design of the production proces leads to savings for a higher output. An example of this is the 'Cube square rule': the cost of a container = the surface. When the volume of the container doubles, the surface doesn't double. This leads to economies of scale.
  - **Stock**: Firms don't want their products to be sold out. Although keeping stock comes with a price. Bigger firms have a relatively smaller stock in

comparison to the total revenue. The Albert Heijn can for example have central distribution centers, which make sure that a temporary rise in demand in one store doesn't lead to being sold out.

### Economies of scope

**Economies of scope** exist when a firm can save costs per unit by raising the variety of products and services.

Mathematically this is given by  $TC(Q_x, Q_y) < TC(Q_x, 0) + TC(0, Q_y) \rightarrow$  the cost of producing X and Y in 1 firm is smaller than the cost of producing X and Y in two separate firms.

Examples are:

- The Coca Cola Company in production and logistics.
- Apple in R&D (Spillovers between projects) and advertising ("**umbrella branding**")
- Bakeries in purchasing and production.

This makes the question raise: Why doesn't there exist one "mega" company for all products:

- Higher labor costs for bigger firms (for example via labor unions).
- Specialised inputs aren't always suitable for scaling up (for example a topchef).
- Bureaucracy: organisatory problems of bigger firms (for example slow information flows).

### Diversification

Lots of firms are **conglomerates**: they have products which aren't related to each other: not-related diversification. These are activities with limited possibilities for economies of scope.

#### Efficiency based reasons for this are:

- Spreading underutilized organizational resources (a very specific management talent) => economies of scope.
- Internal capital market: cash flow of other activities finances profitable investments in companies with limited resources. In the **BCG matrix** below, we

BCG Growth/Share Matrix		Relative market share	
		High	Low
Relative market growth	High	Rising Star	Problem child
	Low	Cash cow	Dog

can conclude that the cash cow can help fund the problem child or rising star.

Problematic arguments are:

- Diversifying the shares of shareholders (they can do this themselves)
- Identifying undervalued firms (very unlikely)
- Managers strive for growth even if it's not profitable (possibly for personal win).

Diversifying is only useful for efficiency based reasons.

## Organisation and Strategy - IBEB -Video lecture 2, week 1

## Vertical Boundaries of the firm

The **Vertical Chain** is a chain which represents all activities from purchasing raw materials to distributing and selling the end products/services

The **vertical boundaries** are the activities which the firm executes itself vs. the activities which are purchased from market firms.

#### Make-or-buy decisions:

- Internally executing = make
- Purchasing from market firms = buy

"Make" and "buy" are two extremes. There are lots of possibilities in between "make" and "buy". See the illustration below for an example:

MAKE-OR-BUY CONTINUUM

Arm's-length market transactions	Long-term contracts	Strategic alliances and joint ventures	Parent/ subsidiary relationships	Perform activity internally
Less integrated	1	$\rightarrow \rightarrow \rightarrow$	a sur ur pres	More integrated

A vertical chain can for example look something like this:

Raw inputs -> Transportation and Warehousing -> Intermediate Goods Preprocessors -> Transportation and Warehousing -> Assemblers -> Transportation and Warehousing -> Retailers.

Where Raw inputs is the most upstream and the retailers are most downstream.

Keep in mind that next to the main chain we also have support services next to the chain. For example: Accounting, Finance, HR Management, etc.

## Why "buying"?

#### 1. Economies of scale and learning

Market firms can be specialised in a certain activity. This is more efficient than an intern integrated firm. This has a few reasons:

• The **aggregated demand of the entire market leads to more production** than if a single firm only produced for themselves. In economies of scale and economies of scope more production is efficient. This higher production also triggers the benefit of economies of learning more.

In the example below we see that producing A' when you make it yourself is not efficient. Therefore it might be more efficient to purchase from an upstream firm which produces at a higher quantity. Keep in mind that the price of the supplier will be in between C\* and C' (C\*<p<C').



- Specialisation:
  - Investing in R&D makes more sense when you can spread out these fixed costs over lots of customers.
  - Patents and private information
  - Lower production costs

#### 2. Agency costs

**Shirking** is the conscious acting of managers and employees against a firm's interest.

**Agency costs** are the costs from shirking and the costs to prevent shirking. For example:

- Production loss
- Cost of monitoring prestations
- Sanctions

Agency costs normally have a negative impact on profit. In **vertically integrated firms** there usually is more shirking. Examples include:

- Overhead (support services like HR) costs are usually higher, since it is harder to manage a big firm.
- Subdivisions are cost centers
  - There is no competition, while market firms (suppliers) normally have competition.
  - There might not be a benchmark for evaluation (the market)
  - Subdivisions are harder to monitor.

- There is a higher chance of outsourcing of the activity.
- Managers react slower on inefficiencies.

#### 3. Influence costs

Subdivisions in a firm will compete for limited financial resources and limited human resources. The managers will fight to influence the allocation of these resources.

**Influence costs** are the resources expended by individuals or groups within an organization to sway decisions in their favor, rather than to improve overall efficiency or outcomes.

In a direct way this includes wasted time lobbying, longer meetings, etc. In an indirect way this leads to bad decisions (not in the interest of the firm).

Influence costs are higher in bigger, more vertically integrated firms than in small firms.

## Why "making"?

**Contracts** define the conditions for transactions:

- Rights
- Duties
- Conflict resolutions

The goal of contracts is to protect against opportunistic behaviour (shirking).

There are two very challenging conditions which decisive how effective a contract is:

- Completeness
- Legislation regarding contracts

#### A complete contract defines:

- All rights and duties
- All possible situations in transactions.

This excludes opportunistic behaviour.

All contracts are in principal incomplete:

- Bounded rationality: it is impossible to foresee all situations
- Lack of objective criteria and measurements
- Asymmetric information: making strategic use of private information

The legislation regarding contracts defines a few standards applicable on a broad range of transactions. This limits the incompleteness of contracts. This is not a perfect substitute for completeness.

Sometimes it is uncertain how to apply the standard. Legal dispute also isn't very demanding since this is very costly and harms the relationship.

It is important to see that contracts aren't the best resource for a smooth transaction. Therefore there are high inefficiencies in "buying" compared to "making".

So now we get to the point. Why we should "make":

#### 1. Coordination benefits

There are lots of diverse parties in a vertical chain. Therefore coordination is necessary. Different types of coordination include:

- **Timing** (a marketing campaign needs to be released at the right time compared to the product release).
- **Sequence** (production needs to be done in a certain sequence)
- **Technical specification** (parts of a product needs to fit onto each other)
- Color (different parts of a clothing piece need to have the same color).

Coordination between firms is hard. We can try via contracts: fines, performance incentives, conflict resolution..., or via specialised intermediary persons.

Since contracts are incomplete it might be better to "make" instead of "buying", especially when the importance of coordination is big.

#### 2. Private information

**Private information** is information that only the company possesses. This can be about products or clients. Lots of times this isn't patentable. Since knowledge is a competitive advantage, you wouldn't want to share this with suppliers or buyers. Therefore it might be better to make the products yourself. Although private information can still leak by the leaving of employees.

#### 3. Transaction costs

**Transaction costs** are the costs of forming and managing a relationship. This includes time, costs of negotiating, writing and enforcing contracts.

There are 3 central concepts for transaction cost:

#### • Idiosyncratic investments

**Idiosyncratic investments** are investments which are bound to a certain transaction between two partners. There will be productivity loss when these investments are used outside of the transaction. Implications of this include that it isn't easy to change trade partners and therefore the relation is "locked-in".

There is a fundamental transformation from before the investments (competitive situation) to after the investments (no alternatives, less competitive situation). Examples are:

- **Place-based investments** (for example placing an extra factory next to a client)
- **Properties of physical assets** (for example custom machines for a specific client)
- **Client-specific assets** (investments in production capacity only utilized by a specific client)
- **Specific personnel investments** (employees with knowledge and skills specifically useful for 1 client).

"**rent**" = the expected profit in relation with the expected partner = Q(P\*-C)-I, in which:

- Q=quantity
- P\*=price the expected partner pays
- C=variable cost
- I=investment/fixed cost

The assumption is that the price an alternative contractor pays is lower than P\* but still higher than C: P\*>P<sub>m</sub>>C.

#### • Quasi-rent.

**Quasi-rent** = rent - (expected profit best alternative)=  $(Q(P^*-C)-I)-(Q(P_m-C)-I)=Q(P^*-P_m)$ Without a relationship-specific investment P\*=P<sub>m</sub> => Quasi-rent = 0.

A high quasi-rent leads to a high risk on losses and a risk on 'hold-up'.

• **Hold-up** is the renegotiation on terms of contract with relationship-specific investments after investments are made.

This is an attempt from the firm which didn't make the relationship to obtain quasi-rent. This firm will set a lower price P\*\* for which P\*>P\*\*>P<sub>m</sub>>c. The other firm will have to accept this price since it is more attractive than the alternative.

Hold-up is a big problem if the quasi-rent is high and contracts are incomplete. This will lead to higher transaction cost by purchasing (good reason to "make"):

- Firms will protect themselves => difficult negotiation + frequent renegotiations
- Investments to improve ex-post bargaining position => higher costs
- Distrust => bad coordination + sharing little information
- Lower ex-ante investments: attempting to avoid hold-up => higher production costs.

## "Make" or "buy" fallacies

There are a few bad reasons on "make" or "buy" decisions:

- "Make if the product is a competitive advantage" => if the product is for purchase on the market it isn't unique and therefore not a competitive advantage.
- "Buy to avoid costs of making" => costs need to be carried in the chain.
- "Make to avoid paying a profit margin to a market firm" => The price if we, or a market firm invests capital is a profit margin: economic profit isn't accounting profit.
- "Make to avoid paying too much in times of scarcity" => long-term contracts are more efficient.
- "Make to gain market share from your competitors through vertical exclusion"
  => this isn't legal because of the competition legislation and competitors can easily integrate themselves.

## Organisation and Strategy - IBEB -Video lecture 3, week 1

How do we choose between "making" or "buying"? -Efficiency

- Technical: lowest cost of technological production
  - Economies of scale, scope and learning
- Agency: lowest cost of organisation production
  - Agency, influence and transaction costs

There is a tradeoff to make: making improves agency efficiency vs. buying improves technical efficiency. The optimal vertical organisation minimizes technical + agency costs.

Now we are gonna try to model this. The x-axis will be specificity of a product: k.

- $\Delta T = technical cost making technical cost buying$
- $\Delta A = agency \ cost \ making \ \ agency \ cost \ buying$
- $\Delta C = total cost making total cost buying$



When k rises:

• Delta T will decrease: smaller economies of scale + less synergie of market firms

• Delta A decreases: more coordination + more specific investments + more hold-up

When the scale increases (for example the same product but 5 times the production):

- Delta T decreases: more economies of scale realising yourself
- Delta A rotates: the original advantage increases.
- More vertical integration (more making)

When there are:

- Big economies of learning, scale and scope (standard products)
  - Delta T is high
  - Less integration
- Big revenue in share of the total market
  - Gaining economies of scope and scale yourself.
  - Delta T is low.
  - Lots of integration
- High specific investments
  - Delta A is negative and high
  - More integration, because the effect of agency > technical.

## Double marginalisation

Let's say there are 2 firms. Both firms have market power, and one is upstream (firm 1) and one is downstream (firm 2).

- First the input price of firm 1 > MC input of firm 1 (marginalisation 1)
- Then the sales price of firm 2 > MC downstream = input price (marginalisation 2)

The **double marginalisation** represents the 2 mark-ups. This leads to a higher price for the final customer and a lower demand. When firms are more vertically integrated there is no double marginalisation, this is a good reason for integration.

## Vertical integration and property

When integration happens there usually isn't any technical change in the vertical chain. We speak of a transfer of property.

**Property** = residual-rights of assets = decision-making authority for rights not in the contract.

We can see that for complete contracts property rights are useless. Although since contracts are always incomplete we need to specify rights outside of the contract. Property is very important for this. We will look at the **Property Rights Theory** of Grossman, Hart and Moore. The main question on the theory is how property influences prestations in the vertical chain.

Let's say we have a downstream and an upstream firm. There are three possibilities of organizing these firms:

- Non-integration: 2 independent firms
- Forward integration: upstream firm takes over downstream firm.
- Backward integration: downstream firm takes over upstream firm.

The willingness to do idiosyncratic investments will influence the residual right. This gives the firm a better negotiating position, makes them catch a greater deal of created value and leads to more idiosyncratic investments.

The theory on which firm should take over which firm, is based on the impact on output):

- Impact firm 1 >>> Impact firm 2 => property firm 1
- Impact firm 1  $\approx$  Impact firm 2 => market transaction is possible
- Impact firm 1 <<< Impact firm 2 => property firm 2

Does integration guarantee elimination of inefficiencies in market transactions? It is still important that there is a good governance structure (lecture 6) to guarantee inefficient **path dependency** (past circumstances could exclude certain possible governance arrangements).

The decision making power should also go to the manger/division with the biggest impact performance activity.

## Alternatives for "make" and "buy"

#### 1. Make-and-buy, Tapered integration

Tapered integration is the mixing of vertical integration and market transactions. You can see this at the Albert Heijn with their housebrand and other brands.

Advantages include:

- Lower investments for expanding input/output channels
- Contract negotiations with market firms are easier since you have information on internal costs (compare them)
- It has a disciplining effect on both the internal organisation (why aren't you as cheap as the market firm) and on the market firm.
- Protection against hold-ups.

Disadvantages:

- Possibly: Internal + external production < MES => Inefficiencies.
- It is harder to coordinate and supervise.
- Maintaining inefficient internal divisions leads to costs

#### 2. Franchising

- Franchise taker:
  - Funds capital for building/exploitation stores
  - Pay a fee for using the brand and business model
- Franchise giver forces/allows:
  - Sell specific products
  - Decide on quality norms
  - Decide on suppliers

Advantages of franchising:

- Franchisegiver: high economies of scale
- Franchisetaker: knowledge of the local market

Disadvantages:

• Abuse of franchisor's reputation

#### 3. Strategic Alliances & Joint Ventures

A **strategic alliance** is an explicit partnership between firms to execute complex transactions without giving up autonomy. This can be:

- Horizontally: the same industry (quality label)
- Vertically: different parts of the vertical chain (Caterpillar x Land Rover)
- Between industries: not linked in the vertical chain (Senseo = Douwe Egberts x Philips)

A **joint venture**: is a strategic alliance where an independent firm is created which is owned by both partners (firms). Advantages are:

- Preservation of independence of the main activity.
- More coordination, cooperation and informational transactions than with a market transaction.
- You don't need formal contracts for each decision => kinda like a marriage.

Disadvantages are:

- Risk of losing private information (at the end of the alliance)
- Coordination challenges (how do we work together if we have disagreements?)
- Big firm => Agency costs = partners monitor joint venture less strictly + influence costs = higher by lack of a clear governance structure.

Transactions with reasons for a mix between "making" and "buying" have typical features:

- High incompleteness => hard contracts
- High complexity, no routine
- Specific (idiosyncratic) investments => hold-up possible
- Expertise buildup = expensive => economies of learning, scale
- High uncertainty => no long-term commitment
- Local participation obligates foreign investments.

#### 4. Implicit contracts

It is possible to run a long run relationship via implicit contracts. These are contracts based on trust (cooperativity from both firms) and no contract (legislation). We can force this contract by making a threat of loss of future business. This leads to less opportunistic behaviour.

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