COMPETITIVE STRATEGY

MARCO S. GIARRATANA

Marco S. Giarratana is Professor of Strategy at the Strategy Department of IE Business School/IE University. He is the actual Vice-Rector of Scientific Knowledge & Research, and he chaired the Strategy Department between 2017-2019. Previously, he was Associate Professor at University Carlos III de Madrid, and Full Professor at Bocconi University in Milan. His research interests are based on resource redeployment and agility, IPRs, and strategic CSR. He is the current Chair of the Knowledge & Innovation division at the Strategic Management Society, and Associate Editor at Strategic Entrepreneurship Journal.

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Summary

Chapter 1: Plan. Strategy

The chapter defines strategy as a multifaceted concept encompassing the selection of goals, environmental analysis, resource allocation, and process implementation. It traces the evolution of strategic studies, starting with planning and forecasting in the 1950s, organizational processes in the 1960s, and resource-oriented views in the 1970s. The 5 Ps framework—Plan, Position, Pattern, Perception, and Performance—serves as a useful tool for understanding a company's strategic direction. It is a methodical approach to ensuring alignment between the firm's actions and the competitive environment, ultimately guiding firms in achieving competitive advantage.

Chapter 2: Performance. Financial Measures

This chapter discusses how value creation and value capture serve as the foundation for competitive advantage. A firm creates value when the customer's maximum willingness to pay exceeds the firm's average costs. The chapter presents essential financial performance metrics, including Return on Investment (ROI), Return on Assets (ROA), and Capital Turnover (CT), as tools for measuring a firm's ability to capture value. These metrics are categorized into short-term and long-term measures, offering insights into a firm’s financial health and potential for sustaining competitive advantage.

Chapter 3: Position. Sector Analysis

Sector analysis, popularized by Michael Porter's work, became a central strategy tool by the 1970s. This chapter introduces the Structure–Conduct–Performance (SCP) paradigm, highlighting the importance of understanding sector characteristics for strategy formulation. It presents Porter's Five Forces framework, focusing on the competitive dynamics within a sector. Analyzing competition through both quantitative measures (e.g., market share and concentration indices) and qualitative insights is essential for evaluating sector attractiveness and determining the optimal positioning of a firm.

Chapter 4: Pattern. Competitive Advantage

The chapter explains competitive advantage as a firm's ability to outperform competitors by generating more value with the same resources. It highlights the sociological view, which emphasizes sector fit, and the innovation perspective, which focuses on disruptive technologies and processes. Competitive advantage arises either from cost leadership, where firms lower their average costs, or from differentiation, where firms enhance the uniqueness of their offerings. The chapter also introduces the VRIN framework (Valuable, Rare, Imperfectly Imitable, Non-substitutable) to analyze the sustainability of resources that lead to competitive advantages.

Chapter 5: Pattern. Cost Advantage

Cost advantage refers to a firm's ability to produce goods or services at a lower average cost than competitors. This advantage is typically driven by factors such as scale economies, learning economies, load factor, scope economies, and organizational efficiency. The chapter explains two primary strategies for exploiting cost advantages: maintaining competitive prices for higher margins or aggressively lowering prices to gain market share. It further explores the challenges of sustaining cost advantages, particularly in highly competitive and price-sensitive markets.

Chapter 6: Pattern. Differentiation Advantage

This chapter explores how firms achieve a differentiation advantage by enhancing their perceived uniqueness. There are two main avenues for differentiation: tangible and intangible. Tangible differentiation involves unique physical product attributes, while intangible differentiation focuses on psychological perception through advertising and branding. The chapter discusses various determinants of differentiation, including R&D, marketing investments, product design, and first-mover advantages. Differentiation strategies may lead to higher customer willingness to pay, but they also come with risks, such as changes in customer tastes or niche market decline. Defending a differentiation advantage is complex but can be more sustainable than cost advantages.

Chapter 7: Perception. Industry Dynamics

This chapter addresses the importance of understanding industry dynamics for strategy formation. It introduces the Industry Life Cycle (ILC) model, which consists of four phases: introduction, growth, maturity, and decline. Each phase presents unique challenges, such as product innovation in the introduction stage and price competition in the maturity phase. The chapter also explores the effects of Demand Pull and Resource Push on industry dynamics, highlighting how firms must adapt to changes in customer preferences or technological advancements. Furthermore, it discusses inertia problems in firms, emphasizing the need for strategic foresight and the ability to overcome internal resistance to change.

Chapter 8: The Growth Strategies

Chapter 8 focuses on firm growth, explaining the relationship between size and competitive advantage. It identifies three stages of firm growth: entrepreneurial, organizational, and corporate. Firms can grow through vertical, horizontal, or international expansion, each entailing different strategic considerations and challenges. Growth tactics include internal development, acquisitions, and alliances, with the choice depending on transaction costs and investment uncertainty. The chapter introduces the concept of the "Real Option Strategy," where firms use alliances to experiment and reduce uncertainty before making significant investments. The importance of balancing growth strategies with value creation and capture is emphasized.

Chapter 1: Plan. The 5 Ps

1.1 Definition and History

What are the main aims of strategy? The following objectives are good starting points:

- To conduct a sector analysis
- To evaluate the financial performance of a firm
- To understand the type and sources of competitive advantage
- To understand the directions of firm growth

Strategy derives from the ancient Greek term "strategos," which defines a specific military role: to lead a "stratia," or group of soldiers. The modern concept of business strategy retains some of these military connotations in that it encompasses four “military” aspects: the selection of aims, the environment, the organization, and implementation.

The aims: Knowing the targets. A firm might have several goals in both the short and the long run, such as market share, growth rate, return on sales (ROS), return on investment (ROI), or return on equity (ROE). Determining the right aim is the first step of a good strategy, much like in a military campaign.

The environment: Knowing the sector. For a firm, understanding the battlefield is fundamental. A firm should be aware of the main characteristics of its environment to choose the right position and the right moves.

The organization: Knowing the firm. What are its strengths and weaknesses? What crucial resources does it have, and which resources are missing? The potential strategies that might be applied depend on the type of resources available. This means that the firm must choose a strategy that can be implemented with its existing resources, or otherwise seek to acquire the required resources elsewhere.

The implementation: Knowing the processes. How does a firm mobilize all its resources (technological, financial, human) toward its objective? Implementation involves designing and assigning tasks, setting the right incentives, motivating the structure, and avoiding mistakes.

From an academic point of view, the approach to strategy studies has not always been consistent. Today, a mainstream business strategy course reflects the evolution of different approaches that have emerged over several decades.

The first studies suggesting strategic thinking originated in accounting literature in the 1950s, which focused mainly on planning and forecasting. As the first mainframe computers became available for business applications (e.g., at GE and IBM), scholars and practitioners also began seriously considering the problems of setting aims and evaluating (accounting) changes according to different environmental scenarios.

In the 1960s, primarily due to the Carnegie Mellon School in Pittsburgh, attention shifted to the organizational processes inside the firm and the problems of decision implementation. The main conclusion from this stream of research was that different methods for organizing firms lead to different behaviors and thus to different results.

In the 1970s, the primary contributions came from historians (Chandler, Rosenberg, David), who approached strategy from a historical perspective, studying the histories of firms in different contexts and highlighting the importance of resources, path dependence, and the evolution of growth strategies.

From a practitioner-oriented perspective, between the 1960s and 1970s, consultancy firms like BCG and McKinsey introduced the widespread use of matrices to analyze problems and make decisions, particularly in terms of firm portfolio planning. Although these matrices were criticized for lacking a sound strategic theory, they are notable for bringing to the forefront two crucial issues: sector characteristics and firm decisions.

Concurrently, from an economic perspective, the 1970s marked the transition from a phase of rapid economic growth (the roaring 1950s-1960s) to a phase of stagnation and crisis due to energy crises (oil shocks). Firms, therefore, started focusing more on understanding how to outperform competitors in static or declining environments rather than on seeking out growing markets and new opportunities.

The 1980s represented the birth of the modern concept of strategy, thanks to Michael Porter, who laid the foundation for virtually every future interpretation and discussion of the topic. His approach emphasized the importance of analyzing the sector, with the idea that knowledge of the sector is fundamental to designing optimal strategies.

In the 1990s, Porter's vision was challenged by a heterogeneous group of scholars who brought the firm into the spotlight. Known as the "resource-based view," this theory stressed the importance of firm resources as determinants of competitive advantage. It also proposed that firm strategies could alter the characteristics of the sector itself, implying that they depend on firms' actions.

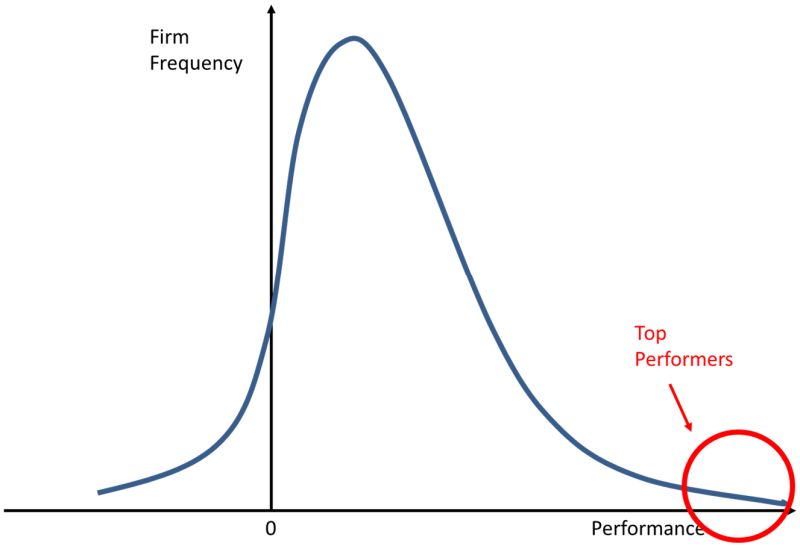
Today, the current strategic approach is a synthesis between the importance of sector characteristics and firm resources. The interest in sector dynamics and their influence on firm learning and adaptation, the firm's position in the product space, and the identity it conveys (largely due to contributions by sociologists) are also relevant.

1.2 Why is Strategy Important?

Why is strategy such a common term? Why are there thousands of consulting firms whose sole purpose is to provide strategic advice? Why are there thousands of universities offering strategy courses at different levels? There must be something valuable about strategy.

The first point to acknowledge is that achieving good performance is not an easy goal. Imagine the performance distribution of firms across all sectors and countries. The plot would likely resemble Figure 1.1, with high performance (right tail) being a low-probability event and low performance (left side) being a higher-probability event. This distribution reflects the specific nature of strategy as a field of study. Rather than focusing on the average behavior of firms, strategy aims to understand what top performers in the right tail of the distribution do. This is why case studies are so prevalent in strategy courses: they focus on firms that have achieved superior performance to discern how they succeeded. Usually, the answer is a sound strategy.

Figure 1.1: The usual distribution of performance among firms



Uncertainty implies that multiple future states of the world could exist. Assume there are three possible states: W1, W2, and W3, with corresponding probabilities G1, G2, and G3. For example, there could be a future characterized by high (W1), low (W2), and medium (W3) commercial tariffs with different probabilities (e.g., 30%, 50%, and 20%), influencing the level of international competition. Under each state, a strategic plan (P1, P2, or P3) comprises the choices that maximize company performance under the given world state. For example, under W2, anticipating more international competition, the company might decide that the choices maximizing performance involve increasing R&D and advertising expenditures (P2) only for new products.

When discussing the set of choices that maximize performance, we assume the existence of causal links between certain actions and outcomes (e.g., a link between R&D and performance). This causal

structure is referred to as strategic logic. Managers often possess a vision, or their belief about the correct state of the world (W1, W2, or W3). This point underscores strategy's value under uncertainty; even with a rational process, there comes a point when a manager must impose a vision to predict the correct state of the world. When this decision is made (e.g., W2) and the corresponding plan (P2) is chosen, the manager then executes the plan by communicating it, motivating stakeholders, setting appropriate incentives, and instilling confidence in its success. Thus, good strategy also entails leadership; a well-rationalized strategic plan is easier to implement and gain consensus within an organization.

Thus, one cannot embrace strategy without understanding that is a quest for a theory of causal relationships among factors. If you are not able to understand, process and create a sound strategic thinking that is logically valid, you cannot talk about strategy. In sum, strategy is not gut feelings or magic predictions, it is a science.

How can we begin studying strategy? One common approach is the 5Ps framework, which a part to be easy to remember could be a good framework to base a report, a presentation, and a pitch.

Performance: Strategy seeks to understand the determinants and contingencies of firm performance. There is no sense in discussing strategy without a performance target.

Plan: Strategy is a conscious plan that, when executed correctly, offers significant value to the firm. In strategic terms, creating and capturing value refers to a firm's ability to generate and retain economic value from transactions.

Position: A necessary condition for creating and capturing value is understanding the environment, i.e. the sector. This understanding enables the firm to identify its position, highlighting elements that may need change, strengthening, or avoidance.

Pattern: Strategy is also a pattern of behavior, consisting of rules and routines implemented within the organization. This behavior encompasses decisions about competing and achieving a competitive advantage in selected markets—whether through cost or differentiation and utilizing which resources.

Table 1.1 provides a framework for analyzing a company's strategy according to the 5Ps.

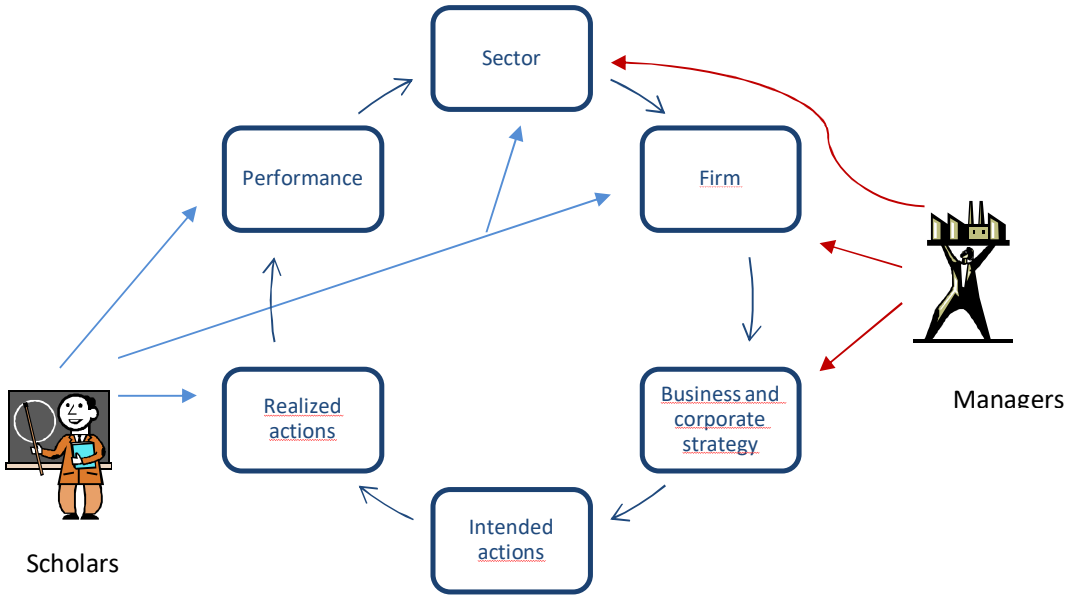
Table 1.1: Strategy according to the 5Ps

Item	*Keywords*	*Question*	*Potential Answers*
Plan	Strategic logic	Does the firm have a conscious strategic plan?	Yes, No, Scale 1-5
Performance	Targets, aims	In which percentile of profit distribution is the company?	Top 5, 10, 15...
Position	Sector, uncertainty	Is the sector of the company attractive?	Yes, No, Scale 1-5
Pattern	Execution, behavior	Does the firm implement routines for a strategic plan?	Yes, No, Scale 1-5
Perception	Dynamics, change, avoiding inertia	Does the firm implement actions that introduce dynamism?	Yes, No, Scale 1-5

Therefore, effective strategies are inherently dynamic. Achieving a competitive advantage typically necessitates a strong alignment between the firm and its sector, which, in turn, requires substantial coherence between the sector's characteristics and the firm's competencies and resources. In greater detail, the current strategy addresses the day-to-day execution of what the firm aims to achieve in the short term. In contrast, a future strategy enables the firm to anticipate changes and prepare for the long term.

In essence, Figure 1.2 illustrates the process of strategy formation: a strategy emerges from the interplay between sector and firm characteristics. This strategy then leads to the formulation of a series of potential actions, some of which will be implemented. This implementation, in turn, affects firm performance, which feeds back into the sector and firm characteristics. The manager's role is to assess both sector and firm conditions and subsequently develop a strategy. Conversely, the role of the scholar or consultant is often retrospective, seeking to infer the firm's overall strategy from its performance and the actions it has undertaken.

Figure 1.2: The path of business strategy formation



To conclude: a) Strategy is a deliberate outcome of a rational strategic logic that utilizes resources within a specific environment (Plan); b) Strategy contributes to the creation of a competitive advantage by optimizing the use of resources within a sector, acknowledging the interplay between firms, the environment, and uncertainty (Position); c) Strategy serves as a tool for fostering consensus and leadership within the organization. Decisions grounded in a sound strategy are seldom subject to criticism, and it also establishes the means of competition in the market, encompassing the execution of the plan (Pattern); d) Strategy combats inertia within firms by steering the organization toward new forms of competitive advantage and facilitating adaptation (Perception).

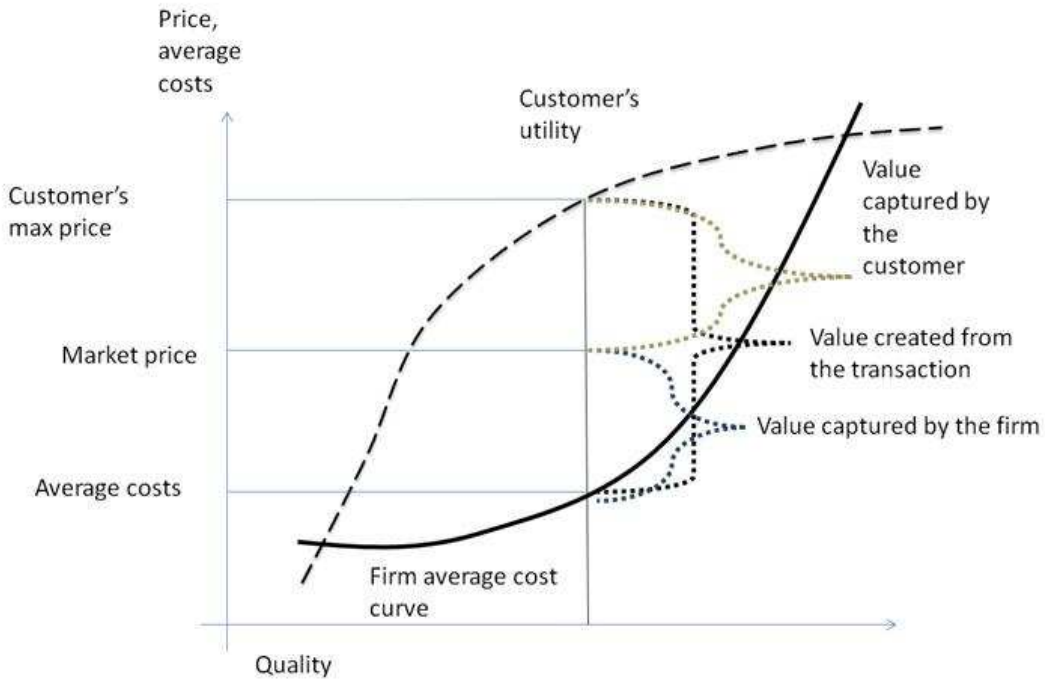
In summary, our definition of strategy recognizes it as a plan of action (Plan), formulated based on an understanding of the firm's environment (Position). This strategy seeks to achieve a specific competitive advantage (Performance) through the deployment of firm resources (Pattern), while also considering dynamic processes and potential future outcomes (Perception).

Chapter 2: Perfomance. Financial Measures

2.1 Value Creation and Value Capture

The previous chapter emphasized that strategy addresses two fundamental questions: where to compete and how to compete, with the objective of creating a competitive advantage. Achieving a competitive advantage involves two distinct aspects: value creation and value capture. Consider the intuition behind value creation and capture, as shown in Figure 2.1. The fundamental forces in this context are the firm's ability to control average costs and increase the customers' willingness to pay.

Figure 2.1: Value Creation and Capture



Value is created during a transaction between a firm and a customer when the maximum price that the customer is willing to pay for a product exceeds the average cost incurred by the firm to produce that product. In a market where supply meets demand, the market price divides the generated value between the customer's utility and the firm's margin. From the firm's perspective, the ability to create value in the transaction and capture the largest portion of it forms the basis for understanding its competitive advantage.

Value creation and capture are influenced by both factors controlled by the firm (e.g., efficiency, differentiation) and those outside its control (e.g., competitors' actions, customer behaviors). Three primary driving forces determine value creation and capture: the maximum price the customer is willing to pay, the market price, and the average cost. Generally, a higher value captured by customers correlates with an increased quantity of products sold by the firm, though it may sometimes reduce the value captured per unit by the firm.

To formalize this reasoning for a specific firm, we can state that the value captured by customers (U) is proportional to the probability that a single customer will buy a product (ProbAcq). This relationship can be expressed as:

ProbAcq = f(U)=f(Max Price-Market Price), where *df(U)/dU > 0*.

Then, the quantity sold (*Q*) is equal to the number of potential customers (*N*) multiplied by the probability of acquiring a product (*ProbAcq*), such that

$Q = N \times ProbAcq = N \times f(U) = N \times f(Max\ Price - Market\ Price)$.

Therefore, *Sales* of a firm are equal to *Sales=Market Price x N x f(Max Price-Market Price).*

Pay attention to the twofold effect of *Market Price*: it increases demand but reduces margins and the other way around.

Finally*, Profits = Sales-Total Costs= Market Price x N x f(Max Price-Market Price)-Marginal Costs x N x f(Max Price-Market Price)- Fixed Costs= (N x f(Max Price-Market Price))(Market Price-Marginal Costs) – Fixed Costs.*

2.2 Accounting and Financial Measures

The next question is how to measure a firm's ability to create and capture value and thereby build a competitive advantage. In this regard, the main data sources are corporate balance sheets and, when available, stock market data (i.e., market value). A useful way to structure this analysis is to categorize measures into two groups: short-term measures, which refer to performance within one year, and long-term measures, which encompass several (sometimes future) years. Let us begin with the short-term measures. (Note: All abbreviations used to refer to these measures are summarized in the Appendix to this chapter.)

A classical measure of performance, and thus of competitive advantage, is the Return on Investment (ROI), calculated as:

EBIT/(FA + (CA – CL)).

A second measure is Return on Assets (ROA), defined as:

EBIT/TA

A third widely used measure is Return on Equity (ROE):

EBIT/Equity

In all three measures, the numerator represents the firm's ability to generate profits from its operations. They differ in their denominators: ROE accounts for the capital invested by shareholders, ROA includes all assets invested in the firm, and ROI focuses solely on the fixed assets and the positive or negative working capital. Although these three measures usually yield consistent results, they can vary depending on the balance between equity and debt and the characteristics of different sectors.

A useful way to break down the ROI is as follows:

ROI = (EBIT/(FA + WC)) × SALES/SALES = (EBIT/SALES) × (SALES/(FA + WC)) = ROS × CT.

Here, Return on Sales (ROS) reflects the firm's profit return on its sales, while Capital Turnover (CT) serves as a proxy for the firm's ability to generate sales from the invested capital. Thus, ROS and CT can effectively measure, though with some noise, the firm's ability to create value (CT) and capture value (ROS), thereby decomposing the firm's competitive advantage (ROI) into its value creation and capture capabilities.

Another significant measure is the Weighted Average Cost of Capital (WACC), calculated as:

(D/D + E) × i + (E/D + E) × d.

This measure can be compared with the previous three to evaluate how much economic value the firm's activities create, considering the cost of capital from both debt and equity sources.

Lastly, liquidity measures are crucial for assessing the financial stress a firm may be experiencing. The Current Ratio is defined as:

CA/(CL)

while the Quick Ratio is:

(CA-Inventories)/CL

Higher liquidity ratios are generally favorable for the firm; ratios below 1 usually indicate situations requiring managerial attention. It is also important to examine the difference between the two ratios, as a large ratio driven by inventory may signal potential problems with the firm's ability to sell its products.

Now, let us consider the long-term measures. If the company is listed on a stock market, its Market Value can serve as a reliable proxy for performance:

Market Value = Share price × Number of outstanding shares.

According to the Modigliani-Miller theorem, the market value of a firm is equal to the discounted cash flow (DCF) if markets are efficient:

DCF = CF1/(1 + WACC) + CF2/(1 + WACC)^2 + CF3/(1 + WACC)^3…

In summary, if markets are efficient, the market value of a firm incorporates all future cash flows at their present value.

Another measure derived from market value is Tobin's q, defined as:

Total market value of a firm/Book value of the company

The precise formula is:

(**P × N of shares + Debt –WC)/(Fixed assets + inventory**).

The concept here is to evaluate the firm's intangible assets using a straightforward intuition: when the market value is higher than the book value, there is some value-added intangibles.

What steps must we follow to conduct a sound evaluation of firm performance? First, it is crucial to avoid basing the evaluation on a single measure. A thorough analyst should employ multiple measures and compare and triangulate various results to elucidate the firm's unique characteristics. Additionally, it is essential to analyze performance measures longitudinally to identify positive or negative trends over time.

Second, careful attention is required when comparing measures across firms operating in different sectors. When the analysis is confined to a single sector, the homogeneity of sector characteristics enhances the likelihood of drawing accurate inferences. Therefore, for each measure, it is advisable to assess the firm in relation to its position within the sector's distribution. However, when comparing firms from different sectors, it is necessary to account for sectoral differences and to attempt to standardize the measures across sectors.

Third, special consideration should be given to firms that are multi-business or multinational entities, as they compete across various sectors and countries. In such cases, each measure of financial performance represents a complex average derived from multiple divisions, each contributing diverse elements.

Lastly, while financial measures are valuable, they are also prone to measurement errors. Thus, these measures must be supplemented with additional information about the company to gain a comprehensive understanding of the firm's strategy, strengths, and weaknesses.

2.3 Social performance and economic performance

A firm is not evaluated solely on its financial performance. In recent years, there has been an increasing emphasis on a firm's social impact. Corporate Social Responsibility (CSR) studies highlight the significant importance of "doing well by doing good." Companies have responded to these social pressures through various actions that promote social, non-profit values, including fundraising, organizing social events (e.g., human rights rallies), and engaging in philanthropic endeavors. Some companies have even established dedicated ethical or CSR divisions to address these issues. Chief Sustainability Officer has become a key figure with power in organizations. Firms' social actions can target a wide range of stakeholders, including customers, employees, and suppliers.

The prevailing assumption across these forms of CSR is that social performance and economic performance could be interconnected, but finding synergies is not an easy task.

This notion is further predicated on the understanding that economic activities are embedded within a network of social relationships that exert pressure on the firm. Failure to respond adequately to these social pressures risks dislocating the firm from its optimal position, leading to a loss of trust, consensus, and support from stakeholders. Diminished trust and consensus result in higher transaction costs in the firm's business operations and restrict its ability to create and capture value. For instance, customers may be willing to pay a premium for products manufactured using low-pollution processes, while suppliers may be more willing to coordinate effectively with a firm's inbound logistics if their values are aligned.

Table 2.1 classifies firms based on their levels of social and economic performance. Virtuous firms are ideally positioned to generate both economic and social value; their strong social image positively impacts their economic performance, which in turn sustains their investment in CSR practices. Avoiding firms exhibit high economic performance but face significant challenges in managing their social image. This imbalance can lead to negative feedback affecting their economic performance, particularly if the firm becomes a target for protests, boycotts, and embargoes. Naive firms have a solid CSR tradition and reputation but perform poorly economically. This situation is also unsustainable, as a firm requires a healthy stream of economic revenues to allocate resources to CSR activities. Finally, firms in the low social and low economic performance quadrant face a bleak future.

Table 2.1: Social and economic performance by firm type

		Economic Performance	
		High	*Low*
Social Performance	*High*	Virtuous firms with synergies	Naive firms
	Low	"Avoiding" firms	Firms with high probability of exit

The social performance of firms has become so crucial that several datasets now measure it directly. Typically, a panel of experts evaluates the social reputation of individual firms based on their actions and behaviors over the past year (e.g., the KLD dataset). Other measures provide counts of positive (e.g., fundraising) and negative (e.g., boycotts) events a firm has experienced in a given year. Recent developments in Large Language Models also examine different texts issued officially by firms (reports, communications, webs, patents, trademarks) to map the company's social values. Certification scores (e.g., ISO, Cradle2Cradle, BCorp) serve as additional proxies.

Indeed, CSR initiatives serve not only as a response to social pressures but also as a pathway to achieving competitive advantage, often through differentiation. Through social actions, a firm can engage specific communities and groups that identify with particular social values. This engagement allows firms to become specialized suppliers of goods and services that uniquely symbolize certain social values, thereby enhancing consumer loyalty and increasing the willingness to pay within these segments. For example, Patagonia is recognized for its environmentally conscious outdoor clothing, while Toms Shoes is noted for its commitment to equal opportunities. Such companies are often referred to as Social Business Hybrids because they pursue both social and profit objectives within a unique business model. The recent rise of B Corporations exemplifies this trend.

However, pursuing social goals can sometimes lead to internal tensions. Certain strategic actions may enhance economic value and profits but contradict the firm's promoted social values. For instance, using cheaper but less eco-friendly raw materials or entering product categories that do not embody specific social values can provoke boycotts and backlash. Therefore, managers must strike an appropriate balance between social and economic performance.

Appendix

EBIT: Earnings before interest and taxes
FA: Fixed assets
CA: Current assets
CL: Current liabilities
TA: Total assets
D: Total debt
E: Equity
i: Interest paid on debt
D: Dividend
WC: Working capital
CF: Cash flow

Chapter 3: Position. Sector Analysis

3.1 Definition

Sector analysis became the predominant approach in strategy studies toward the end of the 1970s, largely due to the work of Michael Porter. Porter drew inspiration from contemporary research in industrial organization and adapted it into a more business-focused language, shifting the emphasis of the study from public policy considerations to firm profitability.

The core concept was built around the Structure–Conduct–Performance (SCP) paradigm, which posits that if an analyst or manager understands the sector's characteristics (S), they can derive the optimal position and behavior of a company (C), which in turn will explain its performance (P). In other words, the creation and capture of value are largely determined by sector characteristics, while the firm's position within the sector dictates how much of that value the firm will capture.

As a result, sector characteristics became central to strategy formulation. In this context, strategy involved first understanding sectors, then selecting the most appropriate sector in which to compete, and finally determining the best position within that sector. Consequently, the primary strategic decision concerns which sector a firm should enter (i.e., which sector is the most attractive). Additionally, firms' different positions within a sector account for variations in their actual performance.

For academic researchers and consultants, developing a robust framework for sector analysis is essential. In this regard, Porter made one of his most significant contributions by introducing the Five Forces (5F) analysis. This framework offers a practical tool for identifying the main characteristics of a sector. The Five Forces are as follows:

1. The intensity of competition within the sector;
2. The threat of potential future competitors;
3. The bargaining power of suppliers;
4. The bargaining power of customers;
5. The presence of substitutes and complementary products.

3.2 Actual competition in the sector

It is well established in standard industrial organization models that there is a negative correlation between the average profits a firm can achieve and the level of competition it faces. Therefore, it is generally preferable to avoid highly competitive sectors, as the likelihood of achieving stable profits is low. Measuring competition is essential, and this assessment relies on both quantitative and qualitative approaches.

For a quantitative measure, we must first determine the number of competitors. The greater the number of competitors, the lower the average profits a firm can expect. However, not all competitors are equal; large and small firms exert different influences on competitive forces. Therefore, it is also necessary to gather information about the relative size of competitors within the sector: do firms have similar sizes, or is there significant disparity? By analyzing the sales data of each firm in the sector, we can calculate market share and derive key concentration indices to measure competition.

The simplest concentration measures are C2, C3, and C4, which represent the combined market shares of the top two, three, and four largest firms in the sector, respectively. For instance, if C3 equals 0.45, the three largest firms collectively control 45% of the market.

While these measures are useful, they do not capture all the available data in a sector, as they focus solely on the largest firms. More comprehensive measures include the Herfindahl Index and the Entropy Index. The Herfindahl Index is a widely used proxy for market concentration, calculated as the sum of the squares of the market shares of all companies in a sector. If $\boldsymbol{Xi}$ represents the market share of firm *i*, the formula is:

$$\boldsymbol{H = \sum_{i=1}^{N} X_i^2}$$

The Herfindahl Index ranges from 1 (indicating a monopoly) to 0 (indicating perfect competition), with higher values signifying less competition in the market. The Entropy Index is similar, with the formula:

$$\boldsymbol{- \sum_{i=1}^{N} X_i \ logX_i}$$

In this case, the index ranges from 0 (monopoly) to 2.5 (perfect competition). The Herfindahl Index is generally preferable for sectors with many small firms.

To calculate these indices, we need sales data for all firms in the sector of interest. Several financial datasets provide this information, usually classified by sector according to standard industrial classification codes such as SIC and NAICS. For example, the SIC code system categorizes industries into progressively broader groups: the industry (4-digit), industry group (3-digit), and major group (2-digit). SIC code 7372 refers to software packages, 737 to computer programming, and 73 to business services. When calculating concentration indices, it is essential to consider only a firm's sales within the focal sector. For instance, if we are analyzing the smartphone sector, we should focus on Samsung's smartphone sales, excluding sales of its televisions.

Another useful metric is the average and standard deviation of various performance measures (as discussed in the previous chapter) at the industry level. A high average with low standard deviation suggests limited competition, whereas a low average with high standard deviation indicates more intense competition. Table 3.1 provides a summary of these arguments.

Table 3.1: A matrix to measure sector attractiveness

		Performance Standard Deviation	
		High	*Low*
Performance Average	*High*	Growing sector, but competitive	Attractive sector
	Low	Non-attractive sector with an established leadership	Declining and mature sector

While these measures are highly useful, they must be supplemented with qualitative information about the nature of competition in the sector. This qualitative data is typically gathered through interviews with industry experts and managers or from specialized media sources. Key qualitative questions to consider include the following: Are the primary clients businesses or individual consumers (i.e., is the market B2B or B2C)? Is the competition primarily driven by price or by product quality? Additionally, how transparent are competitors' actions—for instance, does everyone in the sector have access to information about competitors' pricing strategies?

3.3 Future competition in the sector

To fully understand a sector, it is crucial to assess the likelihood of new competitors emerging, as well as the types of entrants most likely to capture the attention of incumbents. This is a key element in Porter's framework, as it introduces dynamics into the competitive landscape. A useful approach in this context is applying the classic Who, How, and What questions. Who is most likely to enter? How difficult is it to enter the sector? What happens after an entry occurs?

Starting with the "Who" question, an important distinction can be made between large firms and small or entrepreneurial ventures, as these different types of entrants can impact competition in varying ways. Table 3.2 outlines these differences.

Table 3.2: Type of entrants and effects

Firm	***Innovativeness***	***Assets and resources***	***Experience***	***Probability of surviving***
Firms from another sector (lateral entrant)	Low	Plenty	High	High
Entrepreneurial venture (startup)	High	Scarce	Low	Low

While a large firm with a high likelihood of entry represents a new, established competitor, it may not significantly alter the type of competition within the sector. In contrast, while startups often have a lower survival rate, they hold the potential to disrupt and change the rules of competition. Lateral entrants can also be categorized by their mode of entry: vertical integration, diversification, and

international expansion. Although these corporate strategy maneuvers will be discussed in greater detail in Chapters 9, 10, and 11, it is important here to understand how the three types of lateral entry can have different impacts on competition. Table 3.3 summarizes these effects.

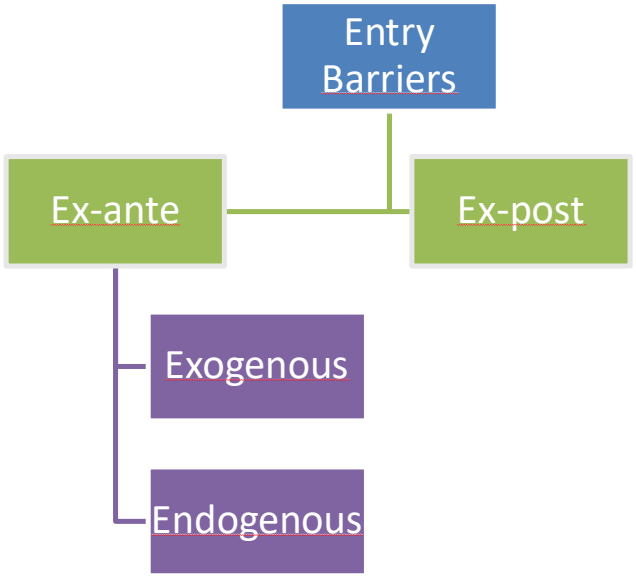
Table 3.2: Lateral entry and its effects

Type of lateral entry	***Production Knowledge***	***Customers' Knowledge***	***Main Threat***
Vertical Integration-Buyer	Low/Medium	High	Loss of market share, customization
Vertical Integration-Supplier	Medium/High	Low/Medium	Loss of bargaining power, inputs shortage
Diversification	Low/Medium	Low/Medium	Synergies
Internationalization	High	Medium	Scale, dumping

Additionally, there is a hybrid model between pure startups and lateral entrants from another sector: the spinoff. A spinoff is a startup founded by a former employee of a company already operating in the sector or in related industries. Unlike a pure startup, a spinoff benefits from significant experience in product knowledge and marketing capabilities. Research (Geroski, 1995) has shown that spinoffs have a higher probability of success than pure startups.

To further assess the types of entrants that merit attention, we turn to the "How" question, which pertains to entry barriers in the sector. Entry barriers represent fixed (and sometimes sunk) costs that new entrants must incur to compete in the market. Higher entry barriers make it more difficult for new competitors to enter the sector. Entry barriers can be categorized as ex-post or ex-ante, with ex-ante barriers further divided into exogenous (or natural) and endogenous (or strategic) types (see Figure 3.1).

Figure 3.1: Entry barriers



Ex-post entry barriers relate to the reputation of incumbent firms for responding aggressively when a new competitor enters the market. The response may involve aggressive actions, such as initiating price wars, tightening control over distribution channels, or engaging in legal challenges. Alternatively, incumbents may choose to adopt a more accommodating stance, which results in no significant escalation of competition. The stronger an incumbent's reputation for escalating competitive pressure upon entry, the less likely a potential entrant will pursue that opportunity.

Ex-ante entry barriers, on the other hand, are the costs that potential entrants must incur simply to enter the business within a particular sector. Exogenous (or natural) entry barriers are determined by the technical characteristics of the industry. For example, a petrochemical firm requires a petrochemical plant, while a software firm may only need a computer and a server. Exogenous barriers can also include legal restrictions imposed by governments, such as startup taxes, permits, and licenses. Sectors with high exogenous entry barriers typically have fewer competitors. A good indicator of these barriers is the level of fixed assets held by companies in the sector, with the average fixed assets serving as a proxy for the height of these barriers.

Endogenous (or strategic) entry barriers, in contrast, result from the strategic decisions made by incumbent firms to make entry more difficult and less appealing to potential newcomers. These barriers are considered endogenous because incumbents actively create them in response to the threat of new competition. Consequently, new entrants must not only cover the costs of exogenous barriers but also navigate the barriers deliberately erected by incumbents. Classic examples of endogenous entry barriers include substantial investments in R&D and marketing. When these expenditures are high, the cost for a new entrant to compete effectively with established firms rises significantly. Proprietary rights, such as patents and trademarks, legally formalize these barriers.

Customer loyalty also plays a key role in creating entry barriers, as an established customer base can deter new entrants, especially when customers face high switching costs. This is particularly

important in industries characterized by network externalities (e.g., video games), where the size of the installed customer base is a crucial entry barrier. Firms can increase their installed base by being early market entrants or by employing aggressive pricing strategies to expand market share.

Using these two dimensions—ex-post and ex-ante barriers—Table 3.4 presents a matrix for classifying sectors.

Table 3.4: Type of sector according to entry barriers

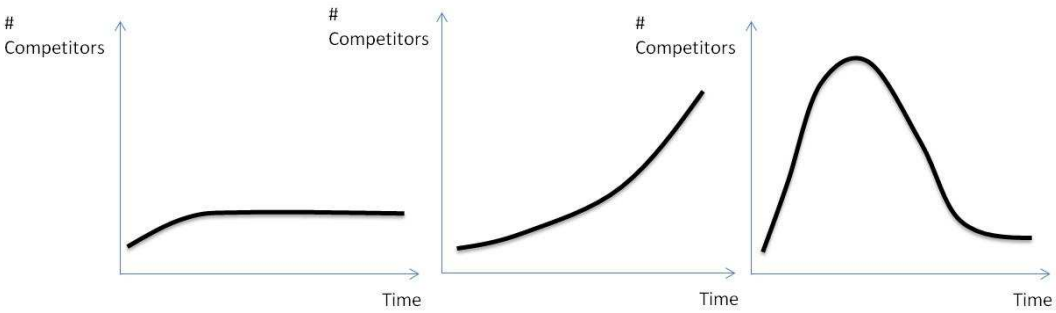
		Ex post-entry behavior	
		Aggressive	Accommodating
Ex-ante entry barriers	High	Top dog	Fat cat
	Low	Lean & hungry	Puppy dog

Source: Adapted from Fudenberg and Tirole (1984)

The top dog sector presents significant challenges for new entrants, as they must navigate substantial entry barriers and face aggressive behavior from incumbents (e.g., the pharmaceutical industry or companies like Coca-Cola and Pepsi). In the fat cat sector, while entry is difficult, firms that manage to overcome these barriers will find a relatively less competitive environment, often due to market segmentation (e.g., the construction industry). The lean & hungry sector, by contrast, may offer easier entry, but competition intensifies rapidly, often resulting in quick exits. These sectors are frequently referred to as contestable markets (e.g., sharing economy platforms, fast food chains, or tabloid newspapers). Lastly, the puppy dog sector is characterized by both easy entry and competition, typically found in emerging or newly developed sectors (e.g., software, services, or consultancy industries).

A scholar or consultant should be able to position the sector of interest within one of these quadrants to thoroughly assess the competitive threats that may arise in the future. Moreover, this matrix can be used in a dynamic manner, illustrating how a sector evolves over time. Figure 3.2 depicts three potential sector trajectories. Sector 1 represents a classic top dog sector, characterized by few entrants initially and stable market concentration thereafter. Sector 2 corresponds to a puppy dog sector, with a steady increase in new entrants over time. The third sector is particularly interesting, as it begins as a puppy dog sector but transitions into a lean & hungry or top dog configuration.

Figure 3.2: Different dynamics of sector evolution



3.4 Power of buyers and suppliers

At this point, it is crucial to clarify that firms often do not have direct business relationships with individual consumers but instead interact with other organizations in a business-to-business (B2B) context. Both buyers and suppliers are other firms. Therefore, to understand the competitive advantages of firms, we must recognize that sectors are embedded in vertical chains of relationships (as will be discussed further in Chapter 9), characterized by upstream supplier sectors (e.g., aluminum producers for carbonated soft drink sellers) and downstream buyer sectors (e.g., automobile sellers for brake manufacturers). When either buyers or suppliers hold greater power, profitability decreases for any firm in the focal sector, as a significant portion of the value created is captured by firms from other (vertically related) sectors.

When the power of suppliers increases, they charge higher prices, causing the average costs for the focal firm to rise. As seen in Figure 2.1, this shifts the average cost curve upwards, reducing the overall value created. Conversely, when the power of buyers increases, they push for lower prices, which reduces the market price and results in thinner profit margins for the focal firm.
How can we measure the power of buyers and suppliers? Essentially, we apply the first two components of Porter's Five Forces (5F) framework separately to the upstream and downstream sectors. The less competitive these vertical sectors are, the higher the power of suppliers and buyers, and consequently, the lower the competitive advantage of the focal firm.

3.5 Presence of substitutes and complements

While the analysis of the power of buyers and suppliers examines vertical relationships outside the focal sector, analyzing substitutes and complements requires looking at horizontal relationships, still external to the focal sector. The key insight here is that sectors exist in interaction with others, which can pose threats or create opportunities for our focal firms.

A product A is considered a substitute for product B if an increase in sales of A reduces the sales of B. Conversely, a product A is a complement to product B if an increase in the sales of A boosts the sales of B. Substitutes represent a threat because successful substitutes can cannibalize sales in the focal sector. For example, high-speed trains compete with airlines, and smartphones have affected the laptop industry. Complements, on the other hand, represent an opportunity. This is especially evident in technology sectors where products are composed of various modules (e.g., personal computers and operating systems, or consoles and video games). Firms that effectively manage complements can secure a strong competitive advantage. When analyzing substitutes and

complements, we apply the previous four forces to assess the real threat or opportunity each represents for the focal firm.

3.6 5F, strategic group analysis, and sub-market niches

Porter's Five Forces (5F) analysis is a crucial tool for understanding firm strategies, and it is the responsibility of managers, consultants, and scholars alike to conduct these analyses when designing a robust and successful strategy. However, 5F is not without its limitations. One major critique is that 5F is overly static; in highly dynamic sectors, 5F can lead to biased conclusions (Chapter 7 provides some solutions to this issue). Additionally, 5F tends to understate the role of the firm itself, placing overwhelming importance on sector characteristics. While this assumption may hold for certain sectors, others—particularly those subject to rapid innovation, turbulence, and continuous change—may not follow the same logic, as firms can actively reshape competitive dynamics. Furthermore, 5F focuses exclusively on competitive behavior, overlooking the importance of cooperative relationships that can also be critical for securing competitive advantages (e.g., strategic alliances between large pharmaceutical companies and small biotech firms).

Another limitation is that some sectors are less homogenous than they initially appear, making 5F too broad to capture the true drivers of competitive advantage. Two complementary approaches that address this concern are strategic group analysis and sub-market niche analysis. Both methods aim to delve deeper into sectors to understand their micro-elements.

Strategic group analysis seeks to classify firms within a sector based on distinct strategies. Typically, two or more strategic variables—such as the level of diversification or R&D expenditure—are used to define strategic groups. These variables should not be correlated and should exhibit high variance across firms in the sector. By mapping these variables, it is possible to create a visual representation (such as a matrix in Table 3.5) that identifies different strategic groups within the sector. For each group, the average performance can be measured, and the competitive forces and sources of competitive advantage for that group can be analyzed.

Sub-market niches, in contrast, are usually defined by product characteristics (e.g., for personal computers: hard disk capacity, memory, screen size, battery life) or, from a marketing perspective, by customer characteristics (e.g., age, income). For defined sub-markets (e.g., SUVs, city cars, sports cars in the automotive industry), competitive forces and sources of competitive advantage can be analyzed. Each sub-niche may vary in several ways, such as in pricing, competition intensity, and customer behavior. Both economic studies (e.g., Klepper and Thompson, 2006) and sociological research (e.g., Negro et al., 2013) emphasize the importance of understanding the birth, growth, and decline of market niches to comprehend firm performance and industry evolution. Recent academic research (e.g., Wu, 2013) also investigates how a firm's position across sub-market niches (as either a specialist or a diversified firm) can explain its performance and the overall dynamics of the industry (see Chapter 6 for more on portfolio versus niche strategies).

An important consideration within the strategy literature is the concept of **mobility barriers**. These barriers are obstacles that prevent firms from shifting between strategic groups or sub-market niches

within a sector. Mobility barriers can restrict a firm specialized in one niche from pivoting to another, and they can also hinder a specialized firm that seeks to expand into multiple niches. This creates challenges for firms looking to diversify their operations or adjust their strategic focus in response to changes in the competitive landscape.

Mobility barriers can be both tangible and intangible. Tangible barriers often refer to the resources required to make the transition, such as technological capabilities, human skills, marketing investments, or physical infrastructure. For example, a firm looking to shift into a new niche may need to acquire new technology, build a distribution network, or significantly increase its marketing efforts to compete effectively in the new space.

Intangible barriers, on the other hand, are less visible but equally significant. These include factors like reputation, image, and legitimacy. A firm that has built a strong reputation in one niche may find it difficult to transfer that credibility to another market segment, where its brand or expertise may not carry the same weight. Similarly, a firm's established image could limit its ability to move into new niches if its brand is strongly associated with a particular product or customer base. Legitimacy in a specific niche may also prevent expansion into others, as stakeholders in the new niche may not recognize the firm as a credible or trustworthy player.

In this respect, it is important to evaluate how firm resources are **fungible.** In addressing the strategic implications of resource fungibility within a firm, it is crucial to assess two primary aspects: the adaptability of firm resources across different market segments or niches to create competitive advantages, and the associated costs of such adaptations. Firstly, the concept of resource fungibility pertains to the ability of a firm's resources—such as its brand—to be versatile and utilized effectively across various segments to leverage competitive benefits. This adaptability can enable a firm to penetrate multiple market niches using a single, cohesive resource, potentially amplifying its market presence and reducing the need for segment-specific investments.

Secondly, while the adaptability of resources can provide strategic advantages, firms must carefully evaluate the costs associated with adapting these resources for different uses. These costs include not only the direct investments required to modify or apply a brand to new products or services but also the coordination costs incurred when managing multiple segments under the same resource umbrella. Coordination costs can arise from the complexities of aligning strategies, operations, and marketing across diverse product lines, which may dilute the focus or efficacy of the resource if not managed effectively.

Therefore, strategic decision-making regarding resource fungibility should involve a balanced consideration of both the potential for increased competitive advantage through resource leverage and the tangible and intangible costs associated with resource adaptation and coordination across different market segments.

Understanding these mobility barriers is essential for assessing the competitive landscape. Firms trapped within certain strategic groups or niches may find it difficult to respond to shifts in competition or changing consumer demands. Whether these barriers are resource-based or rooted in

less tangible factors, they play a critical role in determining a firm's ability to pivot or expand within a sector.

Table 3.5: Example strategic group analysis

		Advertising expenditure	
		High	Low
Level of diversification	High	Strategic group 1	Strategic group 2
	Low	Strategic group 3	Strategic group 4

Chapter 4: Pattern. Competitive Advantage

4.1 Definition

We have established that a firm achieves a competitive advantage when it is able to remain in the top 15% of the profitability distribution for at least a medium-term period. To clarify further, a simple definition of competitive advantage is the firm's ability to generate more sales given the assets invested (value creation) and its capacity to transform those sales into profits (value capture). Therefore, the first step in identifying the presence of a competitive advantage is to assess the firm's position within the sector's profitability distribution using various performance measures. If the firm is positioned on the right tail of the distribution, it possesses a competitive advantage. In skewed distributions, such as the typical profitability distribution within a sector, the mean is often higher than the median, making the right tail a low-probability event.

Figure 3.1 from the previous chapter provides a useful framework for interpreting competitive advantage and its defensibility. Two primary perspectives seek to explain the formation of competitive advantage. The first stems from sociological and economic traditions, positing that a firm's ability to create a competitive advantage is based on its capacity to align and adapt to sectoral conditions. This perspective emphasizes the importance of understanding external pressures created by the environment and responding to them more effectively than competitors. For example, pressures may come from shifts in supplier relationships, the emergence of new complement producers, or evolving consumer preferences.

The second perspective, more aligned with innovation studies in the tradition of Schumpeter, views competitive advantage as the ability to introduce new products, services, or processes that enhance efficiency and potentially confer monopolistic power on the focal firm. This innovation-driven view highlights the role of internal firm processes in generating breakthroughs that disrupt market conditions and lead to competitive dominance.

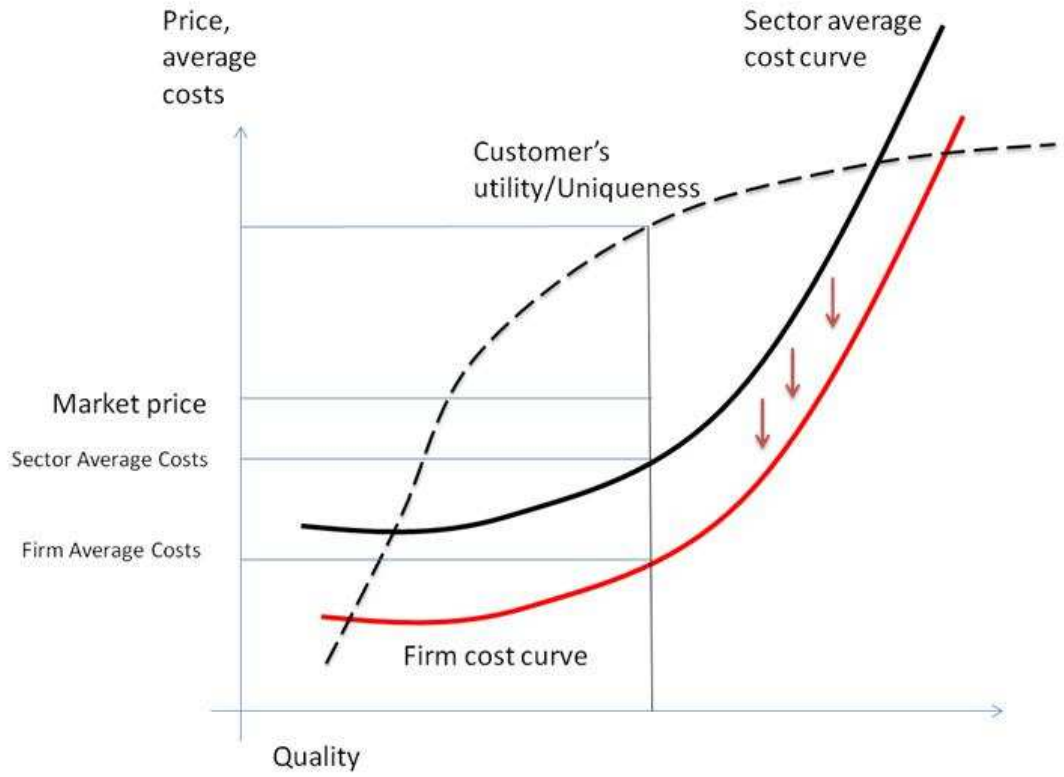
These two perspectives encapsulate the dual aspects of modern strategy: the necessity to respond to external pressures and the capacity to generate internal innovations that secure monopolistic advantages. Importantly, these two views can be integrated into a unified approach. For instance, if sectoral dynamics give rise to an unexploited niche, an innovation that introduces a product perfectly suited to the needs of that niche will represent both a form of innovation and a superior fit with the environment. A relevant example is the recent emergence of the "dental health" niche within the chewing gum market.

4.2 Cost and differentiation advantages

We have established that a firm achieves a competitive advantage when it is able to stay in the top 15% of the profitability distribution for at least the medium term. To refine this concept, we can define competitive advantage as the firm's ability to generate more sales given the assets invested (value creation) and its ability to convert those sales into profits (value capture). Therefore, the first step in identifying a competitive advantage is to examine the firm's position within the profitability distribution of its sector, using various performance measures. If the firm is located in the right tail of the distribution, it can be considered to have a competitive advantage. In skewed distributions, such as typical profitability distributions in a sector, the mean is often higher than the median, meaning that being on the right tail is a low-probability event.

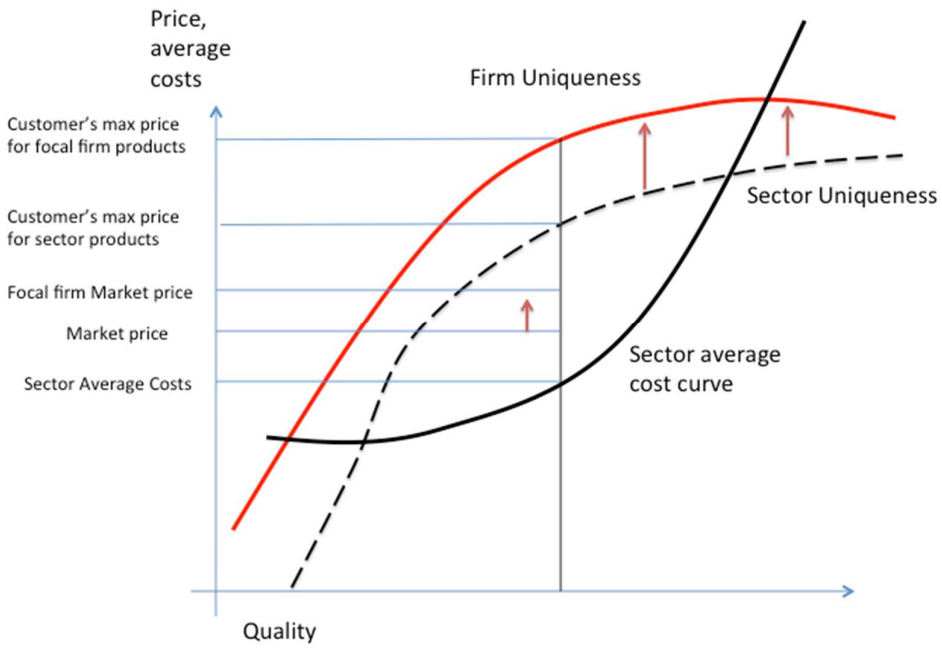
Figure 4.1 illustrates the concept of cost advantage, which occurs when a firm can produce a good or service at a lower average cost than its competitors without sacrificing its perceived uniqueness or customers' willingness to pay.

Figure 4.1: Cost advantage



A differentiation advantage arises when a firm produces a good or service that is perceived by customers as more unique than the average product in the sector, allowing the firm to charge a higher price without compromising its cost structure, as shown in Figure 4.2.

Figure 4.2: Differentiation advantage



This comparison highlights the fundamental differences between these two types of competitive advantage. A cost advantage is primarily concerned with lowering the average cost curve, which is influenced by factors such as investments in production structures and logistics. In contrast, a differentiation advantage is derived from the types of products or services a firm offers and how customers perceive them in terms of preferences and taste. Therefore, differentiation advantages are more complex than cost advantages, as they involve both firm behavior and customer responses.

4.3 The Range of a Competitive Advantage

A competitive advantage can vary in its scope, which may be **broad** or **narrow**. One way to measure the range of a competitive advantage is by classifying a firm according to the number of segments it serves (few or many) in both **B2B** (size, age, sector, location) and **B2C** (age, gender, wealth, location) contexts. Another measure is the extent of the firm's product portfolio, ranging from limited to wide.

For instance, **SpaceX** is a **niche specialist**, which primarily provides space transportation services to a limited group of B2B clients like NASA and commercial satellite operators, has a relatively **narrow range**. In contrast, **Procter & Gamble**, which offers a broad array of consumer goods across multiple product categories, represents a firm with a **broad range** of competitive advantage, catering to a wide variety of B2C customers.

Customer-focused diversifiers, such as Bloomberg that serves financial professionals with a diversified product portfolio (news, software, financial data, …). On the other hand, **product-focused**

diversifiers are chip producers like Intel/Nvidia provide microprocessors and integrated digital to a wide variety of customer segments (cars, home appliances, pc,…).

Table 4.1 classifies the range of competitive advantage, and firms can dynamically change their range over time. For example, **Netflix**, which initially focused on streaming content for a niche segment of viewers, has since broadened its competitive advantage by expanding its content offerings and geographical reach, now serving a global customer base.

Table 4.1: The Range of a Competitive Advantage

		Product Portfolio	
		Wide	*Limited*
Number of customer segments	*Many*	Broad diversifiers (P&G)	Product-focused diversifiers (Intel/NVidia)
	Few	Customer-focused diversifiers (Bloomberg)	Niche Specialist (SpaceX)

4.4 The Resource Based View

In the 1990s, agency theory and Porter's sector analysis were critiqued by scholars advocating for the Resource-Based View (RBV). This approach placed the firm, rather than the sector, at the center of strategy theory. According to RBV, the same actions of a firm can alter the competitive dynamics of a sector, a concept exemplified by innovation-driven sectors such as personal computers, biotechnology, and video games, with iconic firms like Apple, Nintendo, and Amgen. RBV suggests that competitive advantage stems from the unequal distribution of resources among firms (Barney, 1991). These resources, often intangible, are the assets that enable a firm to create and capture value.

For a resource to generate competitive advantage, it must satisfy the VRIN framework:

Valuable: The resource must create economic value (in terms of both value creation and capture), such as a technology or brand.
Rare: Only a few companies can utilize the resource to create value.
Imperfectly Imitable: The resource must be difficult for competitors to imitate.
Non-substitutable: Competitors cannot use alternative resources to serve customer needs more effectively.

The RBV has been both criticized, for example, for the tautology in its definition of valuable resources (e.g., how can one know ex-ante which resources will be valuable?), and praised, particularly for its applicability to diversification studies. A key concept in RBV is that strategy must be dynamic: with the value created by resources, a firm must continually invest in protecting their rarity by ensuring they remain inimitable and non-substitutable.

4.5 Defense

According to the VRIN framework, firms must defend their competitive advantage by maintaining the value and rarity of their resources, and they can do so by protecting against imitation and substitution. Competitive advantage is something a firm can achieve, but it can also be eroded by environmental changes or competitors' actions. Therefore, firms must focus not only on how to achieve a competitive advantage but also on how to defend it—a concept referred to as erosion of competitive advantage.

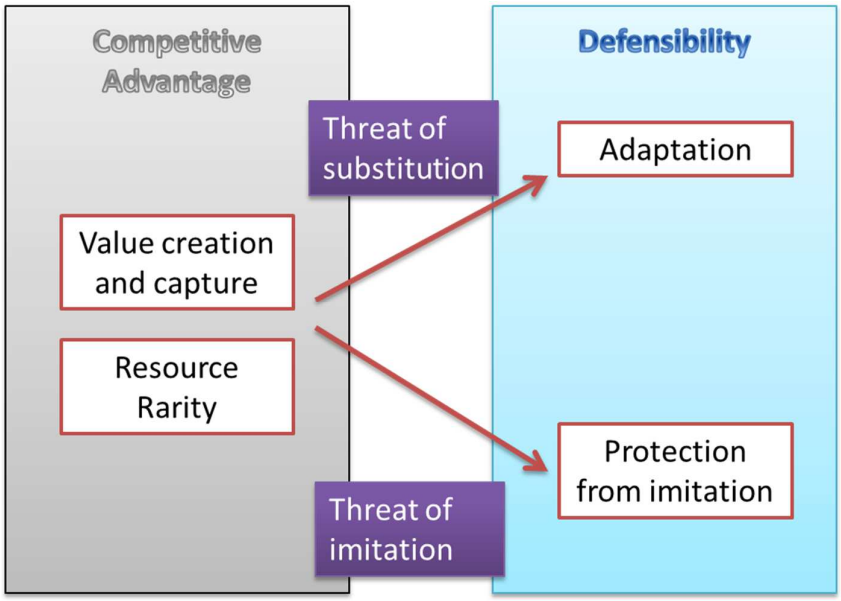
Defending a competitive advantage involves two key aspects: protection from imitation and adaptation to substitution. Protection from imitation refers to a firm's ability to block competitors from replicating the "formula" for its success. This can be achieved through formal protections such as:

- **Intellectual property rights (e.g., patents, trademarks),**
- **Secrecy, and**
- **Monopoly power over strategic resources (e.g., ownership of high-quality coffee plantations).**

Other informal tactics include increasing complexity or causal ambiguity—the more interconnected and numerous the sources of a competitive advantage are, the harder it is for competitors to understand and replicate them. Additionally, firms may use accounting skills to legally conceal benefits and create switching costs for customers to prevent defection.

In terms of adaptation, the firm must be able to respond to dynamic changes that could lead to resource substitution. This requires both regeneration and reconfiguration of competitive advantage. **Regeneration** refers to investments that keep resources valuable, such as continuous R&D efforts (e.g., frequently releasing new product versions, as in the video game or watch industry). **Reconfiguration** involves altering customer segments or the firm's market position (e.g., launching products for more mature audiences in the video game industry). A combination of regeneration and reconfiguration may result in a radical change to the firm's business model.

Figure 4.3: Competitive advantage and defensibility under a VRIN framework



4.6 Attacks

The other side of defending a competitive advantage is the potential attack from new or existing competitors. As discussed in Paragraph 3.3, different entry modes include startups, spinoffs, and lateral entrants. However, a more detailed classification is necessary to understand how competition evolves depending on the type of attack. First, an entrant may challenge incumbents with the same type of competitive advantage (e.g., cost vs. cost, differentiation vs. differentiation) or not. Second, the range of competitive advantage between the entrant and incumbents could vary.

There are four types of competition:

- **Standup Battle**: Firms have similar business models and compete for the same market space.
- **Guerrilla**: Firms have the same competitive advantage (e.g., cost) but target different customer segments (e.g., B2B vs. B2C).
- **Cold War**: Firms serve the same customers but offer different types of value (e.g., price vs. differentiation, as seen in the food and drink industry).
- **Armed Neighbors**: Firms differ in both their competitive advantage and target segments (e.g., one firm has a cost advantage for B2B, while another has a differentiation advantage for B2C).

The high-left quadrant represents the most intense competition, while the low-right quadrant features less aggressive competition. When firms with the same broad competitive advantage operate in the same space, competition is particularly fierce—unless forms of tacit collusion are in place. Importantly, these positions should be viewed dynamically, as competition can evolve over time due to changes in company strategy or shifts in customer needs and demand.

Figure 4.4: Types of competition


Stand-up Battle
Cold War
Guerrilla
Armed Neighbors
Same
Different
Range of Competitive Advantage
Same
Different
Type of Competitive Advantage

Chapter 5: Pattern. Cost Advantage

5.1 Determinants of cost advantage

We have already established that a cost advantage can be defined by a firm's ability to achieve lower average costs than its competitors. But what drives this ability? Below are some of the most important determinants of cost advantage. Traditionally, scale and learning economies are the more under scrutiny:

- Scale economies. Scale economies occur when average costs decrease as the quantity produced increases. These are typically linked to the presence of fixed costs. Scale economies arise when an increase in fixed costs leads to a reduction in variable costs, enabling firms to spread fixed costs over more units as production scales up. As a result, average costs decrease more rapidly than those of competitors. Firms with significant scale economies can achieve considerable cost advantages, as they can utilize larger plants or more extensive production capabilities, driving down costs per unit as output grows. This is particularly important in industries with high fixed costs and the potential for mass production, such as automotive or aerospace manufacturing.
- Learning economies. Learning economies refer to the reduction in average costs as cumulative production increases over time. Unlike scale economies, which depend on production volume at a given point, learning economies are linked to the firm's ability to refine production processes through experience and time. As a firm produces more units, it learns how to improve efficiency, reduce waste, and optimize processes. The longer a firm operates, the more knowledge it accumulates, which can lead to lower costs in the future. Industries like semiconductors and software development, where firms benefit from repeated iterations and process refinement, often experience significant learning economies.

- Load factor. Load factor refers to the efficiency with which a firm utilizes its production capacity. While it is related to scale economies (since larger plants offer higher potential capacity), it differs in that it depends on the intensity of the plant's usage. For example, an airline might achieve cost advantages not just by operating large aircraft but by ensuring that a high percentage of seats are consistently filled.
- Scope economies. Scope economies occur when producing two or more products together results in lower average costs than producing them separately. This often happens because some fixed assets or resources can be shared across multiple production lines. Firms that can

jointly produce goods or services can spread fixed costs across those products, creating a cost advantage over specialized producers.

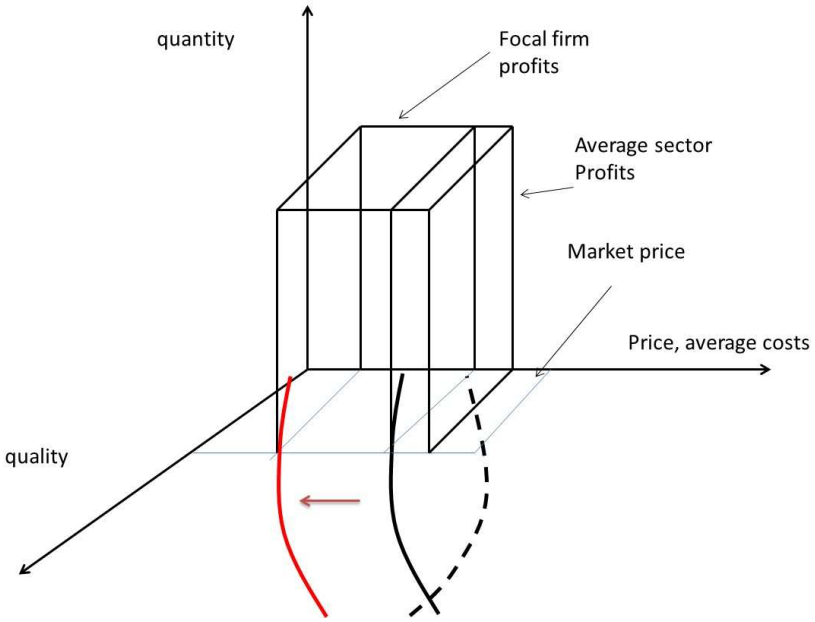
- Organization of production. Production techniques and product designs that improve efficiency and reduce costs are vital drivers of cost advantage. This could include methods like just-in-time production, lean manufacturing, and cross-docking logistics, which help firms streamline operations and minimize waste, leading to lower average costs.
- Corporate strategy. A firm's broader corporate strategy can also affect its cost structure. Vertical integration, for instance, allows firms to control more steps of the production process, potentially saving costs through better coordination and oversight. International expansion can also reduce costs if the firm establishes production facilities in regions with lower labor or raw material costs.
- Product design. Designing products in ways that exploit scale economies or avoid expensive manufacturing processes can significantly reduce costs. A product that uses standardized components or is designed for easy manufacturing can help firms achieve substantial cost savings.
- Residual efficiency. This category includes efficiency drivers that don't fit neatly into other segments, often related to intangible assets. For example, a firm that fosters a positive organizational climate may see increased efficiency and coordination among its employees, boosting overall productivity and reducing costs.

5.2 Exploiting cost advantage

When a firm achieves a competitive advantage based on cost, what happens, and how can the firm capitalize on it? There are two primary ways to exploit a cost-based competitive advantage.

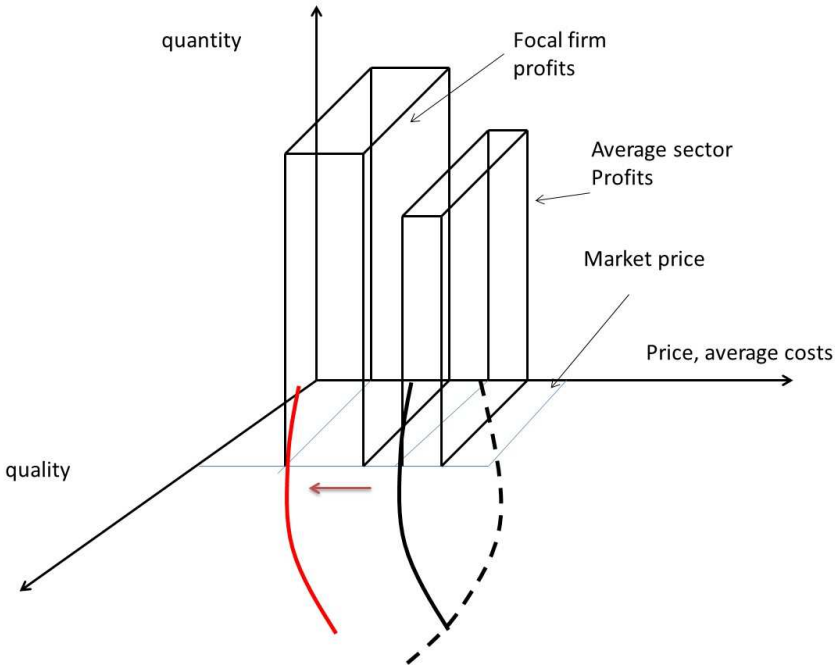
The first approach is to align the product price with competitors' prices, thereby gaining higher margins per product sold. In this case, the firm will achieve higher profits than its competitors, as illustrated in Figure 5.1.

Figure 5.1: Exploiting cost advantage, Strategy I



The second method is to aggressively lower the product price. Although the firm will earn lower margins per unit, it will increase the quantity of products sold, leading to higher total profits than those of its competitors, as depicted in Figure 5.2. This is a highly typical strategy in cost competition.

Figure 5.2: Exploiting cost advantage, Strategy II



How should firms decide between these two strategies? The choice depends on several factors. First, as discussed in Chapter 2, the market price plays a dual role in value creation: *Sales=Market Price x N x f(Max Price-Market Price).*

The relationship between prices and the product's perceived uniqueness is crucial. If lowering the price reduces the perceived uniqueness of the product, it may compromise its perceived quality and decrease customers' willingness to pay. In Figure 5.2, we assume that lower prices do not affect the uniqueness curve; however, if the curve shifts downward, the firm may not be able to sell the target quantity. The utility customers gain—the difference between the market price and the maximum price they are willing to pay—affects the total quantity sold. This reflects the price elasticity of a market: In highly elastic markets, customers tend to buy the cheapest product, and reductions in price are less likely to impact perceptions of uniqueness.

Second, the firm must consider sector competitiveness. Lowering prices can trigger a price war, harming all competitors. Before pursuing this strategy, a firm must ensure that it is truly more efficient than its rivals. However, determining this is not always straightforward, as it can be difficult to accurately estimate the average costs of the focal firm and its competitors. Information about competitors' average costs is typically confidential. Therefore, a firm that lowers its prices may later discover that it is not the most efficient player in the market, making it vulnerable to retaliatory actions from competitors.

How can firms gather information about their competitors' costs? Cost-based sectors resemble poker games: players attempt to deduce their opponents' positions by observing their behavior. Similarly, firms try to infer their competitors' cost structures by analyzing their actions, particularly their price adjustments. Some companies may even initiate price changes to observe how competitors respond. A recent example of this occurred in the ride-hailing industry between Uber and Lyft (or any local version of Lyft). Both companies frequently lowered prices and offered discounts in an attempt to outcompete each other and capture larger market shares. This aggressive pricing led to thinner margins for both companies, forcing them to reconsider their strategies in order to avoid unsustainable losses. In such cases, visible price moves provide valuable insights into a sector. However, in markets where prices are less transparent—such as certain service industries—it is more challenging to draw conclusions about competitors' costs.

In summary, to effectively exploit a cost advantage strategy, a firm must understand three key factors:

(1) its own cost structure;
(2) the cost structure of its competitors;
(3) the price elasticity of its market.

However, is a cost-based competitive advantage truly sustainable? Conventional wisdom suggests that a cost advantage is difficult to maintain over time. It depends heavily on a firm's investments in its cost structure, so any innovations, changes within the firm, or shifts in the environment that affect efficiency can alter the competitive landscape. Furthermore, sectors dominated by cost advantages are vulnerable to price wars, which can reduce profitability for all competitors and place financial strain on even the most stable companies.

Chapter 6: Pattern. Differentiation Advantage

6.1 Determinants of Differentiation Advantage

We have already defined differentiation advantage as the firm's ability to enhance its perceived uniqueness relative to competitors. In this chapter, we explore the determinants of this ability.

1. **R&D and Marketing Investments**. Research and development (R&D) and marketing expenditures, along with their practical applications, are key drivers of both the tangible and intangible differentiation of a firm.

There are two main avenues through which firms can enhance their uniqueness via differentiation: tangible and intangible. Tangible differentiation involves the physical attributes of a product. Firms may offer unique product features within a specific sector. One approach to tangible differentiation is vertical differentiation, typically achieved through variations in quality. For example, in a wine shop, a customer may find bottles of red wine from the same region and vintage, yet with differing quality levels (often reflected in price), despite the wine being composed of the same basic chemical elements.

In contrast, horizontal differentiation refers to product features not necessarily linked to quality but catering to different consumer preferences. For instance, a carbonated soft drink may come with or without sugar, or with or without caffeine, with or without a cherry flavor. These variations do not signify differences in quality but reflect consumers' diverse tastes.

Within these two paths of differentiation, firms may employ specific product strategies: niche or portfolio. A niche strategy involves specializing in a single type of product, focusing on a narrowly defined market segment. In contrast, a portfolio strategy entails offering multiple versions of a product to appeal to a broader range of customer preferences. By combining these two strategic elements, we can construct a 2×2 matrix of tangible differentiation, as shown in Table 6.1. Each of the four strategies in this matrix, if effectively executed, can confer a differentiation advantage by enhancing the firm's perceived uniqueness.

Table 6.1: Taxonomy of tangible differentiation

	Niche strategy	*Portfolio strategy*
Vertical differentiation	Luxury good	Multi-brand company (watches)
Horizontal differentiation	Specialized suppliers (hiking shoes, sunglasses for surfing)	Multi-basket (food, tobacco, household products)

Intangible differentiation refers to the psychological perception of a product's uniqueness. Firms can influence how customers perceive both their products and the company as a whole by directly targeting these psychological processes. The primary tool for achieving this is advertising, in its various forms. Advertising can convey a perception of uniqueness, even when the product itself is not significantly different from competitors' offerings. For example, while Coca-Cola and Pepsi produce similar beverages, they cultivate distinct brand images: Coca-Cola focuses on themes like family, Christmas, and friendship, while Pepsi emphasizes adventure, individuality, and rock star culture. Often, these intangible efforts are complemented by tangible product characteristics, creating a cohesive brand image. For instance, Lululemon, which sells clothing for yoga enthusiasts, has cultivated a brand image that emphasizes community and mindfulness, while also ensuring strict control over raw materials to guarantee their "natural" origins. Finally, intangible differentiation can be oriented toward vertical differentiation (perceived quality) or horizontal differentiation (catering to a specific niche).

Other key determinants of differentiation include:

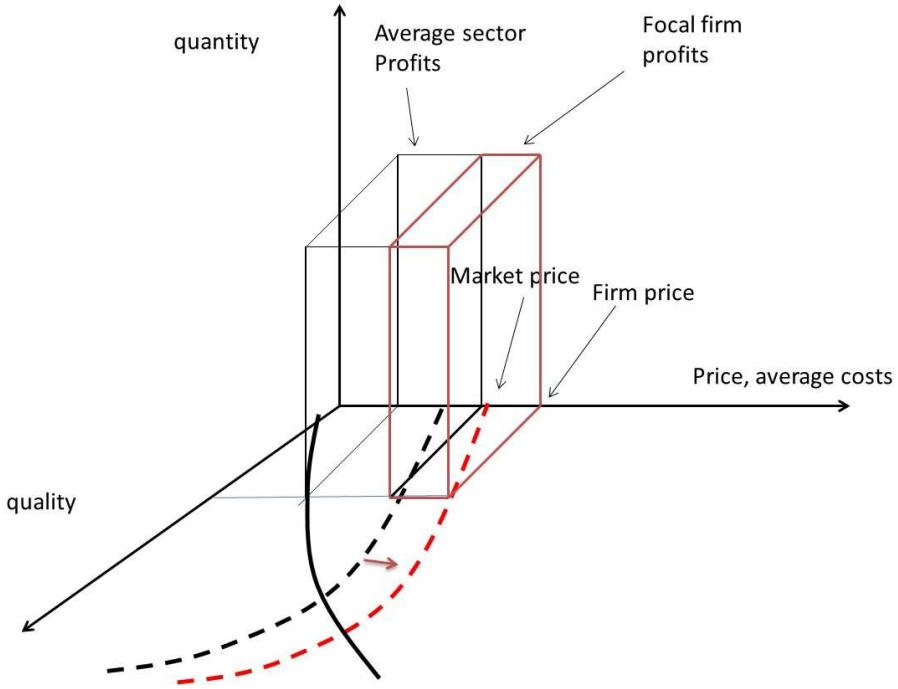
2. **Organization of production**. This involves production techniques that enhance the uniqueness of the firm's offering, such as coordination between divisions, efficient information exchange processes, and total quality control.
3. **Corporate strategy**. Firms that control multiple steps in the vertical production chain can enhance differentiation by ensuring better quality control or improving coordination, thereby reducing time to market.
4. **First mover advantage**. Firms that are the first to introduce a product to the market often create a unique connection with customers, establishing early brand loyalty.
5. **Complementarities with other products**. Firms that produce a range of products can exploit spillover effects in both production and marketing. For instance, superior hardware can lead to the development of better software, enhancing the value of both.
6. **Product design**. Innovative product designs that incorporate different combinations of components can result in tangible differentiation and customized offerings.

6.2 Exploiting Differentiation Advantage

How does a firm exploit its differentiation advantage? The most common approach is by charging a premium price. Customers who perceive a product's uniqueness are willing to pay more for it,

allowing the firm to raise prices without diminishing the perceived utility of the product. When the focal firm sets a higher price while maintaining customer utility, it can sell the same quantity as its competitors but achieve higher profits, as illustrated in Figure 6.1. However, the ability to manage costs is also crucial. In Figure 6.1, we assume average costs remain constant, but firms with a differentiation advantage often face higher average costs—such as those incurred through advertising—which can reduce their profit margins.

Figure 6.1: Exploiting differentiation advantage



Compared to a cost advantage, a differentiation advantage is more challenging to achieve, as it requires a complex combination of both tangible and intangible elements. Tangible differentiation necessitates investments in the supply chain, production processes, and research and development (R&D), while intangible differentiation requires substantial investments in advertising and distribution channels. Due to the intricate nature of its development and the significant role played by customer perceptions—particularly from a psychological standpoint—a differentiation advantage is also more difficult for competitors to replicate. On average, a differentiation advantage is easier to defend and sustain, particularly in sectors with low price elasticity, where customers prioritize product features over cost, and where the presence of sub-market niches is significant.

However, differentiation advantages are not without risk. The first risk stems from the fact that many advantages rely heavily on customer behavior, which firms can only partially control. If customer preferences change unexpectedly, a differentiation advantage may quickly erode. The

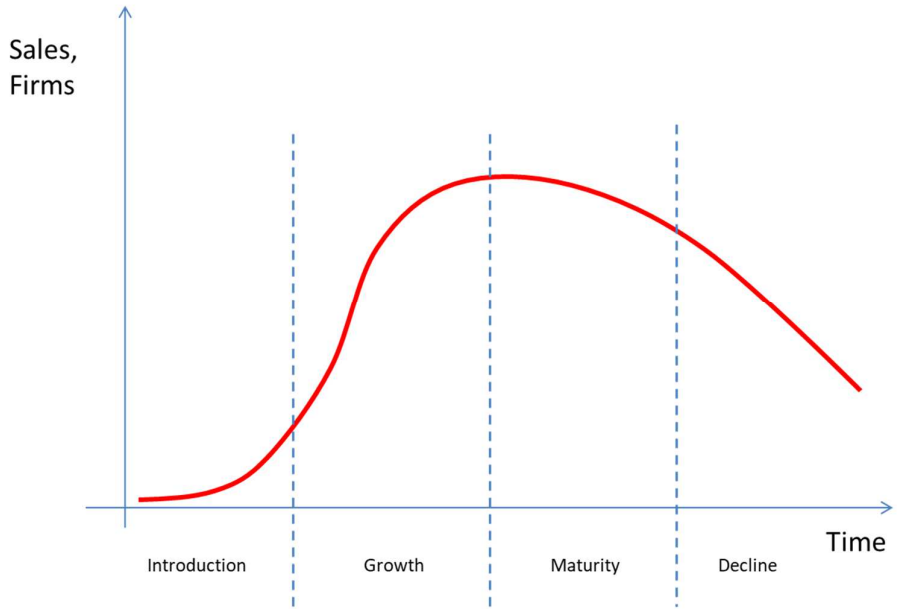
second risk concerns firms that adopt niche strategies. Firms that focus on defending a specific niche within a sector—such as specialized suppliers—face significant challenges if that niche begins to decline or disappear. A new trend in industrial organization and strategy research (Klepper and Thompson, 2006) highlights the importance of sub-market niche dynamics in explaining the success of firms (Hsu et al., 2009) and products (Carroll et al., 2010). For instance, consider a film producer specializing in Western movies, which were immensely popular in the 1950s and 1960s but have experienced a marked decline in demand in subsequent decades.

Chapter 7: Perception. Industry Dynamics

7.1 Definition

As discussed in previous chapters, several forces related to sector dynamics can alter the competitive landscape. Understanding these dynamics is crucial, as they challenge firms to anticipate and interpret future developments while determining the patterns of adaptation and change that should be initiated. A classical framework for analyzing sector dynamics is the Industry Life Cycle (ILC) model, depicted in Figure 7.1, which outlines a sector's progression through four distinct phases: introduction, growth, maturity, and decline.

Figure 7.1: Industry life cycle model



The introduction phase of the industry life cycle is characterized by product innovation and experimentation, with numerous trials and errors. During this phase, the product seeks legitimacy in a new market. The stage is typically dominated by small startups with low survival probabilities, which invest heavily in product innovation.

In the growth phase, the product begins to gain recognition among customers, leading to increased demand. This phase attracts new entrants to the market, though product variation decreases as standardization begins to take place. The key challenge for firms during this phase is to scale up their operations while managing expansion and liquidity constraints.

The maturity phase marks a shift in competition from product differentiation to price competition, with an increasing focus on controlling production costs. As competition intensifies, entry barriers emerge, leading to fewer new entrants and higher exit rates. Firms in this phase invest more in process innovation, and demand starts to stabilize.

In the decline phase, only the largest firms remain in the market, and they often invest in both product and process innovation to maintain their positions. Entry becomes extremely difficult, if not impossible, and demand begins to decline.

Two key considerations arise from this framework. First, it is important to estimate the duration of each phase. Some industries experience life cycle phases lasting five years, while others may transition through each phase within six months. These differences require distinct strategic approaches.

The main driving force behind the industry life cycle (ILC) is entry, exit, and survival. Entry can be analyzed through two perspectives: Demand Pull and Resource Push. Entry driven by Demand Pull occurs when there is unmet demand, either in terms of price or product characteristics, that incumbents fail to address, do not wish to serve, or are unable to capture. This unmet demand may arise due to changes in customer preferences or the emergence of new customer segments with different needs. On the other hand, Technology Push entry is spurred by the creation of a new product or the introduction of a new process for producing, distributing, or selling an existing product. This can include innovations in product design, production efficiency, or sales channels.

Resource Push and Demand Pull factors can also intertwine during industry evolution. However, in sectors where demand changes are more dominant, the firm's most important competence often lies in its ability to foresee, understand, and adapt to these shifts. This competence includes the ability to anticipate future market characteristics, determine what is required to gain a competitive advantage, and plan the necessary changes in terms of organization, strategy, and resources. In contrast, in sectors driven by Technology Push, firms disrupt markets with their innovation capabilities, launching new products and standards, creating novel markets and niches, and attracting both new and existing customers. In such cases, a firm’s ability to channel its creative skills into successful market offerings is critical.

7.2 When growth is profitable?

When is growth associated with profitability? And when is it linked to cost and differentiation advantages?

Growth generally entails a change in revenues (ΔPQ) and a change in total costs (ΔCT). The key issue is whether the ratio between the change in revenues and the change in costs is greater than one.

We know that:

$TC = vQ + F$

where v is variable cost, F is fixed cost, Q is the quantity produced/sold, and P is the market price.

From definitions:

$v = P(1 - ROS), \quad F = PQ/CT$

This allows us to rewrite total costs as:

$TC = PQ\,(1 - ROS + CT^{-1})$

Substituting into the growth condition gives:

$(\Delta PQ)/(\Delta TC) = (\Delta PQ) / (\Delta PQ\,(1 - \Delta ROS + \Delta CT^{-1})) > 1$

which simplifies to the intuitive inequality:

$\Delta CT > 1/\Delta ROS$

This relationship is visualized in Figure 7.2.

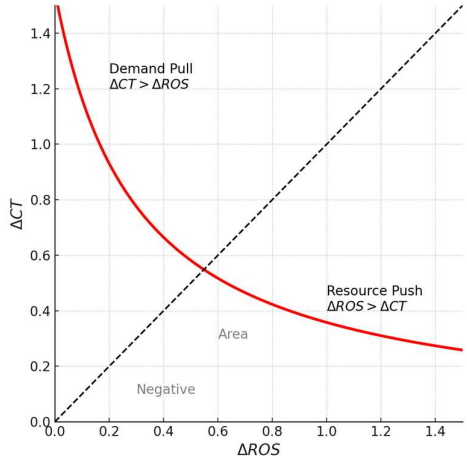
- The south area, below the convex curve defined by $\Delta CT = 1/\Delta ROS$, represents no-profit zones (negative profits).

- The north-west area corresponds to positive profits driven by demand pull, where firms leverage demand-side opportunities.

- The north-east area corresponds to positive profits driven by resource push, where firms exploit internal resources to support growth.

Together, the figure provides a simple yet powerful mapping of how growth strategies relate to profitability and the balance between demand-side and resource-side drivers.

Figure 7.2: ΔCT > 1/ΔROS



7.3 Industry Life Cycle (ILC) and Inertia Problems

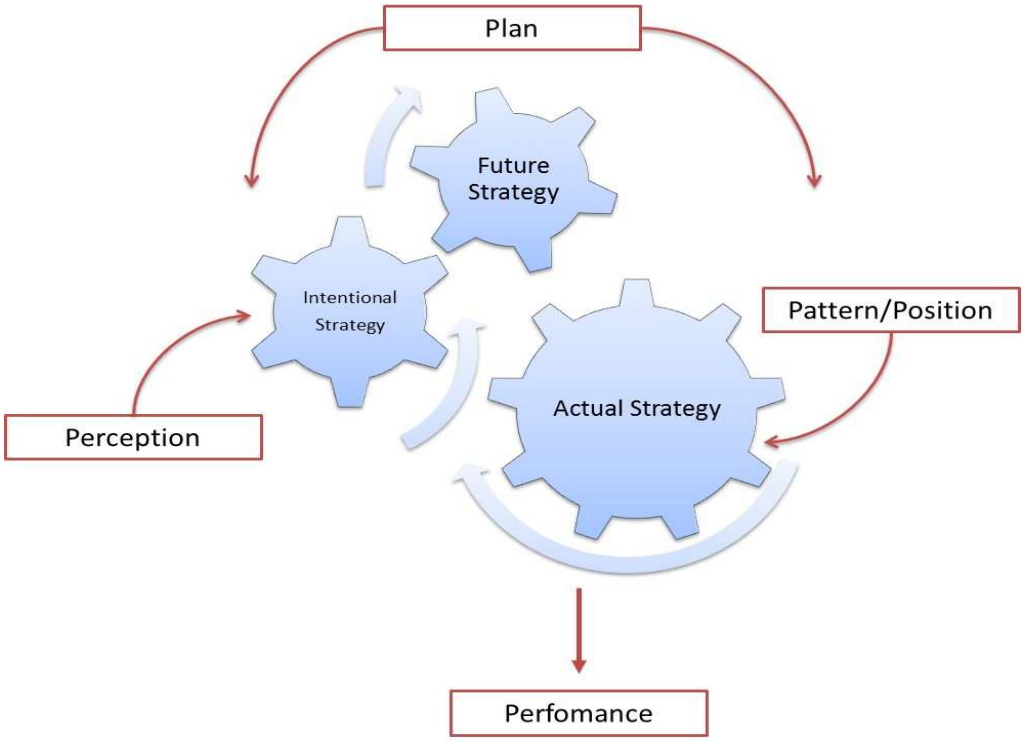
How does the industry life cycle affect strategy? Dynamics pose challenges because firms, as organizations, tend to be inertial. Myopic inertia occurs when managers fail to understand environmental dynamics, resulting in difficulties in formulating long-term strategies. This issue pertains to Perception (refer to the 5Ps). Procedural inertia, on the other hand, arises when an organization cannot implement necessary changes, even when managers understand the required direction. In this case, the firm struggles to adopt appropriate change routines due to internal resistance. This is a problem of Pattern (again, refer to the 5Ps).

From this perspective, we learn that strategy encompasses both perceptions and patterns of behavior. As a perception, strategy clarifies the environment and the dynamics of the sector. As a pattern, it determines the day-to-day routines that prepare the organization for the future. Thus, strategy cannot be viewed solely as a plan or a choice of the firm's position; it is simultaneously plan, position, perception, and pattern—especially when considered in a dynamic context. Firms are not isolated ivory towers; they are permeable organizations characterized by the inflow and outflow of various resources (e.g., financial, technological, human) that interact with and are shaped by the external environment.

This argument implies that strategy operates on different time layers. There is the firm's actual strategy, which refers to the pattern of behavior and position the firm adopts based on current sector characteristics to achieve a competitive advantage in the present. The firm's perceptions—its vision and interpretation of future developments—allow it to predict necessary changes for staying ahead of competitors. This process involves forecasting environmental dynamics (or working toward breakthrough innovations) and determining the firm's future position and pattern. This is the future strategy, which outlines how the firm intends to maintain a competitive advantage in the future. In between these two, the firm develops an intentional strategy, which

serves as the roadmap guiding the firm's transition from its actual strategy to its future strategy. This overall plan is illustrated in Figure 7.2.

Figure 7.3: Dynamics and strategies

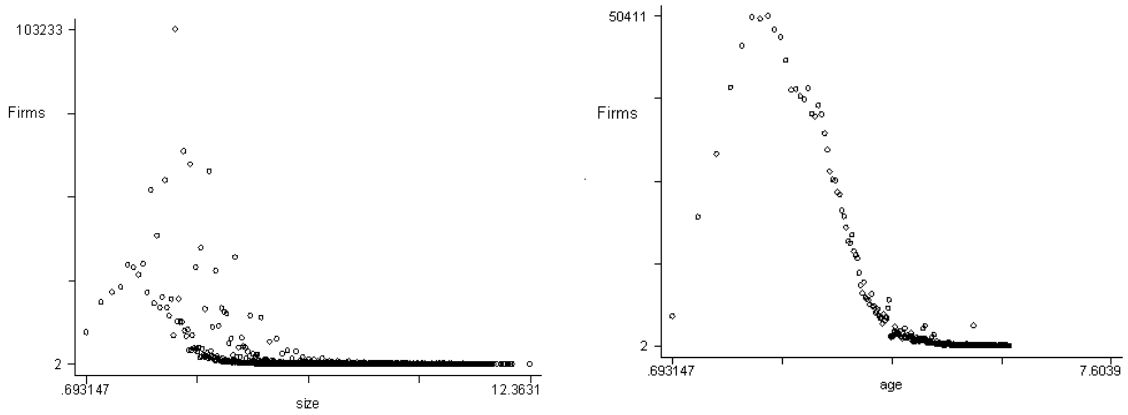


Chapter 7: Perception. Growth

8.1 Definition

Why is size important? In other words, what is the relationship between firm size and competitive advantage? Figure 8.1 presents the distribution of firm size and age in logarithmic terms for all firms in the United States. It is evident how size plays a crucial role in shaping a firm's ability to achieve and sustain a competitive advantage.

Figure 8.1: Log size and age distribution of firms in the United States in 2013



Source: Original elaboration from BvD Osiris Data

These distributions reveal two key stylized facts: being a large firm and being an old firm are both low-probability events. If we were to randomly select a firm from a real-world distribution, the most likely outcome would be the selection of a young, small firm. A direct conclusion, supported by numerous empirical studies, is that survival and size are positively correlated. From a strategic perspective, we can thus infer that certain advantages are associated with firm growth.

Larger firms frequently benefit from economies of scale and learning, which allow them to spread fixed costs over a larger volume of production, thereby reducing average costs and enhancing their

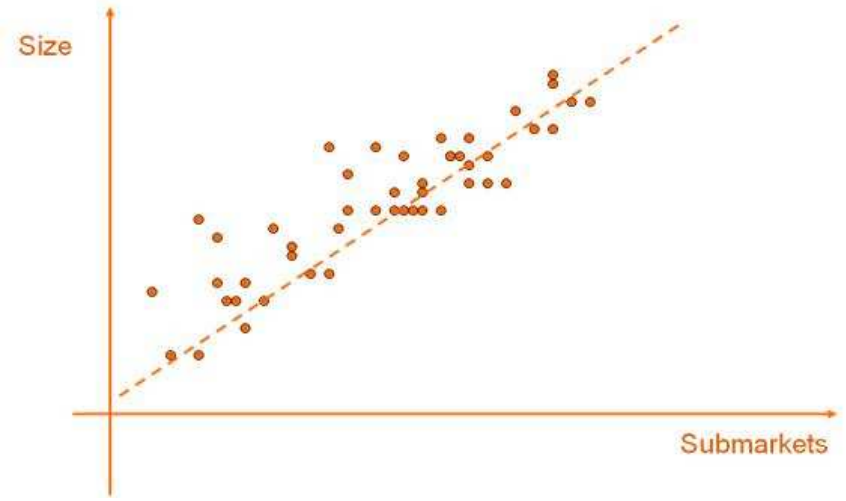
ability to compete on price. Furthermore, size often enhances a firm's bargaining power with suppliers and buyers, further strengthening its market position.

Additionally, larger firms typically have greater resources to invest in R&D and marketing, enabling them to differentiate their products or services more effectively. Their financial capacity also positions them to better withstand market fluctuations and manage competitive pressures compared to smaller firms. Moreover, size is often correlated with brand recognition and market reach, providing strategic advantages in capturing customer loyalty and accessing diverse market segments.

However, the relationship between size and competitive advantage is not strictly linear. While larger firms may enjoy these benefits, they also face challenges, such as bureaucratic inefficiencies and organizational inertia, which can limit their agility and adaptability in rapidly changing markets. Therefore, understanding the balance between size and competitiveness is crucial for firms seeking to leverage their scale while remaining responsive to market dynamics.

A firm's growth trajectory can follow two primary paths: it can either strive to become a near-monopolist in a single large market, or it can expand into multiple markets simultaneously. Existing empirical evidence suggests that the second option—operating in more than one market—is more common and provides a better explanation for firm growth (i.e., size). Figure 8.2 illustrates that firm size is closely related to the firm's ability to perform effectively in multiple markets simultaneously.

Figure 8.2: Size and number of submarkets



8.2 Stages of Firm Growth

To better understand the process of firm growth, we can distinguish three key stages.

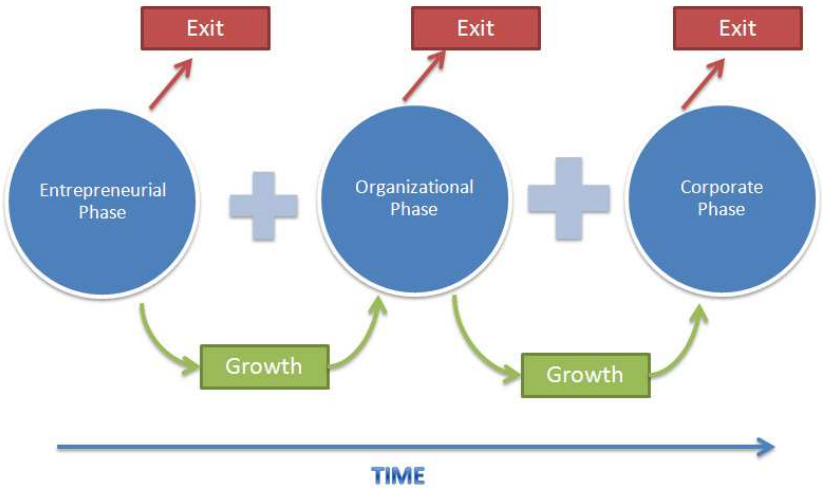
First, in the entrepreneurial stage, the firm is newly established and begins to compete in the market. During this phase, most firms will exit the market. To comprehend the survival prospects of those that endure, scholars often examine the capabilities of the entrepreneurs. As a result, many studies

focus on unraveling the technological, financial, marketing, and psychological traits of entrepreneurs, which may explain the success or failure of young firms.

Second, in the organizational stage, traditional competitive tools come into play, and the focus shifts from the entrepreneur's characteristics to the organization's structure and resources. At this stage, the firm's ability to leverage resources—whether to build a cost or differentiation advantage—becomes critical in determining its competitive position. Firms continue to exit during this stage, though typically at a lower rate than in the entrepreneurial phase, as surviving firms begin to stabilize and grow.

Third, in the corporate stage, firms expand into multiple markets, achieving greater scale and diversification. While some firms may still exit, the exit rate is significantly lower, as indicated in Figure 8.3. At this stage, firms focus on strategic decisions regarding market entry, resource allocation, and sustaining competitive advantages across various markets.

Figure 8.3: Stages of firm growth



8.3 Directions of Growth

As illustrated in Figure 8.4, firms can grow in three primary directions: vertical expansion, horizontal expansion, and international expansion.

1. Vertical expansion refers to the control of different stages within the value chain of production by a single firm.
2. Horizontal expansion (or diversification) involves a firm's control over different markets outside of its value chain of production, which could be also niches inside the same industry (see Table 4.1).
3. International expansion entails a firm's control over markets in different countries.

In practice, firms may pursue different combinations of these growth directions. For example, a firm with high vertical integration may also pursue diversification, or a firm with significant international expansion may simultaneously exhibit high vertical integration. However, most research examines these growth directions independently, often relying on distinct theoretical frameworks. This separation arises because each growth direction involves different determinants, motivations, and relationships with performance.

When considering corporate growth strategies, firms must evaluate their options through two key lenses: value creation and value capture. First, any growth strategy must generate value for the firm. A value-destroying strategy should not be pursued. Second, the strategy must enhance the firm's ability to capture value, meaning that the benefits should outweigh the associated costs. In terms of the first criterion, firms must assess whether their corporate strategy enhances sales by improving either their cost or differentiation advantage. As for the second criterion, firms must consider potential internal costs and new competitive threats. In this context, the modes of entry should be carefully evaluated to ensure that the chosen strategy aligns with both value creation and value capture goals.

8.4 Growth Tactics

Firms can pursue growth through various tactics, including internal growth, alliances, and acquisitions. Each approach has different implications for timing, risk, and the firm's overall strategy.

1. Internal development typically begins with the creation of a wholly owned subsidiary (WOS). This approach carries less risk for the firm because it relies solely on internal resources, allowing the firm to maintain full control and plan in advance. However, the execution timeline can be lengthy, as the firm depends entirely on its own resources. Additionally, the market risk may be high, as the firm must ensure that it possesses the necessary resources for success.
2. Acquisitions, on the other hand, involve merging with an existing organization and absorbing its resources. This tactic allows the firm to enter a new market rapidly and gain access to entirely new resources, which can enhance its competitive advantage. However, acquisitions can present challenges related to control and the integration of different personnel, organizational styles, and cultures.
3. Alliances and contractual agreements represent a middle ground between internal growth and acquisitions. These include licensing, franchising, joint ventures, and strategic alliances. In licensing, a firm transfers technology or brands to new markets, typically managed by third parties. Joint ventures involve the creation of a new organization shared by two or more partners, each investing in tangible and intangible assets. Strategic alliances, by contrast, are partnerships among different organizations involving resource exchanges but no new organization.

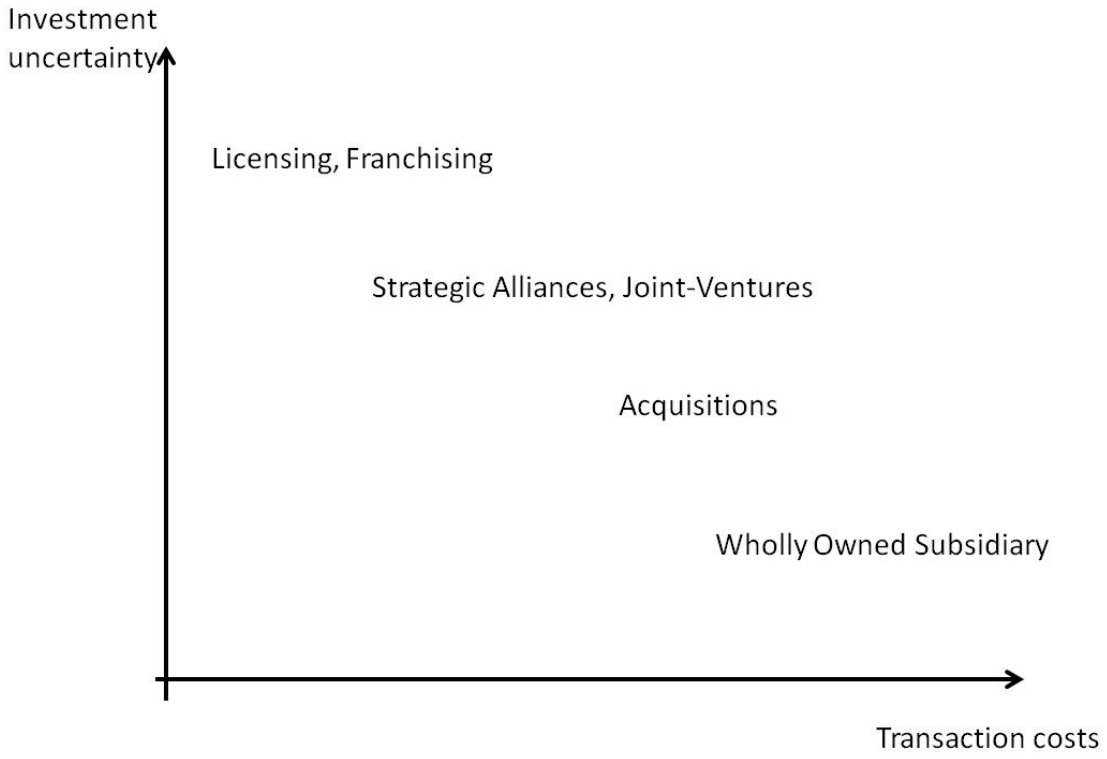
As firms progress from licensing, franchising, and strategic alliances to joint ventures, acquisitions, and WOS, they invest increasingly significant amounts and types of resources—whether financial, human, or a combination of both.

How should firms choose the appropriate growth tactic? Two key factors typically influence this decision: (i) transaction costs and (ii) investment uncertainty. When transaction costs are high, firms

are more likely to adopt structured investment forms (e.g., WOS, acquisitions) because greater control over processes helps reduce transaction costs. Conversely, when investment uncertainty is high, firms tend to favor lighter investment forms (e.g., licensing, strategic alliances) to experiment and gather knowledge before committing significant resources to a risky venture.

This strategic approach is often referred to as the Real Option Strategy in the literature. Similar to financial options, firms make small initial investments (e.g., through a strategic alliance) to reduce uncertainty and learn about the market. Based on this knowledge, the firm can later decide whether to "exercise the option" (e.g., proceed with an acquisition or WOS) or withdraw from the venture. Figure 8.5 represents the potential strategic choices available to firms.

Figure 8.5: Modes of firm growth



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