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**"AN EMPIRICAL ANALYSIS OF VALUE CREATION IN CROSS-  
BORDER M&A: THE DUFREY – AUTOGRILL MERGER"**

**RELATORE:**

**CH.MO PROF. FABIO BUTTIGNON**

**LAUREANDO: NICOLÒ SARTOR**

**MATRICOLA N. 2062672**

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Firma (signature)

A handwritten signature in black ink, appearing to read 'Gaetano Piccolini', written in a cursive style.

*A chi mi ha dato radici ed ali*

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## INTRODUCTION

In the era of intense global competition, mergers and acquisitions (also referred to as M&A) have become crucial strategic choices for companies worldwide to maintain competitiveness in the market. The surge in M&A activities, exemplified by the record-breaking year of 2021 with nearly 58,000 deals totalling \$5.2 trillion, reflects unprecedented transactions levels over the last decade. Multinational companies regard M&A as top-level management strategies, attracting the attention of investment banks, consulting firms, and the international press.

A consequence of the growing interconnectedness in global financial markets is the increased willingness of companies to pursue inorganic growth strategies in foreign markets. Indeed, cross-border M&As are not occasional occurrences but rather frequent and impactful international strategies employed by organizations seeking value creation and enhanced performance.

However, despite their strategic significance, M&A remain intricate and risky events for any firm. Empirical evidence reveals that while target's shareholders generally experience significantly positive abnormal returns around the announcement, acquirer's shareholders often earn zero or negative abnormal returns. This underscores the challenges inherent in the M&A landscape, prompting a deeper exploration of the factors influencing success in these transformative transactions.

This dissertation aims to comprehensively examine the intricate concept of M&A, specifically focusing on the nuances of cross-border transactions. To fully understand the scope of this investigation, it is essential to examine the underlying structure.

The discussion unfolds in two distinctive parts. The initial section involves a literature review providing a foundational understanding of the topic, whereas the subsequent one covers a detailed case study related to the Dufry-Autogrill merger, offering empirical insights crucial for discerning the potential for value creation in the context of cross-border mergers.

Starting with an overview of M&A transactions, the thesis addresses their varied purposes, typologies, recent global deal activity, and the procedural steps integral to the M&A process. The subsequent analysis explores the rationale behind such transactions, delving into the potential for value creation through different levers. To this end, results from various research papers are presented, focusing primarily on the concept of cumulative abnormal returns (CARs) to measure the effect of transaction announcements on the market. This includes an examination of large-scale transactions, managerial capabilities, product relatedness, and industry convergence. Furthermore, the choice of payment methods, such as cash and/or stock, and their

implications on shareholder value added (SVA) and shareholder value at risk (SVAR) is examined.

The exploration extends to cross-border M&As, analysing their evolution by sector and country. Reasons for value creation in these specific transactions are exposed, presenting factors such as country familiarity, corporate governance, and stock payment which are particularly important when companies want to acquire a foreign target. Additionally, the thesis discusses ownership decisions, along with valuation adjustments relevant to the target firm in a cross-border context, including cash flow conversion and cost of capital adjustment.

Building upon this comprehensive literature research, the third chapter provides an in-depth analysis of the two merging companies. This includes separate presentations of their business models, performance ratios (in terms of growth, profitability, and financial health), and a SWOT analysis outlining competitive advantages, disadvantages, and external trends. An analysis of the travel retail sector is also incorporated to contextualize Dufry's operations and growth needs.

A crucial part of the chapter illustrates the motivations behind the transaction for both companies. Dufry's strategic reasons, focusing on expansion into adjacent markets, are properly mapped using tools like the adjacency map and the business definition matrix. This rationale aligns with the importance of product relatedness and industry convergence in shaping M&A decisions. In contrast, Autogrill's motives, primarily grounded in business considerations, were facilitated by the ownership structure choices which potentially influenced acquisition premiums and governance standards.

The discussion concludes by uncovering all values involved in the transaction. Starting with a detailed presentation of the deal's structure, several typical features inherent in the M&A process are illustrated.

Subsequently, an event study, a widely employed method for examining the market's response to the announcement of a transaction, is undertaken. This analysis delves into the impact on the share prices of both the bidder and target companies, providing insights into the market's perceived value creation. The resulting positive market reaction, which depicts a potential value created by the merger, is explored by referring to the value creation motives outlined in the theoretical framework. Determinants for value creation, such as the bidder's track record, managers' experience, country familiarity, mean of payment, and product relatedness, are analysed to shed light on the rationale behind the optimistic market response.

Thereafter, the soundness of the deal is assessed through an M&A economics model. This model delineates the resulting effects of both stock and cash considerations on the post-deal price per



share, based on negotiated terms between the involved parties. Additionally, a thorough discounted cash flow (DCF) analysis is conducted to underscore essential valuation adjustments that are critical for assessing the prospective value of the combined group. Such considerations, which are an integral part of the valuation process of a cross-border M&A, include cash flow conversion, discount rate adjustments, as well as the nuanced impacts of synergies, transaction costs, and integration costs.



## PART I – Literature review

### CHAPTER 1. An overview on M&A transactions

#### 1. Definition and recent evolution

Mergers and acquisitions (also referred to as M&A) refer to a strategic option for pursuing the growth of a firm which involves the consolidation of other companies, as an alternative to the “going it alone” (or “organic growth”) and various forms of business alliances. It typically involves a financial transaction between an acquiring (henceforth the bidder) and an acquired company (henceforth the target).

Although the terms are used interchangeably, in acquisitions the bidder acquires a controlling interest in the target’s shares (*stock acquisition*) or selected assets (*asset acquisition*), whereas in *forward mergers* the bidder absorbs the target which ceases to exist, acquiring all its assets and liabilities. When the target absorbs the bidder a *reverse merger* occurs, as in the case of private firms merging with a shell company to become listed on the stock exchange. Other terms include *consolidation*, when a new entity is formed abandoning the old corporate structures, and the so-called *merger of equals*, in which the distinction between the bidder and the target is not well defined. An alternative frequently used for leveraged buyouts (when the acquisition is carried out using a significant amount of debt) is the *forward triangular merger*, in which a subsidiary is created specifically to merge with the target.

The acquirer may offer either cash or securities (including shares or bonds) to the target’s shareholders, or a combination of the two in a hybrid structure. The choice of the means of payment, called consideration, carries some relevant implications in terms of tax effect or risk exposure. If only cash is used, the selling shareholders are subject to a tax burden, whereas in stock transactions taxes are deferred. Moreover, the target’s liabilities (such as an ongoing process) could be detrimental in a merger, whereas in an asset acquisition these effects are limited.

M&A transactions may be friendly or hostile. In a *friendly* transaction the deal is approved by the target company’s management, while in a *hostile* transaction the change of control is contested. The latter is often hindered by defence tactics such as the “poison pill”, which gives existing shareholders the right to buy more shares at a discount, the “crown jewels sale”, which involves the disposal of key assets or a large dividend to remove excess cash from the target’s balance sheet, or even the “white knight”, when the target seeks out another acquirer to make a counteroffer. Due to these frictions by the counterparty, it often involves a higher purchase price and a slower post-merger integration process.

From an economic perspective, business combination can also be defined according to the industry to which the participants belong. One refers to *horizontal* integration if the target and the bidder operate in the same sector to achieve economies of scale and/or scope, or to *conglomerates* if they are in unrelated industries with the aim of diversifying by combining unrelated activities and income streams. Furthermore, a *vertical* transaction occurs if the merging companies are at a different stage of the value chain; in this case, a company may backward integrate by acquiring a supplier or forward integrate by acquiring a distributor to control those channels (Iannotta, 2010, pp. 117-119).

Empirical studies on M&A suggest that this activity tends to occur in waves and, within a wave, it clusters by industry (DePamphilis, 2022, pp 10-11). More transactions occurred during periods of high economic growth, of rising stock market (even though to maximize the value created lower prices would be better), and of low or declining interest rates which could stimulate highly leveraged acquisitions. They also occur as a reaction to unexpected shocks, such as deregulation, unpredictable events, or technological innovation which creates excess capacity and consequent need for consolidation. For example, deregulation is a key factor explaining the “age of cross border and horizontal megamergers” which led to concentration in the banking and telecommunication industries during the 2000s. Another explanation suggests that acquirers often use their overvalued stocks to purchase the undervalued shares of the target. These empirical patterns could also be explained with the idea of information cascade: a first acquisition encourages others in the same industry to acquire, since it informs agents in similar circumstances about the profitability of a transaction.

Furthermore, companies should try to anticipate these waves: market prices are lower for those firms pursuing promising opportunities early on and escalate for those who follow later in the cycle, leading them to overpay. That’s why acquisitions made early in the wave earn substantially higher financial returns and are more likely to be completed. However, cross-border mergers deals completed later in the wave show superior performance, which is even greater if the target local country is different from the acquirers’ one in terms of economic development, culture, and capital market maturity. This reflects the possibility of learning from prior deals, which establish comparable transaction multiples for valuing companies in that country thus reducing the risk of overpayment.

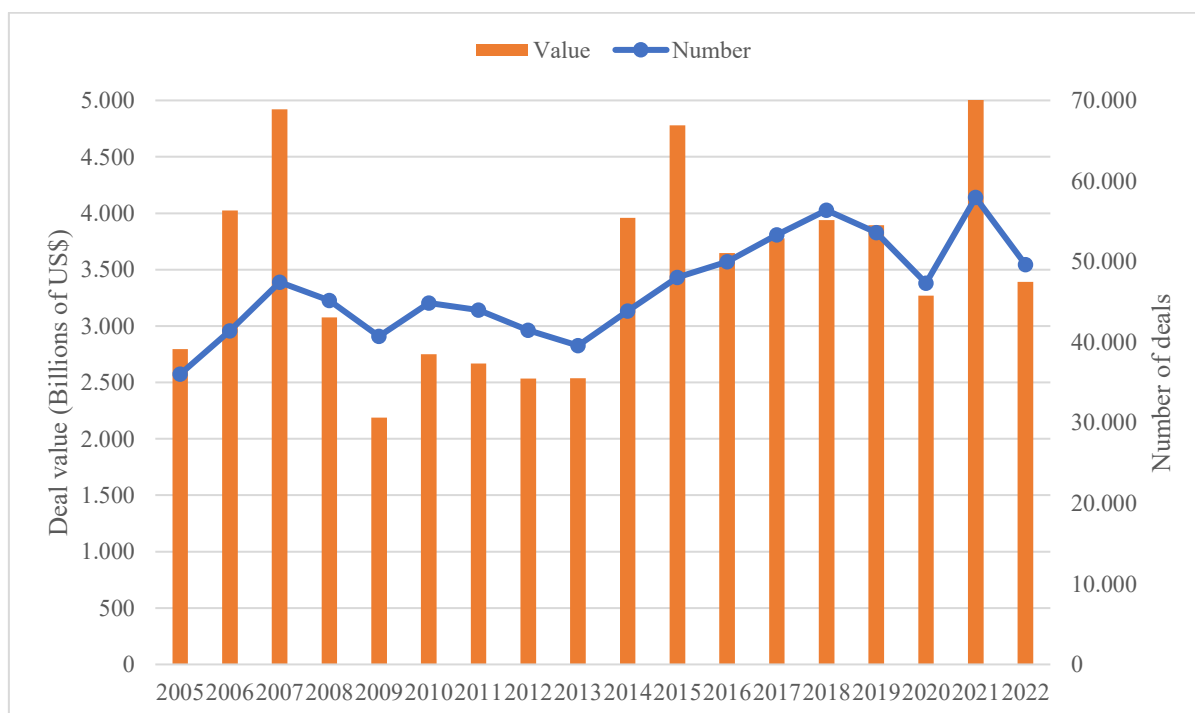
Looking at the evolution of M&A activity worldwide (IMAA, 2023), this has been fluctuating in recent years and reached new heights in 2021, when a new peak of \$5.2 trillion was recorded. Megadeals, those worth more than one billion, contributed significantly to this result with a

combined value of \$3.7 trillion (71% of the total). This is significant considering that historically, megadeals have averaged 40% of the total value between 1985 and 2020.

In general, the value of deals has increased over the last decade, but in 2022 transactions amounted to \$3.4 trillion, representing a -35% drop from the previous year. Indeed, transaction values tend to display the state of the economy, with dips during and after years of recession (as in the case of the decline experienced following the 2008 global financial crisis) and increases during periods of economic growth. In terms of volume, almost 50,000 transactions were completed in 2022. This figure is in line with the levels recorded in recent years, although it represents a slight decrease of -14% compared to 2021.

The 2022 figures suffered mainly from high inflation, which led to a substantial increase in interest rates. Rising rates increase the cost of financing acquisitions and reduce equity valuations, slowing dealmaking activity. Moreover, recent turmoil in the banking sector and economic volatility have added to the global economic slowdown, reducing the executives' confidence to pursue this activity and thus the possibility of its recovery in 2023 (S&P Global, 2023).

Figure 1: Value and number of global M&A activity 2005-2022



Source: IMAA – Statista.

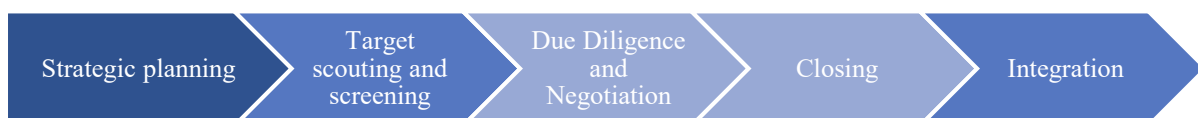
Most of the M&A activity has taken place in the United States, which represents the most attractive target country for both domestic and cross-border deals. However, deals involving Chinese companies have increased over the last two decades, overtaking the UK as the second largest market by value since 2019 (White & Case, 2023).

In 2022, Rotschild & Co. represented the leading financial advisor in terms of number of deals, leading the ranking with 411 completed transactions. Despite being the second-place finisher, Goldman Sachs & Co. was the leader in terms of transaction value, handling \$1,187 billion, as it has every year since 2019 (Wall Street Journal, 2023).

## 2. The buy-side process

Describing the M&A process could be challenging because it varies depending on the specific type of transaction being conducted. For example, the sale of a small business to a private equity fund is different from a friendly merger between two publicly listed companies. However, in most transactions, there are some recurrent steps. They are summarized in the figure below, which serves as a roadmap for executing deals (DePamphilis, 2022, pp. 100-172; Iannotta, 2010, pp. 121-126).

Figure 2: Typical M&A process



### - Strategic planning:

The first stage of the acquisition process refers to the preparatory work of creating the business and acquisition plans that will guide all subsequent phases.

A well-designed *business plan* requires the collection of substantial information to address several activities. The first refers to the external analysis, which is done to understand which market is most attractive to the firm and how to compete for competitive advantages using the Porter's five forces model. This is followed by the internal analysis of the company's strengths and weaknesses. The combination of the two can be summarized with the use of the SWOT matrix, useful to decide how to focus company's resources. Management's intentions are then communicated to the stakeholders in the form of a mission and vision statement and a set of measurable financial and non-financial metrics (e.g., revenue growth rates, market share, or minimum financial returns). In this way, the company is ready to select a business strategy to achieve these goals such as cost leadership, differentiation, or niched position. It then sets the implementation strategy to decide whether to act independently, acquire or merge with another firm, or partner with others.

A specific type of the latter includes the development of an *acquisition plan*, which is necessary if a firm decides to pursue an M&A transaction. It usually includes the resources available, a guidance provided by the senior management to the acquisition team (which establishes the

target selection criteria to be used, the roles and responsibilities of the team, acceptable sources of financing and structuring, etc.), as well as a realistic timetable which plans all the key milestones along the process with beginning and ending dates.

This phase is critically important because, with proper preparation, it increases the number of interested parties willing to perform due diligence and to engage in negotiations, contributing to drive up the price through the creation of a competing bidding process.

- Looking for the potential counterparty:

Large and public firms often hire a financial advisor to handle the process. The bidder often participates in a “beauty contest” to select an investment bank, or more if the deal is particularly large, which involves interviews with several bankers. They, in turn, will prepare the “pitch book”, describing their track record in the specific industry, price estimates, and fees.

First, a broad search is conducted, using proprietary databases, by establishing primary selection criteria such as deal size (i.e., the maximum purchase price the company is willing to pay), industry, and specific geographic area. Other sources of information, such as consulting firms, investment banks, brokers, and credit rating agencies are also available. The list is then shortened by doing a finer screen and applying more specific criteria such as market segment, profitability, cultural fit, market share, etc. For each target firm, initial contact is done through confidential interviews.

Important preliminary transaction documents that are dispatched include the confidentiality agreement (or non-disclosure agreement), which is legally binding and protects private information shared in the information memorandum, including the responsibilities of the receiving party, the governing jurisdiction, and the expiration date. A more comprehensive document is the letter of intent (LOI) which is used to lay the groundwork for a more detailed discussion that goes beyond the offered price and encompasses major terms of the transaction (such as the deal structure, duration of the due diligence, terms of fees, etc.).

- Negotiation and due diligence:

After making preliminary non-binding bids and being selected by the target, bidders and their advisors have access to a virtual data room, which contains all relevant financial, commercial, and legal information about the target. It can be accessed simultaneously by multiple users and provides feedback in terms of the information purchasers have focused on and time spent, indicating their appetite and areas of concern. In this way, the purchaser performs due diligence validating the preliminary valuation, identifying sources of potential synergies, and uncovering potential “deal brakers” (i.e., significant risks which could jeopardize the success of the deal).

Another activity involves structuring the transaction, in which decisions are made to identify how ownership will be determined and protected, the legal structure of the acquisition vehicle, the form of payment, as well as tax and accounting considerations. Moreover, a financing plan is prepared that shows the consolidated financial statements of the combined entity, including projected financing costs, and provides the buyer with an indication of the financing and purchase price.

All these activities overlap with the negotiation between the parties involved. In this context, factors that affect the likelihood of successful closing include different reference values used to determine the consideration, the skill of negotiators, flexibility in offering favourable terms, and competition from multiple bidders.

- Closing:

Final bids are submitted only after the signing of the Definitive Merger Agreement (DMA) or the Definitive Sale Agreement (DSA), which governs the transaction and includes several aspects. For example, the purchase price, which can be fixed or contingent on the achievement of certain future results with the use of earnout clauses. Also, in a merger with shares swap, it is important to include their terms and rights, whether they are to be valued at signing or closing, as well as the fraction of bidder's shares to be exchanged for each share of the target (i.e., the exchange ratio).

Three other common provisions in an agreement are:

- The Material adverse change (MAC) clause, which gives the buyer the right to withdraw from the deal under certain conditions without penalty.
- The Fiduciary out clause, which gives the same right as the MAC to the target's board, often used to accept a higher offer from a competing bidder.
- The Break-up fee, which sets the amount the bidder must pay the target if the deal is not completed, useful in ensuring that the buyer seeks the necessary financing.
- The Go-shop arrangement, which allows the target to seek competing bids after receiving the first bidder's offer, while giving it the opportunity to adjust to any better offer received. If the target accepts another bid, a termination fee must be paid to the initial bidder.

The other steps of the closing include obtaining target's shareholder consent, regulatory approval from anti-trust authorities, and the appointment of the new directors.

- Post-closing integration:

M&A advisors develops with the client an integration plan for all aspects of the new organization, which is critical in creating the synergies that motivated the deal. This process



differs depending on the type of the acquirer. For example, financial buyers (such as private equity funds that intent to resell the business after a certain period) tend not to integrate the acquired entity compared to strategic purchasers who want to keep the business longer. In addition, transformational transactions involving the acquisition of entirely new markets are more challenging than those aimed at consolidating companies in the same industry because of the buyer's greater operational familiarity.

This process involves a set of activities, such as retaining managers through appropriate compensation plans, resolving cash flow needs, managing corporate cultural issues, and evaluating the actual performance. Although commonly overlooked, post-closing evaluation is critical if a company wants to learn from past mistakes.

### **3. A framework for value creation**

In general (Koller et al., 2020, pp. 848 – 865), M&As create value when the post-transaction equity value of the combined companies ( $E[C]$ ) is higher than it would have been otherwise, that is, the sum of the pre-transaction equity values of the bidder ( $E[B]$ ) and the target ( $E[T]$ ). This is the only case in which synergies ( $SYN$ ) are created, which are therefore the basic motivation behind these transactions.

$$SYN = E[C] - (E[B] + E[T])$$

Synergies usually show up as increased cash flows (i.e., *operating synergies*) in terms of cost reduction, disposal of redundant PP&E, tax savings, or revenue enhancement. However, *financial synergies* can reduce the cost of capital by acquiring a target with a lower credit rating or by reducing risk through diversification (between imperfectly correlated cash flow streams).

Moreover, the acquirer would get some value only if the price paid does not exceed the value of what it receives (Iannotta, 2010, pp. 129 – 131). The value received is the stand-alone value of the target company ( $SVT$ ) plus any performance improvement ( $SYN$ ) after the transaction that belongs to both merging companies. The price paid is the sum of the market value of the target company ( $MVT$ ) and any acquisition premium ( $AP$ ).

$$\text{Value created for the acquirer} = (SVT + SYN) - (MVT + AP)$$

For this reason, research shows that acquirers who pay a high premium earn significant negative returns. Related problems include the winner's curse, for targets sought by multiple bidders, or hubris, which is the management's overconfidence of gaining improvements from the transaction. However, if they do not overpay, value can be created in several ways: by consolidating to remove excess capacity in the industry, by accelerating the market entry for innovative products, by acquiring technology faster and at a lower cost, and by exploiting

economies of scale. In addition, strategies to consolidate highly fragmented markets or less focus on price competition can be beneficial, as can initiating a transformational merger to facilitate change in the industry.

To understand what it really means for a merger “to pay”, Bruner et al. (2003) use investors' required return as a benchmark, i.e., the return they could have earned on other investment opportunities. A successful investment is one that either preserves value, where the shareholders get what they required (break-even in terms of NPV), or creates value, where the investor's wealth is greater than demanded (positive NPV).

To allow for generalization, it is important to focus narrowly on economic outcomes, rather than on the broader motivations of managers, with improving shareholder welfare as a key objective. Research mainly aims to understand the consequences for the shareholders of the parties involved in the transaction, as well as the combined effect. Significant conclusions can only be drawn by scientific methods that ensure that the result is not likely due to chance.

The typical research approach refers to “event studies” that examine cumulative abnormal returns for shareholders in the period surrounding the transaction announcement date (usually [-2; +2], [-10; +10], [-5; +30], etc.). This is the sum of one day's abnormal returns, calculated as the difference between a day's stock return (i.e., the change in the share price and any dividends paid, divided by the previous day's closing price) and the expected return (calculated by regressing stock returns against market index returns).

It is well-established that, on average, the combined effect for both parties around the announcement date is significantly positive, but in general it is greater for the target's shareholders (around 25% during the 2000s) and nil or slightly positive for the acquirer's shareholders (around 1% after 2009). Moreover, as time passes, it is less clear whether the bidder's shareholders continue to benefit from the transaction as it is more difficult to isolate its effect (DePamphilis, 2022, pp. 50-59).

Since there are many exceptions to this general rule, some studies will be presented that connect with the case study to draw meaningful conclusions about its potential for value creation or destruction.

### 3.1 Large-scale deals

Examining a sample of 12,023 U.S. public company transactions between 1980 and 2001, the study by Moeller et al. (2004) isolates large from small firms. First, with the three-day cumulative abnormal return (CAR), shareholders of acquiring companies benefit by 1.1% around the announcement, but with a dollar effect of -\$25.2. Thus, the opposite signs suggest the existence of a size effect.

Figure 3: Announcement returns by acquirer size

	All (1)	Large (2)	Small (3)	Difference (2)–(3)
$CAR_{(-1,+1)}$	1.102 <sup>a</sup> [0.362] <sup>a</sup>	0.076 [-0.027]	2.318 <sup>a</sup> [0.940] <sup>a</sup>	-2.242 <sup>a</sup> [-0.967] <sup>a</sup>
$ANPV_{(s2001)}$	-25.2 <sup>a</sup> [0.5] <sup>a</sup> -\$302,742	-47.9 <sup>a</sup> [-0.1] <sup>a</sup> -\$312,061	1.7 <sup>a</sup> [0.6] \$9,319	-49.6 <sup>a</sup> [-0.7] <sup>a</sup>
$VWCAR_{(-1,+1)}$	-1.177	-1.249	1.272	
$ANPV/TV$	5.613 <sup>b</sup> [1.874] <sup>a</sup>	2.961 [-0.152]	8.755 <sup>a</sup> [3.791] <sup>a</sup>	-5.794 [-3.943] <sup>a</sup>
<i>n</i>	12,023	6,520	5,503	

<sup>a</sup>Statistical significance at the 1% level.

<sup>b</sup>Statistical significance at the 5% level.

Source: Moeller et al. (2004)

The table shows that large companies have abnormal returns of 0.08%, while smaller companies achieve significant abnormal returns of 2.32%, a difference of about two percentage points. This result can be explained by the decision-making process of large companies - the managerial hubris - whereby higher premiums are offered and it exists the risk of entering into M&As with an acquisition premium higher than the synergies.

Alexandridis et al. (2013) studied how the size of the target affects the premiums offered, finding a negative association. Thus, in larger transactions, the risk of overpayment by the acquiring firm appears to be reduced. Interestingly, the counterintuitive result is that these transactions tend to result in greater value destruction for the acquiring shareholders. The results suggest that the greater complexity of integrating large companies makes it more difficult for acquirers to realize the expected benefits and strategic potential.

Large-scale acquisitions (worth over \$500 million) are important strategic manoeuvres for companies, capable of reshaping entire industries and exerting an influence on the broader economy. The existing literature suggests that these transactions often end up destroying value for the acquirer shareholders. The work of Hu et al. (2020) makes an important contribution to this issue by demonstrating that mega-deals can indeed produce favourable results if undertaken by companies with a considerable track record. The findings reveal that mega-deals conducted by companies that have completed at least 12 transactions previously are more likely to be completed successfully and also offer superior performance in both the short and long term, with an average abnormal announcement return of \$50.6 million.

In summary, although mega-deals inherently involve substantial uncertainties and integration complexities, these challenges can be better addressed and ultimately lead to value creation for the acquiring company's shareholders when undertaken by more experienced acquirers.

### 3.2 Managerial ability

A recent topic on M&As concerns the influence of superior managerial ability to manage effectively the post-merger integration and realize synergistic benefits.

According to research by Chen et al (2017), deals undertaken by highly capable managers produce significant positive reactions around the announcement date, enjoying on average a 0.7% higher CAR than other deals. Not only that, but they continue to enjoy a higher long-term performance over the one-year horizon after the announcement date, outperforming deals undertaken by less capable managers by about 12.2%. All these results are statistically significant at the 1% level and efficiency is assessed based on how effectively the company generates revenue from its resources compared to other companies in the same industry.

Figure 4: Managerial ability

Announcement abnormal returns based on managerial ability classification.				
Panel A: Managerial ability				
	<i>High managerial ability</i>	<i>Low managerial ability</i>	Difference	
Mean	0.622%***	-0.085%*	0.707%	***
Median	0.007%***	-0.817%***	0.825%	***
N	20248	16307		

Long-term abnormal returns based on managerial ability classification.				
Panel A: Managerial ability				
	<i>High managerial ability</i>	<i>Low managerial ability</i>	Difference	
Mean	5.358%***	-6.848%***	12.206%	***
Median	0.163%***	-10.900%***	11.063%	***
N	19437	15576		

Source: Chen et al. (2017)

The critical role of top management is confirmed by the study of Cui et al. (2020), which also found higher returns for these transactions. The research reveals that the favourable impact of managerial capabilities on long-term performance is more pronounced in the case of horizontal acquisitions, suggesting the sector-specific importance of their competencies (rather than the generic one) in the selection of suitable targets and the management of combined resources in the integration process. This implies that managers who show a superior ability to generate revenue from the same set of resources are more likely to realize greater synergies when engaging in intra-industry, rather than cross-industry, transactions.

One plausible explanation for these findings is explored in the research conducted by Fich et al. (2020), where the significance of acquirer CEOs having prior experience in the supply chain of the target industry is studied. M&As frequently encounter challenges due to the asymmetric information between the parties involved which could jeopardize the accurate identification of a sound target.

Figure 5: Supply-chain CEOs

Panel A: Baseline regressions					
	Dependent variable: Acquirer CAR(-1, +1)				
	(1)	(2)	(3)	(4)	(5)
Intercept	0.104 (0.10)	0.104 (0.10)	0.102 (0.11)	-0.130 (0.39)	0.105 (0.81)
Supply chain CEO (0,1)	0.015** (0.03)	0.015** (0.03)		0.028** (0.03)	0.029* (0.06)
Supply chain CEO (0,1) x Diversifying merger (0,1)		0.002 (0.90)			
Length of Supply chain experience (log)			0.009** (0.03)		
Diversifying merger (0,1)	-0.004 (0.41)	-0.004 (0.41)	-0.004 (0.40)	-0.009 (0.64)	0.004 (0.83)

Source: Fich et al. (2020)

Based on an empirical analysis encompassing 1,491 completed M&As that occurred between 1997 and 2014, the depicted figure illustrates a positive correlation, that is, an increase in the acquirer's CAR by 1,5% (equivalent to \$270 billion of market capitalization) during the 3-day announcement period. Furthermore, regressions 2 and 3 provide noteworthy insights. They suggest that having supply-chain experience proves valuable in both diversifying and non-diversifying mergers and that longer tenure in the supply chain is associated with even higher gains, respectively.

A 3,8% increase in long-term accounting results and a 12% decline in written-off goodwill is also found. These results suggest that these wealth improvements are explained by negotiating better merger terms and by reducing the risk of inaccurate valuation of the target. Indeed, supply-chain CEOs can mitigate the information asymmetry and subsequently execute higher-quality deals.

### 3.3 Product extension

The importance of relatedness was first explored by Kaplan et al. (1992) who showed that transactions between related firms are more long-lived, i.e., they are four times less likely to be divested than diversifying mergers. Indeed, Maksimovic et al. (2008) proved that acquirers with expertise in managing peripheral divisions in related industries tend to retain acquired facilities and increase their productivity.

Moreover, in industries characterized by differentiated products, a merger enhances the market influence of the merging entities when their products are substitutes and other companies produce less similar alternatives (Baker et al. 1985). Indeed, the research paper by Rhodes-Kropf et al. (2008) suggests mergers as strategies aimed at redefining the firm's boundaries to facilitate the consolidation of complementary assets under the same control.

Based on these contributions, Hoberg and Phillips (2010) present evidence that the introduction of new products in the acquirer's portfolio is the main source of this effect. The underlying idea

is that firms may want to merge with other companies with complementary assets to expand their product portfolio and to differentiate themselves from existing competitors. The ex-post outcomes of the paper are presented below.

Figure 6: Announcement returns

Event Window	Acquirer Product Simil. to Rivals	Target Product Simil. to Rivals	Gain in Prod. Diff. vs. Rivals	Target + Acquirer Pair Simil.	Target % Patent Words
<i>Combined</i>					
(1) t=0 only	<b>0.010</b> (1.56)	<b>-0.012</b> (-2.08)			0.004 (2.33)
(2) t=0 only			0.007 (1.03)	0.006 (0.85)	0.005 (2.73)
(3) t=-5 to t=0	<b>0.022</b> (2.00)	<b>-0.040</b> (-3.99)			0.003 (1.31)
(4) t=-5 to t=0			0.015 (1.32)	0.014 (1.13)	0.006 (2.20)
(5) t=-10 to t=0	<b>0.030</b> (2.13)	<b>-0.036</b> (-2.90)			0.003 (1.04)
(6) t=-10 to t=0			0.016 (1.10)	<b>0.032</b> (2.14)	0.006 (1.76)

Source: Hoberg and Philips (2010)

Regarding the abnormal announcement returns of the combined bidder and target (which is the dependent variable) over the [-10, 0] window, figure 5 displays that more value is created when the acquirer is in a competitive environment and the target is in a less competitive market. Indeed, the similarity to rivals is positive and negative, respectively. This suggests that the market rewards acquirers purchasing assets from less competitive environments to differentiate themselves from competitors. Moreover, the effect of the target's patents percentage is positive, suggesting greater gains when new products are likely to be unique.

Figure 7: Long-term performance of acquirers

Row	Horizon	Acquirer Product Simil. (10 Near.)	Gain in Prod. Diff. vs. Rivals	Target + Acquirer Pair Simil.	Row	Horizon	Acquirer Product Simil. (10 Near.)	Gain in Prod. Diff. vs. Rivals	Target + Acquirer Pair Simil.
(1)	1 Year	0.033 (1.66)			(9)	1 Year	<b>0.244</b> (2.16)	.	.
(2)	3 Year	<b>0.079</b> (2.64)			(10)	3 Year	<b>0.619</b> (3.10)	.	.
(3)	1 Year		0.021 (1.28)	<b>0.043</b> (2.52)	(11)	1 Year	.	<b>0.257</b> (2.05)	<b>0.172</b> (1.94)
(4)	3 Year		0.021 (0.83)	<b>0.074</b> (2.88)	(12)	3 Year	.	<b>0.657</b> (2.92)	<b>0.452</b> (2.49)

Source: Hoberg and Philips (2010)

In figure 7, the dependent variable is the long-term performance of the acquirer over a period from year t+1 to year t+2 or t+4. Consistent with previous results, the post-transaction returns show that acquirers in highly competitive markets experience positive changes in both

profitability (rows 1 and 2) and sales growth (rows 9 and 10), especially when the merging firms are more similar (i.e., pairwise similarity) and when they are linked to gain potential in product differentiation.

In summary, value creation and product development are greater when bidders look for related firms (in terms of asset complementarity) that increase product differentiation from rivals. Therefore, firms facing high competition can improve profitability and growth with transactions that increase their differentiation.

Moreover (Sheen, 2014), the acquirer that is diversifying into a new product market is less likely to show evidence of synergies and does not experience price declines due to economies of scale. However, they hold a higher market share and own more brands after the transaction. In contrast, when two firms in a given market merge, the price falls relative to competitors as an effect of cost reductions achieved through economies of scale. This effect is even more pronounced in a mature industry when there is more room for consolidation.

### 3.4 Industry convergence

Pursuing a deal allows a company to expand its product offerings or extend its international presence into new countries. In such instances, it becomes essential to have a thorough understanding of the business being acquired: the further one moves away from its core activities, the more challenging the integration will be.

Another value-creating strategy involves the transformation of an industry and business model based on the belief that significant synergies can be realized by merging with companies in established industries with disappearing boundaries. In that case, success depends on the management betting on the future convergence of adjacent industries. The problem often lies in the incompatibility between companies with different characteristics, or in the erroneous belief in reconfiguring a given sector. To achieve successful convergence, however, the acquirer will need to apply its accounting and control systems within the target company, streamline nonessential processes, and eliminate activities from the portfolio that are not in line with its strategic objectives. In addition, strategic integration strongly involves the decision-making process of top managers (Brower, 2001, pp. 12-18).

The study by Sick et al. (2019) describes industrial convergence in high-tech environments as a sequential process divided into three phases. The initial phase is characterised by dynamic technologies that cause firms to focus on technology-oriented joint ventures and alliances; in the middle phase, as technological uncertainty decreases, the collaboration between firms shifts from R&D to market-oriented alliances; as regulations and standards become established, in

the final phase, a new industrial segment is created that can complement or replace existing industries, leading to more capital partnerships through M&As.

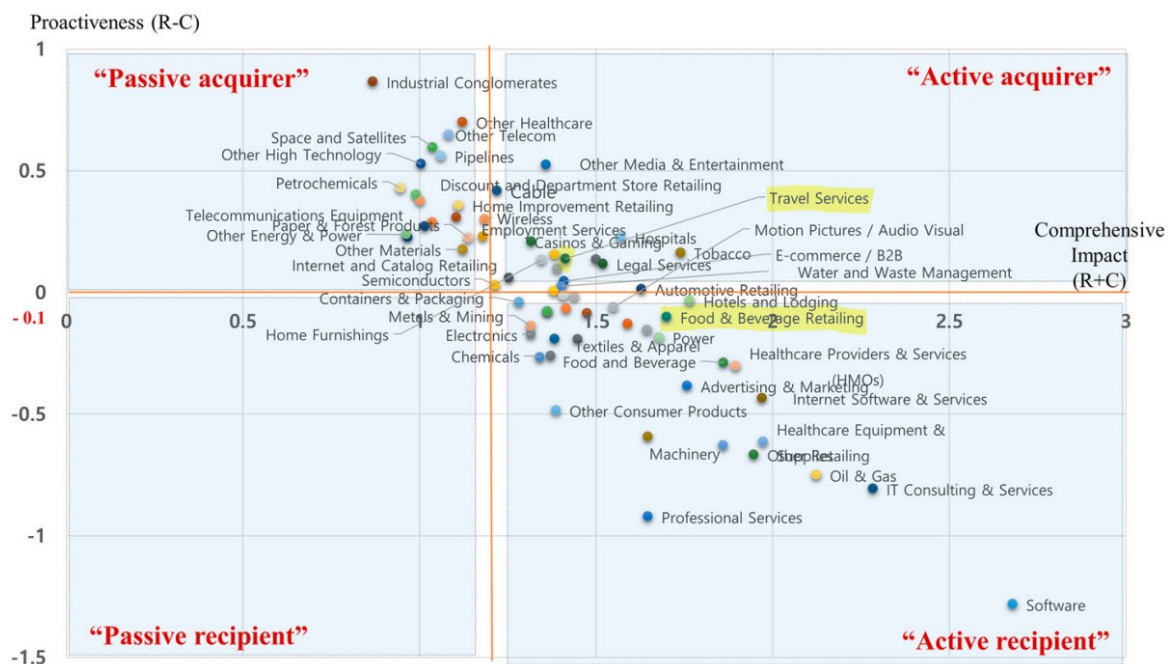
Historical data on past transactions are thus well-suited for identifying the shifts within a specific industrial landscape.

To this end, Taesoo Jung and Choonseong Leem (2021) recently examined convergence trends over two periods (2006-2008, and 2016-2018) using industry-specific data on large-scale M&As.

The paper outlines a decline in intra-industry convergence between periods 1 and 2, while it increases across different industries (even more markedly for non-adjacent than for adjacent sectors). This suggests that boundaries between industries are gradually blurring because of the recent rise of the cross-border phenomenon, which enables companies to increase their competitiveness by diversifying their operations into related sectors. For example, the convergence between IT and software, biotechnology and pharmaceutical, and aerospace and communication equipment industries have strengthened in the last decade.

The figure below depicts the sector-specific role within the global landscape. For example, companies in the food and beverage retail industry show negative convergence proactivity (equal to -0.101), meaning that they are primarily acquisition targets, while strongly influencing the other sectors from which they are acquired (with an overall impact of 1.7). Travel service firms, on the other hand, tend to be active acquirers (with a proactivity of 0.139), while having a fair impact on the sector in which they acquire (of 1.413).

Figure 8: Categorisation of industry roles



Source: Taesoo Jung and Choonseong Leem (2021)



#### 4. Consideration: cash or stock?

In structuring the deal, the choice of the means of payment (i.e., the consideration) is relevant in terms of control, accounting results, and distribution of wealth (Iannotta, 2010, pp. 131-138).

In a cash transaction the transfer of money completes a simple transfer of ownership without affecting the shareholders' voting rights. However, a stock offer impacts the ownership structure and makes the roles of the two parties less clear (e.g., sometimes the target's shareholders may end up owning most of the shares). In the latter case, the exchange ratio (ER) defines the number of shares of the acquirer exchanged for each share of the target, which is represented below as the ratio of the price per share of the target to that of the bidder.

$$ER = \frac{p(T)}{p(B)} = \frac{P(T)/n(T)}{E(B)/n(B)} \quad \text{with } m = ER * \# \text{ shares out.}$$

Obviously, the ER depends heavily on the price paid for the target (P(T)), which may be different from its actual equity value (E(T)). Therefore, the negotiated ER is higher than the theoretical one since the acquirer usually pays a premium. This has a direct impact on the number of new shares to be issued by the acquirer (m) and the ownership structure after the merger, with the bidder's shareholders retaining or losing the majority of voting rights.

The choice of consideration can also have a positive or negative effect on the EPS of the combined company, which is detected by analysing the change in net income and in the number of shares after the transaction. A quicker method is to compare the price/earnings ratio (PE) of the companies: if the bidder's PE is higher than the target's, the stock deal will increase the EPS. However, this is only an accounting effect that could lead to pursuing opportunities that destroy value only because they are accretive, as well as foregoing others that create value but are dilutive.

The last effect concerns the distribution of rewards among the shareholders of the merging companies. Rappaport and Sirower (1999) define the shareholder value added (SVA) – the potential gain of the acquirer – as the difference between the expected synergies and bid premium. In a cash transaction, the acquirer's shareholders get the entire SVA, which, on the other hand, decreases when it comes to a stock deal since the rewards are shared with the target's shareholders.

In that case, the risk that the synergies are not realized (or, rather, that the premium exceeds them) is also shared. The shareholder value at risk (SVAR) is useful for assessing the acquirer's risk and shows how much of the bidder's market value prior to the announcement date is at

danger. A similar measure is defined for the target's shareholders, the premium at risk (PAR), which takes the form of its ownership percentage.

$$SVAR = \frac{\text{premium}}{E(B)} * \text{own}(B), \text{ PAR} = \text{own}(T)$$

To solve these issues, the acquirer's confidence in the realization of the projected improvements and the belief in the over/undervaluation of its shares are crucial.

#### 4.1 Stock deals' returns

The theory suggests that overvalued firms can increase shareholder's wealth by using their stocks as currency to merge with less overvalued targets. However, the acquirer should negotiate a favourable exchange ratio (paying a low premium) and the acquisition should generate substantial synergies.

According to Fu et al. (2013), neither of these conditions appear to be met: overvalued acquirers pay high premiums and generate negative synergies in the years following the transaction, resulting in negative long-term abnormal stock returns.

The paper studies mergers and acquisitions of U.S. firms completed between 1985 and 2006, obtaining a sample of 1,319 equity-financed deals, of which 425 were driven by overvaluation (OV) and 404 were not (NOV), and 671 cash-financed transactions.

Figure 9: Bid premiums

	OV	NOV	Cash	Difference (OV – NOV)	Difference (OV – Cash)
<i>AP</i> <sub>1</sub> = Target bid-period CAR [–42, completion]					
Mean	39.09***	23.24***	39.71***	15.85***	–0.62
Median	35.16***	21.78***	34.24***	13.38***	0.92
<i>AP</i> <sub>2</sub> = $\left(\frac{\text{Exchange ratio}}{P_{\text{Target,AD}-42} / P_{\text{Acquirer,AD}-42}} - 1\right) \times 100$					
Mean	68.51***	37.15***	–	31.36***	–
Median	44.97***	24.62***	–	20.35***	–
Three-day target abnormal announcement returns [–1, +1]					
Mean	19.70***	14.24***	28.40***	5.46***	–8.70***
Median	16.56***	10.93***	21.68***	5.63***	–5.12***
Acquirer bid-period CAR [–42, completion]					
Mean	–17.45***	0.12	1.72	–17.57***	–19.17***
Median	–10.88***	–1.27	–0.09	–9.61***	–10.79***

Source: Fu et al. (2013)

According to figure 9, both measures of the acquisition premium (*AP*<sub>1</sub> and *AP*<sub>2</sub>) yield consistent results. The average premium paid by OV acquirers is significantly higher than that of NOV (with a difference of 15.85% and 31.36%), almost equal to that offered by cash acquirers (with a difference of -0.62%) that are known to pay higher premiums due to the incidence of hostile acquisitions. As a result, during the bid period (defined as [–42,

competition]), their abnormal returns are very negative, at -17.45%, compared to the positive returns of NOV and cash acquirers.

Figure 10: Abnormal changes in operating performance after mergers

	OV	NOV	Cash
<i>Panel A: Healy, Palepu, and Ruback (1992) method</i>			
Operating ROA	<b>-0.93 (0.005)</b>	-0.15 (0.767)	<b>1.37 (&lt; 0.001)</b>
Asset turnover	-12.81 (< 0.001)	2.94 (0.448)	3.71 (0.267)
Operating profit margin	0.69 (0.463)	1.04 (0.442)	1.24 (0.006)
<i>Panel B: Barber and Lyon (1996) method</i>			
Operating ROA	<b>-1.82 (&lt; 0.001)</b>	<b>-1.78 (0.002)</b>	<b>-0.63 (0.041)</b>
Asset turnover	-8.67 (< 0.001)	-3.49 (0.002)	-4.82 (0.004)
Operating profit margin	-0.27 (0.920)	1.57 (0.075)	0.97 (0.056)

Source: Fu et al. (2013)

In figure 10, which considers the operating performance in years -3 to +5 around the year of completion, the first method shows a significant reduction in operating ROA (by -0.93%) due to the decline in asset productivity (by -12.81%), while this is not true for cash bidders (who show significant improvement in performance). The second method also allows similar conclusions to be drawn, with NOV and cash bidders experiencing a decline in performance, but with a smaller magnitude than OV stock bidders.

Moreover, comparing their long-run performance against that of similarly overvalued industry peers not involved in acquisitions (control firms), the paper concludes that the bidder's shareholders would have been better off if the firm had not pursued such transactions. Regarding the causes of these results, the study points to the agency problem of CEOs, who earn significant benefits through increased option-based compensation, and weak corporate governance exacerbating the problem.



## CHAPTER 2. Cross-border M&A

### 1. Entry strategies and recent evolution

Mergers and acquisitions conducted by foreign companies can be categorized into two distinct groups, which are differentiated based on the direction of the capital movement. *Inbound* (or inward) cross-border M&A involves the inflow of resources into a home country through the sale of a domestic company to a foreign investor. On the other hand, *outbound* (or outward) transactions involve the outflow of capital as a result of a domestic entity acquiring a foreign company.

To begin with, multinational enterprises (referred to as MNEs) typically employ two types of market entry strategies when establishing their presence in foreign markets: acquiring or merging with an established firm in the host country, or the greenfield investment, which entails the parent company setting up a subsidiary in the foreign country and building its operations from the ground up. These two approaches represent fundamental options for MNEs seeking to expand their global reach.

However, numerous factors contribute to the preference of MNEs for the M&A strategy as opposed to organic growth. These factors include the pursuit of strategic or complementary assets (i.e., brand names, ownership of local permits, access to distribution networks, and patents). Indeed, they often find M&As a faster and more efficient means of acquiring these valuable assets, which can be essential to their expansion and competitive advantage in foreign markets.

According to the study by Norbäck and Persson (2019), the high strategic value of domestic assets seems to favour this option. However, the announcement of a cross-border M&A has a decreasing effect on the share value of both companies if the domestic assets become more valuable, creating fierce bidding competition. Conversely, their value around the announcement date increases if the assets are not too strategically important or if there are few potential acquirers (as the bidder may pay a lower price).

These findings indicate that cross-border M&As in emerging markets are likely to yield greater benefits for the shareholders of MNEs compared to those in developed countries. This is primarily because target firms in emerging markets often do not possess highly strategically valuable assets, and there is typically less intense competition in the bidding process.

Moreover, the presence of risks in cross-border M&As diminishes the likelihood of their occurrence and, when they do occur, reduces the consideration paid for targets. This explains why acquirers overperform when acquiring in emerging markets (where risks may be comparatively higher), while encountering challenges in more developed markets.

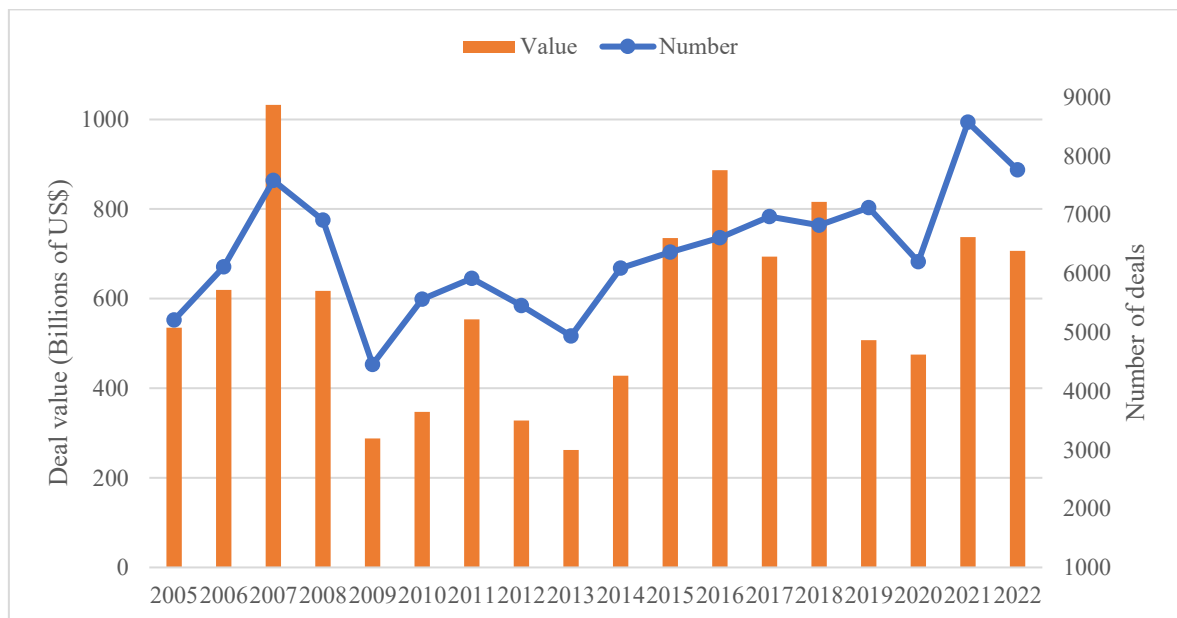
A business alliance represents another entry strategy. The paper by Bodnaruk et al. (2016), investigating U.S. firms' expansion choices, studied the effects of the opportunistic behaviour of direct (the foreign company that shares the venture) and indirect partners (host country government and institutions). Forming alliances helps to mitigate the risk of indirect partners but exposes the firm to problems arising from the behaviour of direct ones, thus generating a trade-off between alliances and M&As.

Other things being equal, when the risk of misconduct by the host country government is high and the risk of the partner firm is low, a U.S. company expanding internationally would typically favour establishing a cross-border alliance (rather than merging or acquiring).

As outlined in the UNCTAD (2023) World Investment Report, cross-border M&A activity<sup>1</sup> faced significant challenges over the past year due to various macroeconomic factors, including the Ukraine conflict, worsening financing conditions, and heightened uncertainty in financial markets. In fact, in 2022, the total deal value declined from \$737 billion to \$707 billion, marking a -4% decrease compared to the previous year. Additionally, the number of deals also dropped from 8,571 to 7,763, representing a -9% decrease.

The trajectory depicted in the following figure aligns with that of [Figure 1](#), indicating that the overall M&A activity (encompassing both domestic and cross-border transactions) is predominantly influenced by the fluctuations in cross-border M&A.

Figure 11: Value and number of net cross-border M&A 2005-2022



Source: United Nations Conference on Trade and Development (UNCTAD)

<sup>1</sup> Values and numbers presented within the UNCTAD WIR23 are presented on a net basis. Calculations for net cross-border M&As consider sales of companies in a host economy to foreign Multinational Enterprises (MNEs), while excluding sales of foreign affiliates to foreign MNEs and divestments (to domestic firms)

In 2022, the net value of cross-border M&A transactions experienced declines across most sectors when compared to 2021, except for the *primary* sector, which more than quadrupled from \$27 billion to \$122 billion. This remarkable surge, despite a nearly -38% decrease in the number of deals, broke the decade-long downward trend in this industry.

In *manufacturing*, the value of such deals decreased substantially from \$246 billion to \$142 billion, reflecting a significant -42% decline compared to 2021. Notably, the automotive and electronics industries were the hardest hit within this sector, jointly contributing to a decrease of almost \$45 billion, which accounts for approximately 43% of the overall decrease.

At the *service* level, the value and number of transactions remained relatively stable, with only slight decreases of -5% and -6%, respectively.

Furthermore, in terms of value, the top three industries were information and communication (accounting for \$166 billion), followed by extractive industries (\$121 billion), and finance and insurance (\$88 billion). The pharmaceutical industry witnessed the largest deal of the year, with two notable transactions standing out. The first was the \$11 billion acquisition of Vifor Pharma, based in Switzerland, by CSL Behring from Australia. Additionally, there was the acquisition of the biosimilar business of U.S.-based Viartis by India's Biocon Biologics for a substantial \$3.3 billion.

Figure 12: Value and number by sector 2018-2022

Sector	VALUE (B. US\$)					NUMBER				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Primary	39	37	25	27	122	406	433	658	623	389
Manufacturing	307	243	228	246	142	1.599	1.633	1.136	1.608	1.406
Services	470	227	221	465	442	4.816	5.052	4.407	6.340	5.968
<b>Total</b>	<b>816</b>	<b>507</b>	<b>475</b>	<b>737</b>	<b>707</b>	<b>6.821</b>	<b>7.118</b>	<b>6.201</b>	<b>8.571</b>	<b>7.763</b>

Source: United Nations Conference on Trade and Development (UNCTAD)

In terms of value, developed countries play a dominant role, accounting for nearly 85% of sales and 90% of purchases in cross-border deals. At the regional level, in 2022, Europe emerged as the leading seller of businesses, with transactions worth \$356 billion, while the United States stood out as the largest purchaser, with deals totalling \$327 billion.

For our analysis of the case study there are some notable changes. Since 2022, Italy has shifted its previous trend, which saw it consistently making more purchases than sales between 2018 and 2021. In fact, the country recorded an inbound movement of \$11 billion and an outbound movement of \$6 billion in the last year. Conversely, Switzerland, which had been consistently selling more than buying in the period between 2019 and 2021, displayed a different pattern in 2022. The country experienced an inward movement of \$17 billion, along with an outward movement of \$24 billion.

Figure 13: Value by country 2018-2022

Value (US\$ B.)	SALES					PURCHASES				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
<b>Developed</b>	<b>692</b>	<b>428</b>	<b>389</b>	<b>624</b>	<b>599</b>	<b>708</b>	<b>479</b>	<b>393</b>	<b>673</b>	<b>634</b>
Europe	381	200	260	271	356	343	182	209	284	156
Italy	23	4	0	13	11	34	6	6	13	6
Switzerl.	12	23	19	13	17	35	17	15	8	24
US	224	183	109	309	155	316	151	153	296	327
<b>Developing</b>	<b>124</b>	<b>79</b>	<b>86</b>	<b>113</b>	<b>107</b>	<b>92</b>	<b>13</b>	<b>68</b>	<b>40</b>	<b>58</b>
<b>World</b>	<b>816</b>	<b>507</b>	<b>475</b>	<b>737</b>	<b>707</b>	<b>816</b>	<b>507</b>	<b>475</b>	<b>737</b>	<b>707</b>

Source: United Nations Conference on Trade and Development (UNCTAD)

The magnitude of cross-border deals motivates the importance of analysing the impact of foreign ownership on the economies of the host countries, which focuses on empirical examinations aimed at determining whether foreign-controlled firms exhibit superior post-acquisition performance compared to domestic-owned ones. This topic holds significant relevance for policy makers, as it can provide evidence to inform decisions regarding policies designed to either attract or discourage foreign entities from acquiring local ones.

## 2. Motives

Although some factors driving cross-border mergers and acquisitions may be similar to those influencing domestic transactions, they differ in some cases.

Exploring new countries can help companies diversify their investments into the same or different markets that are relatively uncorrelated, potentially reducing the overall volatility (risk) of their consolidated cash flows. This level of risk reduction may be challenging to attain through diversification efforts limited to their domestic markets. Indeed, diversified international firms tend to exhibit a lower cost of capital (Stulz, 1995). However, achieving higher returns through international diversification may reflect economies of scale and scope, the expansion of the firm's served market, and the acquisition of strategic capabilities and assets that either expand or complement existing ones.

Drawing on the resource-seeking motive, the paper by Batsakis et al. (2018) suggests that the relationship between diversification and the performance of emerging market target firms depends on the size of the acquisition. In particular, a high volume of acquired shares leads to negative returns for the target firm in the post-acquisition period due to the over-exploitation of strategic assets by the acquirer.

Barbopoulos et al. (2014) add that for UK firms announcing a foreign direct investment in emerging countries, the acquisition of physical (relative to intangible) assets leads to higher abnormal returns, especially when investing in regions with high political and corruption risk.



This is because “hard” assets might not face challenges in terms of enforcing intellectual property rights, or because they cannot be easily extracted by corrupted officials.

Companies located in high-tax countries often relocate to countries with more favourable tax regulations. The paper by Arulampalam et al (2019) shows that the host country's statutory tax rate has a negative effect on the probability of acquisition. Specifically, a 10% reduction in the tax rate in the target firm’s country increases the likelihood of an acquirer expanding in that country by between 12% and 17%.

While companies with appreciating currencies are more likely to acquire companies with depreciating currencies, the impact of a strong currency on M&A returns is uncertain and depends on future exchange rate movements (since the target company's expected future cash flows will be less valuable when profits are repatriated to the acquirer's home country). Indeed, the study by Shetty et al. (2019) reveals a statistically significant positive impact of exchange rate volatility on acquirer returns, implying that positive returns are expected from cross-border transactions when the exchange rate is volatile.

Consistent with the rigidity of the labour market, where resources tend to be less mobile across political boundaries, an often-cited reason for moving production abroad relates to the reduced operating expenses, as emerging markets often offer access to lower labour costs and cheaper raw materials. Workforce restructuring as a source of cost synergies is confirmed by Dessaint et al (2017), who show that increased employment protections reduce M&A activity from 14% to 27%, and create combined firm gains from 50% to 80%.

These driving motivations are critical for companies to expand oversea and create value. In a study involving a dataset comprising 624 transactions from 1997 to 2015 and involving acquirers from 14 different markets, Otto et al. (2021) recently challenged the conventional notion that developed acquirers generally suffer losses. As illustrated in the figure below, the research reveals that publicly traded developed countries bidders tend to earn higher abnormal returns when announcing cross-border deals compared to domestic ones.

Figure 14: Developed-market acquirers returns

Developed-market acquirers: domestic acquisitions.			Developed-market acquirers: cross-border acquisitions.		
Event window	CAAR	P-value	Event window	CAAR	P-value
<i>[-1...1]</i>	<b>0.006</b>	<b>0.010***</b>	<i>[-1...1]</i>	<b>0.007</b>	<b>0.001***</b>
[0...0]	0.001	0.637	<i>[0...0]</i>	<b>0.005</b>	<b>0.000***</b>
[0...10]	0.002	0.702	<i>[0...10]</i>	<b>0.021</b>	<b>0.000***</b>
[0...20]	-0.002	0.706	[0...20]	0.006	0.247

Source: Otto et al. (2021)

In the current era of integrated global economies, investors not only appreciate a company's effort to establish a global presence, but also place a premium on the initial effort towards global expansion because, close to the announcement of the firm's first cross-border M&A, they realize an abnormal return (in terms of 3-day CAR) that is 1% higher than subsequent transactions (Dandapani et al., 2020).

The benefits associated with cross-border transactions are numerous, and their extent depends on the strategic motivations that drive a company's entry into new markets. For instance, this may represent an opportunity for slow-growth firms to accelerate by accessing fast-growing markets, for firms in financial services, telecommunications, and oil and gas to consolidate to remove excess capacity, or in general to access intangible assets such as valuable brands and cutting-edge technologies.

Hereafter, arguments will be presented that are closely related to the case study and shed light on the reasons behind the execution of cross-border transactions.

## 2.1 Country familiarity

Companies located in countries that frequently trade with each other and that are geographically close are more likely to engage in cross-border mergers and acquisitions, suggesting that country familiarity contributes to higher acquirers' returns.

The work of Ahern et al. (2015) examines how national cultural values impact the dynamics of these transactions. Taking a sample of 20,893 cross-border mergers involving 52 different countries between 1991 and 2008, it isolated three key dimensions of national culture: trust, hierarchy, and individualism. Cultures with higher levels of trust in others are expected to engage in mergers and to extrapolate greater gains by facilitating integration; conversely, differences in the norms of dialogue between employees and superiors may hinder effective cooperation between merging firms, as well as collectivist workers may be less inclined to collaborate with the individualistic ones as their goals may not align. The study revealed a robust negative relationship between countries' distance in cultural values and the volume of cross-border merger activity. In terms of a natural log, for a change in the distance in trust and individualism, merger activity falls by 0.436 and 0.334, respectively (out of an average of 1.02). Similarly, higher combined announcement returns are achieved only when the merging firms share common cultural values (trust and individualism both lead to a 16% increase in abnormal returns, representing a value gain of about \$47 - \$57 million).

Boateng et al. (2019) draw interesting implications for managers and policy-makers, arguing that the lack of familiarity can be overcome by including three firm characteristics: size, experience, and managerial capability. Their interaction is strong enough to reverse the negative

effect of cultural differences on value creation. This suggests that large acquirers may possess more tangible and intangible resources needed to deal effectively with cultural issues and that more experienced and better-managed acquirers are more adept at resolving cultural challenges. Furthermore, language (which can be regarded as being part of culture) emerges as a critical factor. The study by Kedia et al. (2016) presents evidence suggesting that linguistic distance between merging companies has a negative effect (of -14.4%, with a p-value < 0.01) on post-acquisition performance, representing a barrier to cross-border deals. Similar to the previous study, these effects are moderated by the bidder's transaction experience, which generates a positive (of 8.4%) and significant effect on cross-border M&A performance.

In essence, these studies highlight the crucial role of cultural alignment and familiarity between countries in determining the success of cross-border M&As, highlighting the importance of considering both cultural factors and firm-specific attributes when evaluating the outcomes of these transactions.

## 2.2 Corporate governance

Variation in institutional and legal environments across countries is an equally important aspect to consider in determining the extent of value creation.

In their research, Maung et al. (2019) conducted a comprehensive analysis of how legal, regulatory, corporate governance, and transparency standards at the target country level affect cross-border M&A premiums. Using a dataset including 2,070 cross-border M&A transactions, the paper examined the effect of the target country's investment environment index on the premium paid by the bidder.

Figure 15: Premiums for cross-border M&As and investment environment

Variables	ln(Premium4w)				
	(1)	(2)	(3)	(4)	(5)
Common	0.170*** (0.000)				
Accounting		0.102*** (0.010)			
Expropriation			0.126*** (0.001)		
Repudiation				0.071* (0.066)	
Enforcement					0.081*** (0.002)

Source: Maung et al. (2019)

As a result, all the coefficients exhibit positive and statistically significant values for all the proxies considered. This implies that, when acquiring abroad, foreign acquirers are willing to offer higher premiums for target firms located in countries with a better investment

environment, i.e., with common law origins (which offer stronger investor protection compared to civil-law countries), with strong accounting standards (which influence the quality of financial information used in target valuation), with reduced risk of expropriation and of contract's repudiation (which measures the security of property rights with respect to government's attitudes and the quality of contract enforcement), and with better judicial efficiency (which reduces the cost of credit and the risk of acquiring firms).

Furthermore, the increase in the premium associated with investor protection is more pronounced for LBOs, suggesting that the target shareholder's wealth in these transactions is particularly linked to the effectiveness of investor protection schemes, because of the heavy reliance on external financing (Cao et al., 2019).

The work by Breuer et al. (2020) demonstrates that the presence of strong investor protection positively influences the long-term performance of the acquiring firm up to three years after the announcement, ensuring that investors' time preferences are considered. Indeed, a more effective institutional framework serves to guide managers' behaviour by addressing their pursuit of suboptimal short-term strategies. This outcome is relevant for boards and policymakers to establish a sound governance structure to address potential conflicts of interest.

In another stream of research, cross-border mergers are looked at to improve the corporate governance of target companies through convergence. International law requires that the target company becomes a domestic entity of the acquirer's home country, and consequently be subject to its corporate governance framework. Bris et al. (2008) analysed a dataset comprising 506 acquisitions from 39 different countries that occurred during 1989-2002, using changes in shareholder protection (provided by the corporate law or commercial code) metrics among the countries involved. The paper isolated the direct relationship between the quality of corporate governance of the deal and merger premium by comparing it with a similar domestic transaction. The main result indicates that when companies from countries with weaker shareholder protection and accounting standards are acquired by firms operating in countries with more robust protective regulations, it leads to a higher premium relative to a similar domestic acquisition involving the same type of target firm. Furthermore, this study suggests that these buyers have a preference to expand abroad because they must pay a higher premium in their home countries, emphasising that transactions involving corporate governance motivations may be mutually beneficial.

The importance of cross-border transmission of governance practices is confirmed by the work of Miletkov et al. (2017), which analysed the performance effects of the presence of independent foreign directors on corporate boards. Boards play a central role in corporate

governance, with a dual function of supervising management and providing guidance on strategic decisions, such as acquisitions and global expansion. The underlying idea is that, in an era marked by globalization, companies have benefited from incorporating enhanced standards from foreign countries.

The paper, which takes a large sample of corporate boards, reveals that companies located in less developed countries (characterized by less educated populations, smaller capital markets, and lower levels of human capital development) often face difficulty in finding high-quality domestic directors. Consequently, they show a tendency to hire directors from abroad. Notably, the research demonstrates a positive correlation between the appointment of foreign directors and performance in countries with weaker legal institutions, as well as when the individual appointed comes from a country with stronger legal regimes (with a 1.1% higher announcement return). This finding aligns with the idea that independent foreign directors from jurisdictions with superior governance standards, which they tend to bring with them, can enhance the quality of corporate boards.

### 2.3 Stock payment

As explained in the previous chapter ([Chapter 1, paragraph 4](#)), market participants typically prefer cash-financed transactions. However, cross-border mergers and acquisitions have unique features that may lead them to consider equity payment more favourably. The paper by Dutta et al. (2013) examined the effects of payment methods by focusing on 1,300 completed deals by Canadian bidders from 1993 to 2002. In terms of cumulative abnormal returns of acquiring firms, the results revealed that the market favours equity-financed (with a 3-day CAR of 7,4%) over cash-financed (CAR -0,1%) cross-border M&A.

In the long run, there are no unique synergistic benefits (in terms of operating performance) to justify the short-term outcome. This suggests that the market is overly enthusiastic about a stock-financed cross-border transaction (overestimating synergies) around the announcement date while reassessing the benefits of such transactions and adjusting negatively in the long run. As shown in the table below, the 3-year value-weighted buy-and-hold abnormal returns (BHAR) on equity-financed cross-border transactions are significant at the 1 percent level and equal to -10.8%, confirming that market participants make negative corrections to compensate for initial overreactions when there are no long-term operational improvements.

Figure 16: Long-term reassessment

Panel C. Cross-border cash and stock financed deals		
	Cross-border cash financed deals (N = 296)	Cross-border stock financed deals (N = 45)
Value weighted BHAR (individual matching firm as a benchmark)	0.154	- 0.108
Adj. t-stat	1.192	- 2.32***

Source: Dutta et al. (2013)

Moreover, the research has found that the method of payment in cross-border M&A is significantly related to country-level governance risk.

The paper by Huang et al. (2016) argues that cash (stock) is more (less) likely to be used in international than domestic deals, although for cross-border transactions over the period 1990-2010, all-cash payment declined (from 87,6% to 69,3%), while mixed (from 8,3% to 20%) and all-stock payment (from 4,1% to 10,7%) increased. Including several relative governance proxies (such as the difference in economic, political, transparency, and shareholder rights measures of countries), it is found that greater uncertainty about the institutional environment in the target's country significantly increases the use of equity over cash. This finding is consistent with the use of shares to allow the acquirer to share risks (such as expropriation, overpayment, and governance) with the target's shareholders.

Another contribution that relates to governance and country familiarity is the work of Cho et al. (2017). They first show that the variable of stock payment has a significant negative coefficient, indicating that the exchange of shares has a signalling effect on the market, leading to a negative value for shareholders (in terms of 5-day CARs).

Figure 17: Impact of stock-financed cross-border M&A on CAR

	(1)	(2)	(3)	(4)	(5)
STOCKPAYMENT	-0.0102** (0.002)	-0.0103** (0.001)	-0.0100** (0.002)	-0.0437*** (0.000)	-0.0159*** (0.000)
INSTITUTION		0.0091** (0.001)		0.0014 (0.609)	
CULTURE			0.0023*** (0.000)		0.0014* (0.042)
STOCKPAYMENT * INSTITUTION				0.0302*** (0.000)	
STOCKPAYMENT * CULTURE					0.0039* (0.010)

Source: Cho et al. (2017)

After confirming the importance of institutional development and cultural distance (in specifications 2 and 3), columns 4 and 5 show their effects on equity payment. The coefficients are significantly positive, meaning that when the target firm is in a relatively underdeveloped institutional environment or in a culturally dissimilar country, the use of stock can serve as a strategy to reduce the high risk associated with the transaction. Consequently, these divergences

(that lead to information asymmetry and agency problems) represent two significant factors that determine when payment in stock can be advantageous in cross-border M&A transactions. From the managerial standpoint, selecting the appropriate means of payment when expanding abroad in these contexts can enhance the probability of achieving expected synergies.

### **3. Structuring and valuing cross-border M&A**

#### **3.1 Structuring considerations**

Within the European Union, although a common institutional framework for M&A has been established, transactions in different regions continue to exhibit distinct characteristics. According to Moschieri et al. (2014), the completion of a deal in the EU is more influenced by the presence of a friendly attitude and competing bids, rather than the deal's origin, the payment method, or industry regulations. Consequently, transactions in this region exhibit unique characteristics, as residual country-specific factors play a substantial role.

Moreover, the growing scale of cross-border M&A transactions suggests that the area is moving toward the formation of conglomerates and industry consolidation and, secondly, the attractiveness from outside the EU for European targets is increasing progressively over time. Since the implementation of a common institutional framework does not guarantee the same outcomes in all transactions, it's important to consider local contexts. Therefore, companies engaged in cross-border M&As must carefully balance both global and local factors when choosing their targets and structuring the transaction, in order to manage risks and maximize the benefits of their diverse foreign investment portfolio.

In line with the discussion in [section 2.3](#), the paper by Bae et al. (2013) highlights that in the context of cross-border M&A, pure cash transactions are the most common choice, constituting 45% of the sample, as opposed to 25% for pure stock-financed deals and 30% for mixed transactions. Notably, when it comes to public targets, pure cash deals are more frequent. Conversely, private targets often involve non-pure cash deals, which include both pure stock and mixed transactions, mainly due to the complexities associated with valuing private firms.

The research conducted by Di Guardo et al. (2016) offers valuable insights into the ownership strategies of firms from the seven largest European countries when engaging in cross-border M&A. The study identifies a U-shaped relationship with the corruption level in the host country. When corruption is low, the emphasis is on business integration, making a full acquisition the preferred choice. However, as corruption levels increase, it becomes essential to partner with a local entity to effectively address the challenging environment. In cases of high corruption, a

wholly owned approach is favoured as it helps mitigate the negative impacts of local partners' opportunistic behaviour and safeguards the company's global reputation.

Additionally, as outlined in the following figure, the study uncovers various findings that apply to some, but not all, countries. The degree of industry relatedness or similarity, the acquirer's experience in the target country (as it enhances the acquirer's knowledge of the local context thus improving its capacity to handle risk and uncertainty), and economic connectivity at the country level (proxied by trade relationships, past M&A activity, common language, and spatial proximity) have a positive impact on the likelihood of executing wholly owned deals.

Figure 18: Determinants of full acquisition

Table 7  
Determinants of full acquisitions.

Dependent variable: Y = 1 when acquired shares >95%, 0 otherwise

	United Kingdom		France		Germany		Italy		Netherlands		Spain		Sweden	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Institutional conditions in T country														
Corruption	-6.25	0.99***	-4.69	1.67**	-8.32	1.92***	-6.49	3.08**	-10.72	2.41***	-6.42	2.99**	-9.52	2.92***
Corruption square	5.49	1.64***	3.13	2.90	10.07	3.35***	9.90	5.27*	14.66	4.06***	7.42	5.39	11.08	4.85**
legal strength	-0.04	0.02**	0.05	0.02***	0.03	0.02	0.05	0.03	-0.01	0.02	0.02	0.03	0.05	0.03**
Industry relatedness between A-T firms														
high relatedness	0.20	0.06***	-0.13	0.07*	-0.15	0.08*	-0.02	0.13	0.00	0.10	0.26	0.12**	0.15	0.10
unrelatedness	-0.22	0.06***	-0.17	0.08*	-0.20	0.08***	-0.21	0.15	-0.12	0.10	0.17	0.13	-0.05	0.10
Acquirer firm connectivity														
specific experience in T country	-0.16	0.07**	0.08	0.10	-0.14	0.11	-0.16	0.18	0.27	0.13**	0.38	0.18**	0.20	0.13*
Connectivity between A-T country pairs														
economic (trade shares)	0.06	0.01***	0.03	0.01***	0.09	0.01***	0.04	0.02***	0.00	0.01	0.00	0.01	0.01	0.02
economic (past M&A)	0.40	0.19**	0.41	0.22*	-0.18	0.22	-0.09	0.27	0.26	0.27	0.00	0.26	0.72	0.26***
historical (common language)	0.31	0.08***	-0.16	0.10*	-0.24	0.09***	-0.33	0.30	0.34	0.18*	0.25	0.17	0.02	0.16
natural (spatial distance)	-0.13	0.07*	0.05	0.10	0.21	0.10**	-0.03	0.16	0.00	0.13	-0.14	0.20	0.86	0.17***

Source: Di Guardo et al. (2017)

From a different perspective, the study conducted by Dang et al. (2018) indicates that the probability of a minority acquisition, as opposed to a majority or full acquisition, is more likely when the target company operates in a country with lower government quality, limited economic openness, stronger international trade restrictions, lower financial development, and a significant cultural distance from the acquirer's home country. As such, the paper suggests that the bidder actively assesses cross-country characteristics (between their home and the target's local countries) during their decision-making process, as they subsequently influence various transaction aspects, including the choice of payment method, financing needs, and ownership choices.

Furthermore, targets located in industries that heavily rely on external funding have a greater likelihood of being fully acquired by foreign firms, with a 22% greater share compared to sectors with lower leverage. This pattern is also observed in countries with less developed capital markets, as noted by Alquist et al. (2019).

### 3.2 Valuation considerations

In the context of a cross-border merger or acquisition, the acquirer must consider particular valuation adjustments. First, it's necessary to convert cash flows from one currency to another.



Second, discount rates must be adapted to account for risks that may not be present when merging companies operate within the same country (DePamphilis, 2020).

Generally, nominal cash flows are used in this process, except in cases of high inflation, when the valuation of real cash flows is preferable. The latter approach involves adjusting all cash flows by dividing them by the current GDP deflator, increased by the inflation rate, and using real discount rates by subtracting the inflation rate from the nominal ones.

The prevailing method used by M&A professionals involves projecting the total nominal cash flows of the target company in its own currency, rather than individually for each component, and subsequently translating them into the bidder's currency. To execute this approach, it is necessary to possess an estimate of the future exchange rates of both currencies, which are determined by the differences in interest rates and expected inflation between the two countries. Moreover, it is necessary to know the current exchange rate of the two currencies (the spot exchange rate), estimated on the basis of either interest rate parity theory or purchasing power parity theory.

When dealing with a target firm situated in a country with a well-developed and globally integrated capital market, the *interest rate parity theory* is applicable. In line with the case study, let's consider a Swiss acquirer's valuation of a company in the European Union.

According to the following formula, the projected cash flows expressed in terms of Euros (€) can be converted into Swiss Francs (F) by calculating the forward rate for the Swiss Franc-to-Euro exchange rates ((F/€)<sub>n</sub>). This calculation is based on the differences in interest rates between the two countries (R<sub>F<sub>n</sub></sub> and R<sub>€<sub>n</sub></sub>), adjusted by the current spot rate ((F/€)<sub>0</sub>).

$$\left(\frac{\text{F}}{\text{€}}\right)_n = \left(\frac{(1 + R_{\text{F}_n})^n}{(1 + R_{\text{€}_n})^n}\right) \times \left(\frac{\text{F}}{\text{€}}\right)_0$$

If interest rates in Switzerland rise relative to those in the European Union, investors exchange Euros for Swiss francs at the current spot rate and simultaneously sell an equivalent amount of Swiss Francs for Euros on the forward market. In this way, the spot rate will appreciate and the forward rate will depreciate until any potential profit from the interest rate differential is eliminated.

In situations where there is a lack of sufficient information regarding interest rates, such as in emerging and segmented capital market countries, the *purchasing power parity theory* is useful. According to it, one currency appreciates (or depreciates) relative to another currency in accordance with the anticipated inflation rates in both countries. As expressed in the following formula, the forward rate for the Dollar to Mexican Peso exchange rate ((\$/P)<sub>n</sub>) is expected to

adjust based on the expected inflation rates ( $P\$_n$  and  $P\text{₱}_n$ ) and the Dollar to Peso spot exchange rate ( $(\$/\text{₱})_0$ ).

$$\left(\frac{\$}{\text{₱}}\right)_n = \left(\frac{(1 + P\$_n)^n}{(1 + P\text{₱}_n)^n}\right) \times \left(\frac{\$}{\text{₱}}\right)_0$$

Another critical factor to consider for valuation purposes is the accurate determination of the marginal tax rate, which depends on where most of the taxes are actually paid. Globally operating companies are typically subject to either the worldwide tax system, applicable to profits earned by domestic firms in their home or foreign country, or the territorial tax system, applicable to income generated by both domestic and foreign firms within the country's borders. However, in practice, many countries do not employ a pure territorial tax system. Instead, they generally exempt about 95% of foreign earnings, resulting in most MNEs in foreign countries paying only a token tax when they repatriate their earnings.

If the acquirer's home country exempts foreign income (or imposes only a token tax), the appropriate tax rate will be the foreign country's marginal tax rate. Conversely, if the acquirer's country's marginal tax rate is higher than that of the target's country, and if taxes paid in a foreign country are deductible from the acquirer's tax liability, then the correct tax will be the acquirer's effective marginal rate, determined as the difference between the bidder's marginal tax rate in its country and the rate paid in the foreign country.

When valuing cross-border deals, adjustments to the Capital Asset Pricing Model (CAPM) are necessary with respect to the basic formulation. In the case the target is located in a developed country, there are relatively minor differences in the cost of equity compared to emerging markets due to the integration of capital markets between developed economies. In such cases, the global CAPM can be applied to discount the projected cash flows of the target firm (expressed in its local currency), which is expressed as follows:

$$Ke_{dev} = Rf + \beta_{dev} * (Rm - Rf) + FSP$$

Here's a breakdown of the components of the required return on equity for a target firm operating in a developed country ( $Ke_{dev}$ ).

- Risk-free rate ( $Rf$ ), which is represented by the local country's government bond rates;
- Company non diversifiable risk coefficient ( $\beta_{dev}$ ), which is estimated by regressing the percent change in the total return on a specific stock against a globally diversified equity portfolio. It captures the stock's sensitivity to systematic, non-diversifiable market risk;

- Equity Risk Premium ( $R_m - R_f$ ), defined as the additional return required by investors as the expected return in a global market portfolio, such as the MSCI or S&P 500, in excess of the return of a risk-free asset;
- Firm size premium (FSP), which accounts for the higher default risk and lower liquidity associated with small-cap firms compared to large ones. These adjustments reflect the additional risks investors take when investing in smaller companies<sup>2</sup>.

Moreover, an analyst may need to evaluate the target company's future cash flows in both the local and home currencies. This consideration relates to the *Fisher effect*, which asserts that nominal interest rates ( $i$ ) can be expressed as the sum of the real interest rate ( $r$ ) (i.e., adjusted for inflation) and the expected inflation rate ( $P$ ). For the case study, the Fisher effect can be illustrated in the context of Switzerland (CH) and Italy (IT) as follows:

$$(1 + r_{CH}) = \frac{1 + i_{CH}}{1 + P_{CH}} \quad (1 + r_{IT}) = \frac{1 + i_{IT}}{1 + P_{IT}}$$

Assuming that real interest rates remain constant across all countries, nominal interest rates among countries will vary solely due to differences in their expected inflation rates. Thus:

$$\frac{1 + i_{CH}}{1 + P_{CH}} = \frac{1 + i_{IT}}{1 + P_{IT}}$$

By rearranging the previous equation, an analyst can convert the cost of equity expressed in terms of Euros (i.e., the target's local currency) into that expressed in terms of Swiss Francs (i.e., the acquirer's home currency).

$$Ke_{CH} = \left( (1 + Ke_{IT}) * \frac{1 + P_{CH}}{1 + P_{IT}} \right) - 1$$

Adjusting the cost of equity for a target located in emerging markets introduces a range of additional complexities related to political instability, limited liquidity, and currency fluctuations, which can often be challenging to address. Although these topics are important in the world of international finance, a comprehensive discussion may require in-depth analysis which is beyond the scope of this dissertation.

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<sup>2</sup> For an estimate of the magnitude of this effect, based on empirical data collected since 1963, see Grabowski et al. (2017)



## PART II – The merger Dufry - Autogrill

### CHAPTER 3. Rationale of the combination

#### 1. Dufry A.G.

After being established as a retailer in Switzerland in 1865 under the name of Weitnauer, the company started its duty-free retail business in 1952 opening its first duty-free shop in Paris/Le Bouget. The company's name was changed to Dufry only recently, in 2003. A recent milestone in its history refers to the listing of its shares on the Six Swiss Exchange in 2005, as well as the listing of Dufry South America on the Brazilian and Luxembourg stock exchanges in the following year (merged into Dufry only in 2010).

The group is very active in its merger-and-acquisition activity. In 2008 it acquired a 10% stake in Hudson Group, the largest travel retailer in North America, with the use of a share swap and the refinancing of its debt. It's only since 2020 that Hudson became a wholly owned subsidiary, after the acquisition of a 42,6% stake and its delisting from NYSE. Other brands of Dufry's current portfolio were acquired from there onwards, including a 49% equity stake in the leading travel retailer in Greece in 2012 - Hellenic Duty Free - to consolidate its presence in the Mediterranean area. In the same year, Dufry acquired 51% of RegStaer Vnukovo (one of the leading operators in Russia) through a joint venture and then acquired a 60% stake in it in November 2019. To expand its broad geographical reach, Dufry signed an agreement to acquire 100% of Nuance in 2014 and World Duty Free in 2015, the latter representing the biggest acquisition in the travel retail industry (Marketline, 2022, pp. 5-13; Dufry's website).

##### 1.1 Business description and performance

Dufry is a Swiss-based global travel retailer founded in 1865 which operates on all continents through different retail formats (Dufry AG, 2023, pp. 45-53). The most used concept for duty-free is the *general travel retail shop*, located in areas with high passenger traffic and covering the full range of product categories, which carries the name of different brands in Dufry's portfolio (including Nuance, Word Duty Free, and Hellenic Duty Free among others) or a name combination linked with the specific location (such as Zurich Duty-Free or Stockholm Duty-Free). As of December 2022, the group had 917 general shops.

*Dufry shopping stores* offer a similar experience in terms of product assortment and brand variety of international travellers to domestic ones in a duty-paid environment. They offer a convenience benefit - rather than a duty exemption - since there are large countries where domestic travels account for most trips.

Dufry is also a trusted partner for major brands to showcase their products in dedicated retail spaces and to communicate their image. They could be found as standalone *brand boutiques*, which can also be integrated as a shop-in-shop within duty-free and duty-paid stores, creating an exciting shopping environment. At the end of 2022, the group operated 202 brand boutiques including Armani, Burberry, Bottega Veneta, Hugo Boss, Lindt, Salvatore Ferragamo, Swarovski, Versace, and others.

*Convenience stores* offer a wide product assortment using different brands according to the passenger profile and location. “Hudson” is the main brand of the group in the convenience segment, with more than 633 shops in North America, to provide passengers with anything they may need during their trips. These stores are carefully designed with distinctive and color-coded signage to orientate customers’ attention to distinct selling areas.

In 2022 the company owned 485 *specialized and theme stores*, a concept with a single product category offered by a variety of different brands. For them, Dufry looks for a location with the potential to carry a product range relating to a specific theme or to convey a sense of place. Examples include “Colombian Emeralds International” for watches and jewellery in the Caribbean market, “Kids Works” for toys, books, and apparel for children, and “Tech on the Go” for electronics-oriented travellers.

Geographically, as Figure 19 displays, the company operates in three macro-regions (Dufry AG, 2023, pp. 28-39). In FY2022, the EMEA (Europe, Middle East, and Africa) region accounted for 52% of Dufry’s revenues, followed by the Americas with 42%, Asia Pacific with 2%, and Distribution Centres (which have global functions and cannot be allocated to the other segments) with 3%.

*EMEA*, Dufry’s largest region which includes 31 countries, experienced a strong performance acceleration in the last financial year mainly driven by leisure demand towards holiday destinations allowing the region to achieve a remarkable growth of 108% compared to FY2021. This result is even more significant as it was achieved despite flight disruptions and capacity cuts at European airports and by airlines during the summer months. The share of EMEA returned to be higher than the Americas, after two years in which the two segments accounted for the same turnover. In fact, the Covid-19 pandemic impacted the region from mid-February 2020 onwards, with a recovery characterized by the specific country’s lifting of travel restrictions.

At the beginning of 2021, to simplify the organizational structure, the two former regions North America and Central-South America were combined into one single segment, thus creating the second-largest business unit of the group. *The Americas* showed the fastest recovery pattern among the segments, thanks to the early resumption of domestic flights within the US, as well

as to Mexico and Caribbean destinations. Also, more favourable travel protocols for transcontinental flights helped the region to improve in the fourth quarter. This rebound continued in the last year, reflecting organic growth of 68,8% compared to 2021 levels.

*Asia Pacific* lost share within Dufry's business units, despite remaining its most important strategic region offering the highest prospective passenger growth as well as cooperation and M&A opportunities due to the high fragmentation in local markets. It has been a challenging business environment to operate during the pandemic since it remained largely impacted by travel restrictions implemented by most governments. Exceptions were made for some domestic travel destinations (within China and towards Hainan) which benefitted Dufry's portfolio of duty-paid operations but could not provide the necessary recovery since the company in the region is mainly focused on international travel. In 2022 the region improved after showing gradual progress in easing restrictions, recovering with organic growth of 67,7% on the previous year's levels.

Figure 19: Dufry's geographical turnover in CHF millions

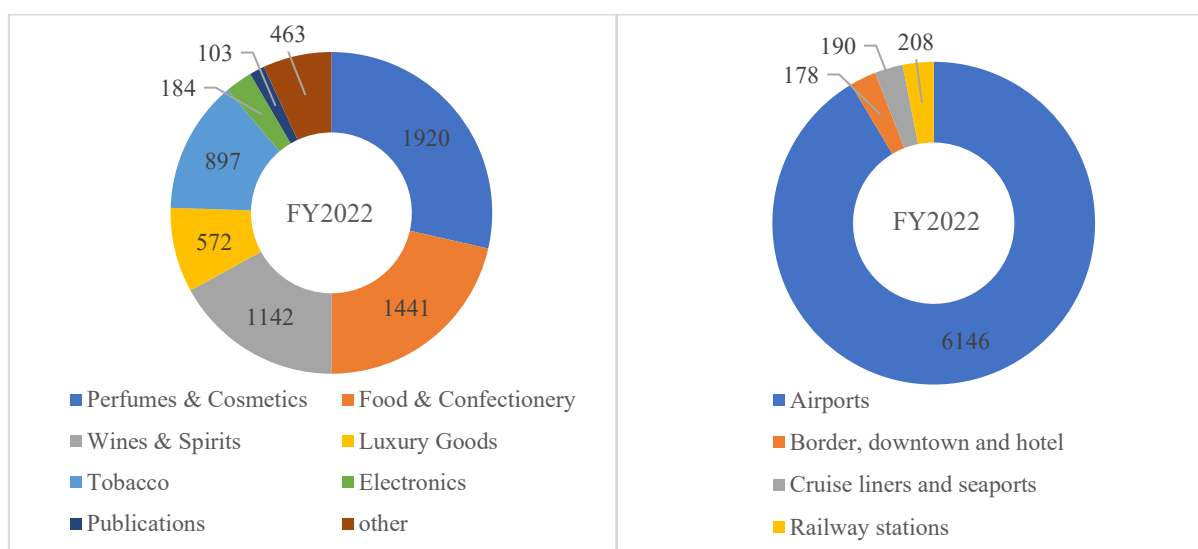
Sales (millions)	FY2022		FY2021		FY2020		FY2019	
EMEA	3.586	52%	1.724	44%	1.145	45%	4.434	50%
Asia Pacific	166	2%	99	3%	160	6%	692	8%
Americas	2.918	42%	1.729	44%	1.142	45%	3.472	39%
Global DC	208	3%	364	9%	115	4%	251	3%
<b>Total</b>	<b>6.878</b>	<b>100%</b>	<b>3.916</b>	<b>100%</b>	<b>2.562</b>	<b>100%</b>	<b>8.849</b>	<b>100%</b>

Source: personal elaboration based on Dufry's annual reports

As Figure 20 shows, Dufry offers a wide assortment of product categories with beauty and food products accounting together for 50% of net sales in FY2022, followed by food (21%), alcohol (17%), and tobacco (13%) goods. This allocation characterized the company's offer for many years, presenting its customers with a selection of the most prestigious brands.

The company operates over 2.200 duty-free and duty-paid shops present in different retail channels, building on a strong portfolio of international airport locations. Most sales are attributable to them measuring 88% in FY2019, declining to 86% in FY2020 and to 84% in FY2021 given the reduced travelling during the pandemic, and then rebounding to 91% in FY2022. In fact, the group represents the global market leader in airport retail with a close to 20% market share. Other channels include border crossings, downtown tourist areas, and hotels (3% in FY2022), cruise liners&ferries and seaports (3% in FY2022), railway stations and other locations (3% in FY2022) (Dufry AG, 2023, p. 9).

Figure 20: Dufry's turnover by products categories and channels in CHF millions



Source: personal elaboration based on Dufry's annual reports

After appropriately reclassifying its income statement and balance sheet, the following tables summarize some of the performance ratios of Dufry's group during the period 2019-2022.

From a growth standpoint, the company is suffering negative CAGR both on its revenues and operating margins (EBITDA and EBITA) given the strong impact of the Covid-19 pandemic in 2020 results. However, in the last two years, Dufry delivered a strong operational improvement in recovering its revenues and EBITDA while turning positive in its EBITA and net profit. Especially in 2022, despite an environment impacted by inflation, rising interest rates, and travel disruptions, travel demand returned strongly.

In addition, the invested capital without goodwill decreased year-on-year, due to the decrease in the operating fixed assets (property-plant-&-equipment, right-of-use assets, and intangible assets).

Figure 21: Dufry's growth ratios 2019-2022

Growth	FY2022			
	31/12/2022	31/12/2021	31/12/2020	CAGR 19-22
Revenue	74,8%	53,0%	-71,1%	-8,2%
EBITDA	12,1%	317,6%	-84,6%	-10,3%
EBITA	62,3%	129,0%	-277,5%	-5,8%
Net group income	133,0%	86,7%	-9204,7%	58,8%
Invested capital without goodwill	-16,6%	-26,6%	-8,5%	-17,5%

Source: personal elaboration based on reclassified financial statements

ROIC excluding goodwill (the ratio between NOPAT and average IC) and the pretax ROIC excluding goodwill (the ratio between EBITA and average IC) are a measure, respectively, for the after-tax and pretax profitability generated from core operations excluding non-operating



assets. In 2020 they were both below zero due to the negative return experienced in the year, in terms of EBITA margin, given the travel interruption and social distancing measures. The ratios rebounded in the following year and came back to high levels (respectively of 11% and 14,1%) in the last reporting period. Instead, in 2020 the EBITDA margin didn't fall below zero, but it has halved with respect to 2019, returning to almost the same level in 2022.

Regarding days in working capital, which measure how many days it takes to convert its trade working capital into cash flows, the company enhanced its efficiency of asset utilization with respect to the 2020 level (in which Dufry experienced a high number of days to sell off its inventory and to pay its payables) going from 67 to 24 days.

In addition, in 2022 the ROE was 13% given the high level of asset turnover (which increased a lot from 37,4% in 2021 to 71,9% in 2022) and financial leverage (of 10,43 in 2022, which brings a multiplier effect), while it was negative during the pandemic given the negative result in terms of net profit margin (respectively of -9,2% in 2021 and -105,6% in 2020).

Figure 22: Dufry's profitability ratios 2019-2022

Profitability	31/12/2022	31/12/2021	31/12/2020	31/12/2019
	ROIC without goodwill	11,0%	5,3%	-15,1%
Pretax ROIC without goodwill	14,1%	6,8%	-19,3%	
EBITA margin	10,1%	10,8%	-57,2%	9,3%
Revenues/Invested capital without goodwill	140,5%	62,4%	33,8%	
EBITDA margin	23,0%	35,9%	13,1%	24,6%
Trade working capital in days (on revenues):	24,55	43,72	67,32	
- Account receivables	3,83	4,64	4,25	
- Inventory	42,03	61,30	118,61	
- Account payables	-21,31	-22,22	-55,54	
DuPont	31/12/2022	31/12/2021	31/12/2020	31/12/2019
	ROE	13,0%	-40,7%	-157,3%
Net Profit Margin	1,7%	-9,2%	-105,6%	
Asset Turnover	71,9%	37,4%	21,1%	
Financial Leverage	10,43	11,83	7,06	

Source: personal elaboration based on reclassified financial statements

Concerning its financial health, net debt reached the lowest level since 2015. If net debt and EBITDA are held constant, Dufry could pay back its debt in 3,6 years with its operating activity. On the other side, the D/E ratio has worsened with respect to 2019 mainly because of the decrease in equity caused by the heavy losses suffered in 2020, although the situation is not critical considering the improvement in the last two years. In addition, the ability to pay its interests is also recovering reaching an EBITDA coverage ratio of 4,6% in 2022. In terms of

financing, the current debt profile (which has been reclassified before considering both borrowings and lease obligations) is composed of 82% fixed rate debt at attractive rates of 3,1% on a weighted average, while only 18% has floating rates, in line with the composition of previous years. In 2022 the credit rating improved to B1 Outlook Stable by Moody's and B+ CreditWatch Positive by S&P (Moody's, 2022; S&P Global, 2022). In addition to the well-balanced debt profile, the company started the refinancing of 2024 maturities at the end of 2022 and has concluded an agreement with the lending bank consortium for a new Revolving Credit Facility of €2.085 million maturing in 2027 replacing the existing €1.300 million RCF and \$550 million term loan. This is an important result since they have shown their capability of addressing the upcoming maturities well in advance, providing additional flexibility with the higher RCF while maintaining interest charges stable.

Figure 23: Dufry's financial health ratios 2019-2022

Financial Health	31/12/2022	31/12/2021	31/12/2020	31/12/2019
<b>Leverage:</b>				
NFP/EBITDA	3,6	4,7	25,7	3,4
Debt/Equity	6,9	7,3	9,9	2,6
<b>Coverage:</b>				
EBITDA/Interest	4,6	3,9	0,9	5,7
<b>Debt composition</b>				
% Short-term	18,1%	15,7%	15,9%	14,1%
% Long-term	81,9%	84,3%	84,1%	85,9%

Source: personal elaboration based on reclassified financial statements

## 1.2 SWOT analysis

The following analysis is based on the information contained in the sustainability report annex of the company's annual report (Dufry AG, 2023, pp. 305-308) and in the Passport Research (Euromonitor, 2023, pp. 16-27).

*Strengths:* these are the internal abilities and associated competitive advantages.

- Business diversification has always been and will continue to be an important strategic focus on Dufry's operations to mitigate risks. The diversification by geographies, sectors, and channels already developed can mitigate the impact of regional or local events which could either reduce the passenger traffic or influence the traveling and spending behaviour of its customers because of economic conditions and political changes.
- After the Covid-19 pandemic, during which governmental restrictions severely reduced domestic and international travel and passenger traffic, the company organization

quickly adapted to the new business environment by reducing costs, placing greater emphasis on cash management, and implementing a variety of refinancing initiatives focusing on liquidity and solid financial position. Dufry is therefore well positioned to face the current recovery phase and to undertake strategic initiatives to accelerate growth in the future. In fact, the industry is experiencing a strong rebound in international tourism, bringing a much-needed recovery of duty-free shopping. The easing of travel restrictions is bringing travellers back and driving interest in “revenge” travel.

- Dufry owns a well-balanced concession portfolio across emerging and mature markets, with an average remaining lifetime of almost 6 years. The largest concession only accounts for less than 6% of turnover, while the ten biggest concessions represent less than 28%. This significantly reduces the risk of its business model. Moreover, Dufry rigorously evaluates each project on a commercial and financial basis (including development potential, initial investment requirements, and the expected evolution of passage numbers), thus ensuring that the concession portfolio remains of the highest quality according to the principle of return evaluation for each concession contract. At the appropriate time, it updates the portfolio by renegotiating or exiting from any concession that does not match the specific objectives.
- Being a “pure” retailer, Dufry does not produce any products or private labels in-house. Instead, the key success factor is represented by the ability of the retailer to maintain and develop supply relationships to source products from brands at a global and local level. Dufry operates a centralized procurement department to manage its supply chain with global brands while sourcing local brands locally.

*Weaknesses:* these are internal limitations and associated competitive disadvantages.

- The industry in which Dufry operates, namely travel retail, is typically highly regulated. Operators must adhere to the same regulations with respect to commercial activities and product requirements as local retailers in each specific country. Moreover, they could be impacted by changes in the taxation and duty-free systems of individual countries, and they must follow security requirements issued by the airlines and airports. Changes in the regulatory environment and government policies of a specific market could lead to uncertainty and negatively affect the company’s performance.
- Being part of a captive market, thus facing a limited number of competitive suppliers, the company faces a dependency on brands exposing the group to risks of travel supply chain disruptions and shifts in brand preferences by customers.

*Opportunities:* these are external trends and associated competitive prospects.

- Due to the EU's VAT union and single market, duty-free shopping is not available for travellers within Europe, but only to tourists from outside the continent. Brexit has opened the possibility of offering duty-free shopping to visitors from the UK, one of Europe's main source markets.
- Loyalty programs are becoming important tools to attract and engage with customers. Many operators are adopting flexible and functional schemes to adapt to travellers purchasing preferences and to create a seamless experience along all touchpoints, for example by providing unique and personalized rewards. More generally, the use of digital technologies as part of an omnichannel strategy will continue to drive sales online, but also improve the customer experience in-shop. New revenue streams could be created by embracing Web 3.0 technologies (such as the metaverse to mimic physical world interactions or NFTs for digital avatars), converting virtual experiences into real benefits.
- Referring to the expansion of its distribution channels, access to Asia Pacific countries will continue to be one of Dufry's major strategic goals given the strong market potential, especially for luxury goods and the increasing income level of its inhabitants. In addition, destinations are opening duty-free zones to stimulate retail sales. For instance, in September 2022 Saudi Arabia approved their expansion to all entry points (air, sea, and land) in line with the government's aim to diversify from an oil-based economy, whereas previously duty-free shopping was available only in the departure lounges of its international airports. Also, Da Nang in Vietnam is developing a duty-free zone to be completed in 2027 to attract luxury travel and develop the domestic market.

*Threats:* these are external trends and associated competitive obstacles.

- The travel retail business is typically highly competitive. Dufry competes with other travel retailers on a global, regional, and local level to obtain and maintain concessions at the main travel channels. Within a specific location (e.g., an airport, train station, cruise ship, etc.), the number of concessions is limited and involves a de facto exclusivity: failing to obtain or extend a specific concession prevents the company from entering a location until the concession is to be renewed again. Moreover, these contracts may be subject to revocation and modification, which can negatively affect the performance of the group.
- Although Dufry regularly conducts customer surveys and cooperates with brand partners to identify new trends and customer needs at an early stage, unperceived changes in customer behaviour could affect sales performance.

- Excessively high airfare and accommodation prices, driven by inflation, are currently eroding consumers' discretionary income making them more price-conscious, leading the lower-income travellers to leave the market. Moreover, the industry is facing significant challenges, such as the war in Ukraine or travel disruptions and capacity constraints during the summer season.

## **2. Autogrill S.p.A.**

### **2.1 Business description and performance**

In 1977 the Italian state holding company, Istituto per la Ricostruzione Industriale (IRI), merged the Pavese, Motta, and Alemagna highway businesses, creating Autogrill. Mario Pavese had initially opened the first outlet on the Milan-Turin motorway, specializing in the sale of cookies produced in the family factory. In 1995, following substantial growth in Italy and through acquisitions abroad, the Benetton family passed the company into full private ownership. In 1977, its shares were subsequently listed on the Milan Stock Exchange (Autogrill, 2023).

The core business of the Autogrill Group revolves around the operation of various retail outlets, including the sale of food, beverages, confectionery, and other items such as tobacco, books, periodicals, and consumer goods. These activities are typically conducted under concession agreements, generally granted by private landlords or operators (such as concessionaires and public authorities) and acquired through public tenders or private negotiations. Under these contracts Autogrill agrees to pay a fee, often subject to an annual guaranteed minimum amount. These agreements constitute the company's main asset, enabling Autogrill's controlled entities to secure the commercial space needed to conduct their activities for a specific time period. In addition, these agreements often involve an obligation to invest in the necessary facilities and equipment.

As of 31 December 2022, the Autogrill Group has expanded its operations to 30 countries, with about 3.300 outlets located in 774 locations, including airports, motorways, railway stations, and shopping malls. It is worth noting that Autogrill Group also engages in fuel sales which, however, constitutes a relatively small part of its total revenues, mainly concentrated at service stations within the motorway channel in Italy and Switzerland.

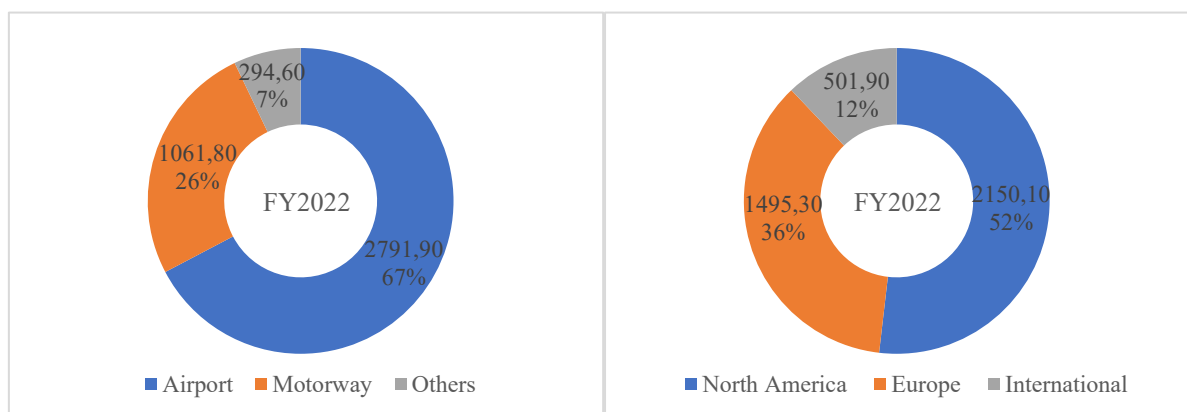
In terms of sales, Autogrill is the global leading operator in the food and beverage (F&B) industry. The company distributes its products through three main channels: airports, motorways, and other channels (which include outlets at railway stations, shopping malls, urban areas, and fairgrounds).

The following picture provides a comprehensive overview of the revenue breakdown for the fiscal year 2022. Airports emerge as the most significant point of sale, contributing 67% of total

turnover. In particular, this channel is particularly developed in North America, where it accounts for 51% of the company's revenues. The motorway channel, on the other hand, accounts for 26% of total revenues and is present only in Europe.

In terms of regional distribution of revenues, North America holds the largest share at 52% of total revenues, while Europe follows closely with 36%.

Figure 24: Autogrill's turnover by channel and region



Sales (millions) FY2022								
North America			Europe			International		
Airport	2.133	51%	Airport	233	6%	Airport	426	10%
Motorway	0	0%	Motorway	1.062	26%	Motorway	0	0%
Other	18	0%	Other	200	5%	Other	77	2%
<b>Total</b>	<b>2.150</b>	<b>52%</b>	<b>Total</b>	<b>1.495</b>	<b>36%</b>	<b>Total</b>	<b>503</b>	<b>12%</b>

Source: personal elaboration based on Autogrill's annual reports

The consolidated income statement and balance sheet have been appropriately reclassified to provide a more accurate representation of the group's operating activities. Net sales and cost of sales (COGS) have been adjusted to exclude figures for the fuel segment, the net amount of which has been reclassified to "other operating income" in accordance with management's outlook on the group's operating activities. In 2022, fuel segment revenues amounted to €313 million, with associated costs of €296.7 million.

It is worth noting that the company is still struggling with the persisting impact of the Covid-19 pandemic, which affected its financial performance in 2020. Despite some signs of recovery, the company recorded a 2019-2022 negative compound annual growth rate (CAGR) in revenues, with a decline of -6%. In 2022, the company's revenue stood at €4.148 million, down from €4.997 million euros in 2019. This unfavourable trend is also evident in the company's EBITDA and EBITA margins, both of which showed a decrease during the observed period.

Figure 25: Autogrill's growth ratios 2019-2022

Growth				
	31/12/2022	31/12/2021	31/12/2020	CAGR 19-22
Revenue	59,7%	30,9%	-60,3%	-6,0%
EBITDA	-4,6%	311,1%	-83,4%	-13,3%
EBITA	-27,9%	130,5%	-230,5%	-34,0%
Net group income	2,9%	95,9%	-322,7%	-144,5%
Invested capital without goodwill	-14,3%	-22,9%	-15,6%	-17,7%

Source: personal elaboration based on reclassified financial statements

Profitability ratios were all negative in 2020, except for EBITDA margin which still decreased compared to the previous year, due to travel and social distancing restrictions of the year. In 2022, however, the profitability generated from core operations shows a 4,3% of ROIC without goodwill and 5,7% of pre-tax ROIC without goodwill.

It is important to note that the company currently maintains negative working capital, as the value of current operating liabilities exceeds the value of current operating assets. This situation, however, should not automatically be interpreted as unfavourable, as negative working capital can lead to excess cash flows when driven by operational efficiency. In essence, this means that the company is able to collect accounts receivable quickly, manage efficiently its inventory, and extend payment times. As a result, this approach allows the company to retain more cash during the period in question.

Although the company uses leverage, this is not excessively high, but it exacerbates the already negative financial result.

Figure 26: Autogrill's profitability ratios 2019-2022

Profitability				
	31/12/2022	31/12/2021	31/12/2020	31/12/2019
ROIC without goodwill	4,3%	4,8%	-12,8%	
Pretax ROIC without goodwill	5,7%	6,4%	-17,0%	
EBITA margin	2,5%	5,6%	-24,2%	7,4%
Revenues/Invested capital without goodwill	224,3%	113,5%	70,3%	
EBITDA margin	15,1%	25,2%	8,0%	19,2%
Trade working capital in days (on revenues):	-18,55	-24,49	-33,21	
- Account receivables	4,18	5,72	8,36	
- Inventory	10,84	14,83	20,98	
- Account payables	-33,58	-45,04	-62,55	

DuPont	31/12/2022	31/12/2021	31/12/2020	31/12/2019
ROE	-2,2%	-3,2%	-84,1%	
Net Profit Margin	-0,5%	-0,8%	-25,4%	
Asset Turnover	100,5%	57,7%	39,0%	
Financial Leverage	4,50	7,12	8,49	

Source: personal elaboration based on reclassified financial statements

The company maintains a well-balanced and stable financial structure with moderate leverage. The NFP/EBITDA ratio suggests that the company has a reasonable capacity to cover its debt obligations with its operating earnings over a span of 2.5 years, with the decreasing trend indicating an ongoing improvement in managing debt effectively. The D/E ratio of 2.2, which remained relatively stable overtime, reflects a medium level of debt compared to equity, contributing to the overall stability of the company's financial position.

Moreover, the EBITDA/Interest ratio indicates that the company is generating operating earnings of 9x the amount of interest expense. This high coverage ratio underscores a robust ability to service interest payments, significantly reducing the risk of financial distress.

Examining the debt composition, in 2022 the company changed its financing strategy towards 40.2% short-term debt that, while providing flexibility, introduces refinancing risks. However, the substantial reliance on long-term debt at 59.8% signifies a commitment to stable financing.

Figure 27: Autogrill's financial health ratios 2019-2022

Financial Health	31/12/2022	31/12/2021	31/12/2020	31/12/2019
<b>Leverage:</b>				
NFP/EBITDA	2,5	2,8	18,6	3,1
Debt/Equity	2,2	2,3	9,1	3,5
<b>Coverage:</b>				
EBITDA/Interest	9,0	6,1	1,3	9,2
<b>Debt composition</b>				
% Short-term	40,2%	15,8%	18,9%	13,9%
% Long-term	59,8%	84,2%	81,1%	86,1%

Source: personal elaboration based on reclassified financial statements

## 2.2 SWOT analysis

### Strengths:

- Autogrill has an extensive brand portfolio that includes approximately 350 brands, including proprietary brands (such as ACafè, Motta, Ciao, Puro Gusto, and Bubbles) and others under licensing agreements with well-known names (such as Starbucks Coffee, Burger King, Prêt à Manger, Chick-fil-A, Panera, Leon, and Panda Express). This variety of brands not only enables the group to secure commercially viable and



profitable locations but also mitigates the company's dependence on a single third-party brand, thereby improving its flexibility in the market.

- The company enjoys strong brand recognition in the F&B industry, which enables it to charge higher prices than its competitors. This is also a valuable asset for maintaining the trust of customers, landlords, and brand partners.
- As of December 31, 2022, the company has secured new contracts and renewals worth €3.4 billion, with an average duration of 6 years. This portfolio of long-term concessions provides revenue stability, reducing the risks of short-term market volatility.

#### Weaknesses:

- In Italy, the widespread use of the Group's name as a reference for motorway rest areas may expose this channel to reputational risks arising from possible shortcomings in competitor's services, which could be wrongly associated with Autogrill.
- The group's dependence on partnerships with local operators in emerging markets, some of whom actively participate in store management, presents a risk that local partners may fail at maintaining the necessary operating standards for quality and service.
- Autogrill's ability to renew existing concessions and secure new ones is critical for its strategic goals. There is a risk that contracts may be less profitable than initially expected, potentially reducing the return on investment. In addition, the grantors have the power to unilaterally change contract terms (such as changing store locations for site renovations) based on public interest or safety considerations.
- The company is over-exposed to a single channel, namely airports, which account for 67% of its revenues, making it vulnerable to fluctuations in air travel and disruptions in the aviation industry.

#### Opportunities (Statista, 2023):

- Autogrill is particularly aligned with the growing trend of offering ready-to-eat and take-out meals but also providing dining areas for on-site consumption for travellers. By partnering with supermarkets or expanding its offerings in high-traffic locations, such as train stations, the company can meet consumer preferences for these meals.
- The expected increase in global food consumption, particularly in low- and middle-income countries, offers Autogrill an opportunity to expand its presence in those regions characterized by economic development, rapid population growth and non-saturation of the market.

#### Threats:

- The current macroeconomic scenario is characterized by a period of high and sustained inflation. High energy costs for gas and electricity, combined with increased raw

material and labor costs, can directly affect Autogrill's operational costs and indirectly impact consumers' travel decisions and spending capacity. Moreover, rising oil prices can result in increased airfares, making travel more expensive and affecting the company's airport business.

- The post-Covid labor market, characterized by a reduced workforce and low unemployment rates, has caused worker shortages in the F&B industry and air transportation. This labor shortage is slowing down the recovery in travel due to the reduced network's ability to absorb demand.

### **3. The travel retail industry**

The duty-free and travel retail industry refers to a specific retail sector involving the sale to travellers of goods that are exempt from certain local or national duties and taxes (Bush, Storey, 2016, p. 7). This privilege normally applies to passengers crossing international borders, but not to domestic trips. Airports represent the primary locations of such sales worldwide, but these shops could also be found on ports, on cruises and ferry vessels in international waters, on aircraft during international flights, on certain international railway stations, and on dedicated downtown stores under the condition of showing proof of travel. It is a highly regulated environment, in which each country has its own customs allowance governing the amount of tax relief and the number of goods that could be imported.

Regarding historical origins, the Irish Shannon Airport claims on its website that it was the first customs-free airport in the world. In 1947 its first duty-free shop started as a small kiosk with one woman, spanning only a few square meters, offering souvenirs and gifts. This pioneering model quickly gained popularity, creating a global retail industry that contributed to both the passengers' travel experience and the aviation and maritime sectors.

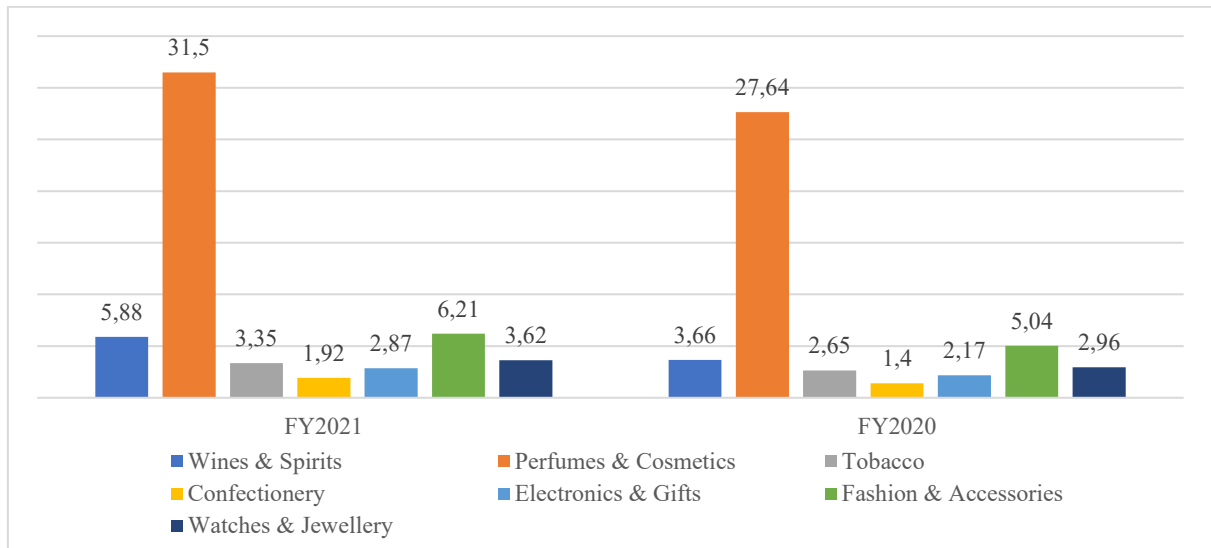
#### **3.1 Market size**

According to Generation Research (Ireland, 2022, pp. 13-14), in 2021 the size of the market amounted to \$55.33 billion in sales. It represents a 22.6% year-on-year increase relative to 2020's level (\$45.15 billion), but still below the industry pick registered in 2019 (\$86.40 billion). Certainly, this indicates the beginning of the global recovery from the Covid-19 pandemic, which had the biggest impact on tourism-related industries caused by the suspension of international travel and closure of borders.

Considering the product categories in Figure 28, the duty-free industry recently changed its focus from a liquor-and-tobacco-oriented market to one dominated by beauty products. Even if in 2020 perfumes and cosmetics sales declined by -28% relative to 2019, this category has been

the lifeline for retailers and brands that were able to access the lucrative Hainan Island market in China. In fact, the Asia Pacific -13% drop contrasted with the difficulties suffered in Europe (-71%), in the Middle East (-65%), and in the Americas (-62%). Moreover, these products continued to drive sales in the aftermath of the pandemic with an increase of +14% in 2021, even if it seems modest compared to the comeback of wines and spirits which registered a climb of +60,6%.

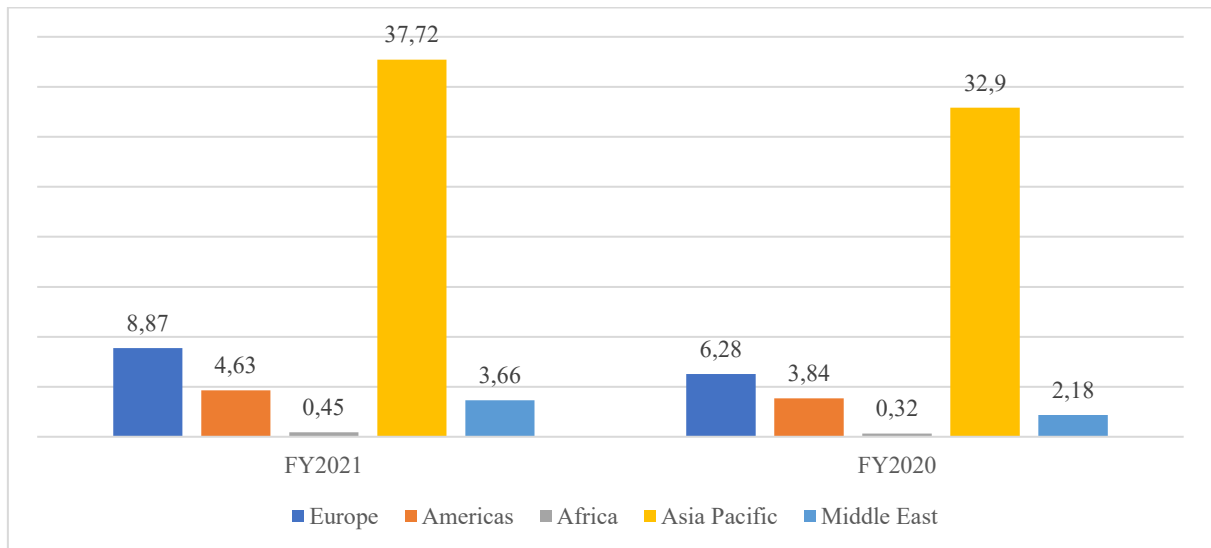
Figure 28: Category performance



Source: personal elaboration of data taken from "DFNI Travel Retail Industry Database & Insights 2022/23"

As Figure 30 shows, in 2021 Asia Pacific maintained its leadership in regional performance capturing a significant 37,72 billion in sales, even though it had imposed some of the strictest travel restrictions. This fact is attributable to the Hainan province duty-free shopping haven, which gained popularity during these years among Chinese domestic travellers. Given the region's resilience during the pandemic, its growth in percentage points compared to 2020 levels (+14,6%) was lower than in other regions where it gained more momentum (e.g., Middle East +67,9% and Europe +41,2%). Based on forecasts, the industry will recover to 2019 levels no earlier than 2024, although the positive performance places the industry on the way to recovery.

Figure 29: Regional performance

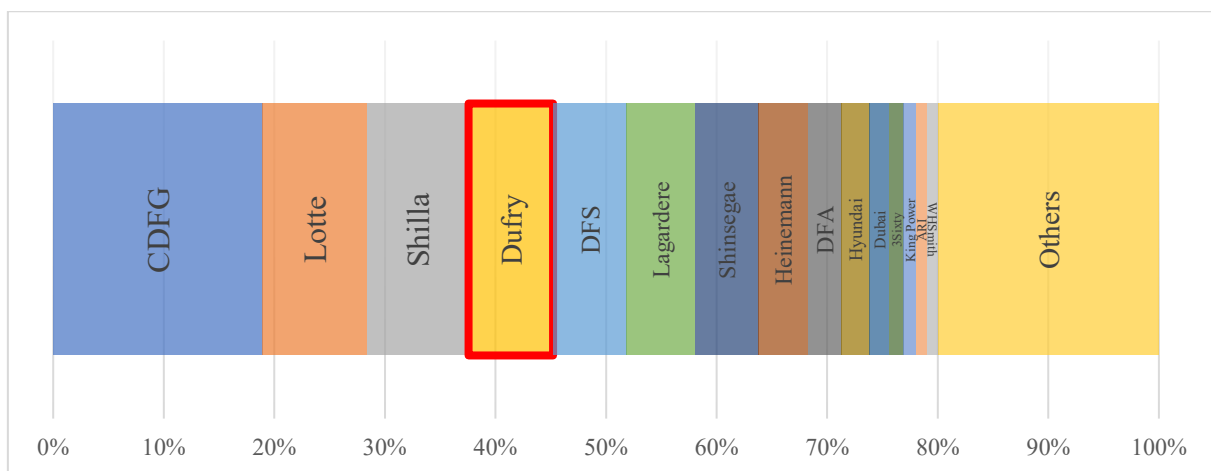


Source: personal elaboration of data taken from "DFNI Travel Retail Industry Database & Insights 2022/23"

### 3.2 Retailers' competitive landscape

Measuring the retailers by their annual turnover, figure 3 displays a relatively fragmented industry with the top five players controlling just over half of global sales and the remaining market consisting of small and medium-sized operators, despite the consolidation seen in travel retail over the last years (Moodie, Davitt, 2022; Ireland, 2022, pp. 15-21). The pandemic significantly affected the industry landscape, as reduced international traffic negatively impacted businesses worldwide. While Europe and US showed signs of recovery in the second half of 2021, many Asian retailers experienced a decline since borders remained closed throughout the year.

Figure 30: Global top 15 travel retailers – FY 2021



Source: personal elaboration of data taken from "DFNI Travel Retail Industry Database & Insights 2022/23"

State-owned *China Duty Free Group (CDFG)* strengthened its position as the largest travel retailer for the second year in a row, capturing a 19% share of the industry. Bolstered by the Hainan Island offshore duty-free business, which it dominates retaining a market share of 91%, its sales of €9.369 million more than doubled that of the second-place finisher. With a strategy of retaining travellers' spending at home, the company has experienced tremendous growth ranking 19<sup>th</sup> in 2010 and doubling its turnover since 2018. From a financial standpoint, in the period 2019-2021, revenue has grown at a CAGR of 18,7% and earnings at a CAGR of 50,8%. The company recently launched a secondary listing on the Hong Kong Stock Exchange to raise \$2.17 billion and unveiled the ambitious Haikou International Duty Free City project, the world's largest duty-free shopping complex.

During the pandemic, *Lotte Duty Free* benefited from a strong daigou business (popular in China, it refers to the practice of reselling in which someone purchases a product abroad on behalf of a Chinese consumer to make a profit), e-commerce sales to sell Korean domestic products to foreign consumers without them having to travel, and government support measures to deplete unsold inventory. Recent highlights include the so-called "flights to nowhere" with duty-free services (which cross foreign airspace without landing and then return to the departure airport), the opening of a three-level boutique in Sydney's Central Business District to pioneer the nation's downtown market, as well as the reopening of its Tokyo Ginza off-airport store in Japan and its outlet in Cam Ranh Airport in Vietnam that were temporarily closed due to the pandemic. However, the company has some big challenges to overcome, including the risk of Chinese authorities abolishing unofficial trade and the exit of several luxury brands from selected downtown duty-free locations.

The same constraints in the home market apply to another Korean retailer, *The Shilla Duty Free* which relies on daigou income and online sales too. The company is particularly focused on the perfumes & cosmetics concessions business, and recently invested in Singapore Changi Airport with the opening of new beauty stores and the launching of its first Fragrance Festival with several partner brands. Another key development is the strategic cooperation agreement with Hainan Tourism Investment Duty Free Shopping (HDTF) to enter the offshore duty-free market. Through this partnership, the two companies will establish a joint venture which involves product and market development, human resources training, and business incubation.

Having been the market leader in the industry for many years, *Dufry* remains among the top five players in 2021 with a turnover of \$4,23 billion, representing an increase of 53,2% on 2020 levels. The company has been able to renegotiate the Minimum Annual Guaranteed rents (MAG) payable with Spanish airports and to keep tighter control on costs which led to a strong

recovery in the year. Because of the strong return of domestic travellers compared to international, sales in the year were driven mainly by duty-paid shopping which has increased their size from 44% in 2020 to 52% in 2021.

Dufry has always depicted the greater driver of consolidation in the industry contributing to the transformation of the sector landscape over the past 17 years. It is currently pursuing one of its biggest deals yet, a merger with the travel food & beverage leader Autogrill Group to create a larger and more diversified group with CHF13,6 billion in revenues and CHF1,4 billion in EBITDA based on 2019 pro forma figures, as well as to provide customers with a holistic travel experience. Dufry evaluated the “addressable market” in which the combined entity will operate at \$115 billion, made of duty-free, duty-paid, and travel F&B channels’ sales (the latter with a size of \$28 billion). In addition, in 2020 the Swiss group has taken a step towards its ambition to grow in the Asia Pacific through a joint venture with Alibaba Group to operate travel retail in China, facilitating the agreement with Hainan Development Holdings to cooperate at the opening of the Global Premium Duty Free Plaza at the Mova Mall complex in Haikou.

#### **4. Expansion into adjacent markets**

Dufry focuses on two key growth pillars: organic growth and mergers and acquisitions. In the area of organic growth, the company continuously increases its global presence by extending existing contracts, winning new concessions, and adding more retail space in existing locations. On the other hand, the group continues to focus on its M&A activity, as it provides the opportunity to make strategic add-on acquisitions in the travel retail sector as well as to access new and adjacent travel-related markets.

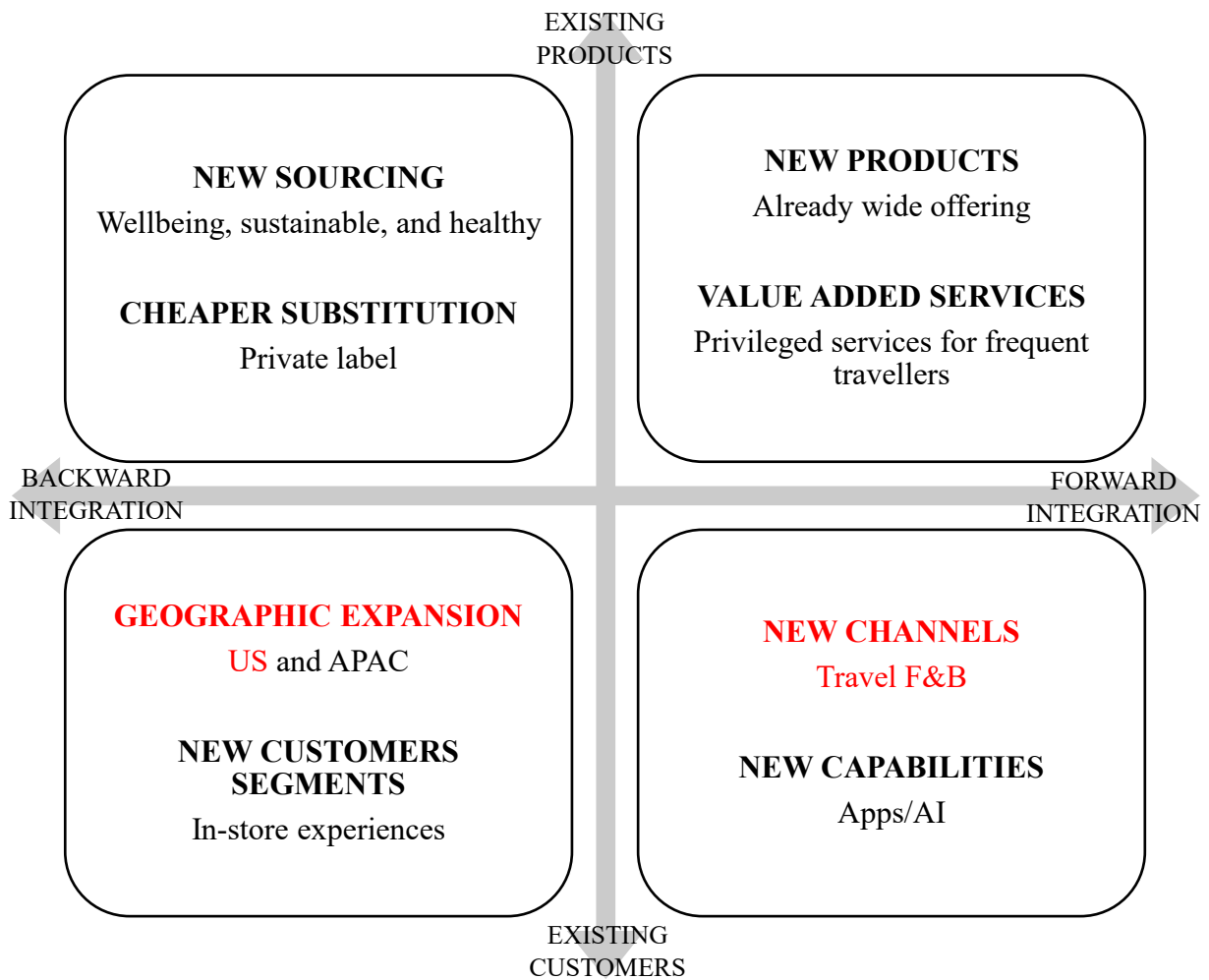
As regards the retail industry, Bain's analysis draws a clear picture regarding the M&A activity in the next years (Bain, 2023, pp. 64-68). In a situation in which traditional retailers are improving their digital capabilities, profit pools are likely to change significantly as players need new sources of revenue from beyond trading activities. Since their traditional business continues to be facing slower organic growth rates, retailers are moving toward new directions to diversify the company’s offerings and revenue streams beyond traditional retail to continue growing. Overall, for the industry such nontrading activities will account for 40% of turnover and more than half of profits by 2030.

In such a context, M&A activity emerges as a pivotal strategy in a balancing act. In the last half of 2022, retailers began to reembrace large-scale deals to establish a local and global leadership position, fostering cost synergies that can finance ventures into adjacent markets which will drive most of the future growth. Companies are taking advantage of the record levels of liquidity

accumulated during the Covid-19 pandemic as well as of the lowest multiples in a decade (also lower than any other major industry) to pursue such deals. Concurrently, they are pursuing scope deals to acquire or merge with other companies that offer complementary products, allowing them to expand their revenue sources beyond their traditional trade business. While in the past two years scope deals were aimed at accelerating the presence of technology for traditional store-first retailers and at developing physical store capabilities for tech-first digital natives, in the coming years the quest for diversifying into higher growth revenue streams could be the driving force behind scope M&A especially when it comes to leveraging an already existent asset.

To understand what the rationale was at the time of Dufry's acquisition decision, one can consider the adjacency map. This is a strategic tool used by companies to identify growth opportunities by visualizing adjacent areas that are closely aligned with the business's existing offering. By exploring related markets or developing related products/services, the potential exists to benefit from synergies by leveraging existing capabilities and customer base. This should not be confused with targeting completely new markets of which one has little or no knowledge, as there is a risk of facing complexities and M&As that are unsuccessful or not valuable to shareholders. Rather, the idea is to export one's skillset to bring value to additional areas with similar characteristics.

Figure 31: Map of adjacencies



Source: personal elaboration

Within its latest annual report, Dufry presented its new strategy “Destination 2027” in which are presented some of the growth paths contained in the adjacencies map (Dufry AG, 2023, pp. 337-378). This plan has been crafted based on a deep understanding of the stakeholders’ needs (including brand suppliers, concession partners, and employees), customer insights, and the current travel retail market trends evolution. It is based on four key pillars: travel experience revolution, geographical diversification, operational improvement culture, and ESG.

Backward integration:

- *New sourcing*: Dufry can consider acquiring or partnering with suppliers in the sourcing of well-being, sustainable, and healthy products to have more control over the supply chain thus ensuring the quality and availability of such products in their stores. With this emerging trend, customer expectations increasingly consider consciousness about the impact on the environment and transparency on how responsible the sourcing is (e.g., desire for local, organic products). By owning or collaborating closely with brand suppliers, the product offering can be aligned with customers’ values and preferences.



- *Cheaper substitution*: as a pure retailer, Dufry does not own any white-label products as cost-effective alternatives to well-known brands. The group could consider managing the development, production, and distribution of these private labels to control costs more effectively and offer travellers more convenient alternatives to established brands.
- *Geographic expansion*: diversification allows for strengthening business resilience and mitigating economic, political, and regional risks by combining initiatives such as organic business development, joint ventures, and M&A. Part of its new strategy is the development of its footprint in the highly attractive and resilient North American market thanks to the business combination with Autogrill. The presence in combined existing locations could offer concession partners new hybrid concepts including F&B and travel retail, allowing them to optimize retail space, passenger flows, and ultimately spend-per-passenger and revenue generation. Second, the joint expertise of both partners on passenger shopping behaviour across the US represents a competitive advantage at the disposal of each airport operator, increasing the group's attractiveness to obtain new locations when participating in concessions tenders.

In addition, part of its strategy includes a strategic focus on expanding its geographical presence in major Asia-Pacific countries, which represent the fastest-growing travel retail market. The key success factor will be the strong engagement with Chinese travellers domestically in China and internationally in neighbouring countries (as APAC accounts for 80% of their international destinations), thus creating a strong presence in this region to best capture the high spending power of this customer segment. Since in 2022 only 2% of Dufry's revenues came from this region whose importance is expected to grow further in the future, it is advisable to continue the trajectory beyond the partnership with Alibaba established in 2020.

- *New customer segments*: customers are showing an increasing interest in seeking experiences and experience-based goods (for example luxury hotels, cruises, and yachts). This trend was already present before the pandemic but had shown high growth rates in the coming years. Curated travel deals are catching the attention of a new emerging persona, the so-called experience seekers, who look for premium and personalized experiences. This creates the opportunity to innovate stores, creating sensory retail experiences with the use of aromas, ambient sounds, and design to create a memorable atmosphere thus extending dwell time and enhancing customer engagement.

Forward integration.

- *New products*: Dufry is not planning to expand the existing product range, as it already has an extensive offer within its product portfolio. Retail space and assortment are dynamically tailored based on the traveller’s needs adding new categories and exclusive products.
- *Value-added services*: this could entail the development of premium services tailored to frequent travellers through the use of the “Red By Dufry” own loyalty scheme. By participating in the program, members can accumulate points with their purchases, thus benefiting from exclusive advantages. For example, for higher levels of membership, the group could offer access to airport lounges or expedited security checks as part of a premium package by partnering with airport operators. This allows to increase conversion of travellers into regular customers and to attract them to the stores.
- *New channels*: in the case of Dufry, this shift towards beyond retail revenue sources takes the form of a “category and format expansion” as the company will expand its offering to travellers beyond just retail goods, bringing together travel retail and travel food & beverage into a single offering. Up to now, only Legardère Travel Retail has provided such broad services offer across duty-free, convenience, and food service (Legardère SCA, 2023, p. 23). The business combination with Autogrill represents the key element to providing customers with a holistic travel experience and generating benefits for concession operators. These advantages are realized through hybrid and mixed formats of shops that broaden the value proposition to customers and generate additional cross-selling and promotional opportunities. This creates a greater attraction for customers and an increased number of touch points and opportunities for engagement, bringing them to visit more shops. Revenue generation can be further optimized by integrating food and beverage locations and retail spaces to optimally match passenger flows and enhance offerings, benefiting airport operators with a simplified space management process.
- *New capabilities*: this could involve Dufry enhancing its digital capabilities through partnerships. With the evolution of its user-friendly mobile app and the incorporation of artificial intelligence, it can transform the shopping experience in-store by providing personalized recommendations and promotions or by implementing self-learning smart stores. This is part of the company’s strategy to provide a seamless experience to its customers.

To understand the business in which the company is currently in and where it should focus from now on, the table below represents the Business Definition Matrix applied to certain segments of the travel retail industry. It represents a strategic framework developed by Bain & Company,

which is useful for gaining strategic insights and making wise decisions (e.g. buying or selling a specific business, expanding into new countries, integrating vertically in the supply chain, etc.). In fact, an incorrect business definition could lead to poor strategic decisions: companies could miss opportunities to seize synergies, incur unnecessary costs, under/overinvest in certain initiatives, neglect relevant geographic areas, and so on. The degree of cost sharing and customer sharing are the primary determinants of defining a business (Zotti, 2023).

Figure 32: Business definition matrix

Cost Sharing	High	<b>One business with the potential for differentiation or niche position</b>	<b>One business</b>	
			Duty-free shop	
		<b>Separate business with the potential for cost leadership</b> Airport, cruises, railways, downtown locations	Duty-paid shop	
		<b>Separate businesses</b> Research publishing Retailing	<b>Separate businesses with the potential for bundling</b> Travel retail Travel F&B	<b>One business with the potential for substitution</b> Private label Retailing
	Low		<b>Customer Sharing</b>	High

Source: personal elaboration

In this case, we use the matrix to check how Autogrill's business fits into Dufry's current offer.

- *Cost sharing: LOW.* One shared cost relates to goods sold related to certain products, which comprise the purchase price and the costs incurred until the products arrive at the warehouse. Another relates to concessions' contracts at common airport locations in the US, as the new entity will have a combined presence at approximately 100 airports. However, Dufry's stores comprise a wide range of products, whereas Autogrill maintains procurement relationships with food and beverage brand suppliers, limiting the cost savings to the latter only. Moreover, although both entities rely heavily on the concession business model, the combined footprint of the two businesses is limited compared to Dufry's approximately 2.300 shops and Autogrill's 3.300 stores across various travel locations.

- *Customer sharing: LIMITED.* In both businesses, the purchasers are represented by the same individuals (those who travel) who can share the shopping occasion within airports and railway stations. However, since Autogrill's operations in Europe relies heavily on the motorways channel, the types of customers are not perfectly aligned. In addition, the two offerings do not possess functional substitution characteristics, but share common customer perceptions (they are both part of the travel experience, and the variety of products makes them a great place for shopping and trying out new brands).

All this, including the plan to create mixed store formats with both duty-free and F&B offerings to attract passenger flow, allows one to conclude that the merger makes sense for the physical and digital cross-selling promotion opportunities that could arise in overlap terminals to create bundled deals or incentives for travellers to engage with both services, thus enhancing the overall customer experience.

The theoretical foundation laid in Chapter 1, sections [3.3](#) and [3.4](#), provides insights into the importance of product relatedness and industry convergence in shaping M&A decisions.

The merger between Dufry and Autogrill, combining travel retail and food & beverage services, aligns with the idea that mergers serve as strategic tools for redefining firm boundaries and consolidating complementary assets under unified control, as articulated by Rhodes-Kropf et al. (2008).

In the particularly fragmented travel retail market where Dufry operates, mergers assume strategic importance for value creation. Expanding on this perspective, Hoberg and Philips (2010) illustrate that acquirers in competitive environments generate value (in terms of announcement returns for both the bidder and the target), when they seek related firms with asset complementarity, thereby enhancing product differentiation from rivals. According to the research, these positive effects persist in the years post-transaction, showing notable increases in profitability (+7.9% after 3 years) and revenue growth (+61.9% after 3 years).

Furthermore, the case study aligns with the value-creating strategy outlined by Brower (2001), focused on transforming an industry through mergers with entities in established industries where boundaries are disappearing. The success of such a strategy depends on management's foresight in anticipating the convergence of these two adjacent sectors: travel retail and travel F&B. This strategic approach draws on the concept of creating a new industry segment through M&As, either to complement or replace existing industries (Sick et al., 2019). This rationale supports the notion presented by Taesoo Jung and Choonseong Leem (2021) that industry boundaries are gradually blurring due to the cross-border phenomenon, allowing companies to bolster their competitiveness by expanding into related sectors. Moreover, the research's categorisation of industry roles within the global landscape resonates with the case study. Travel

service firms, like Dufry, emerge primarily as acquirers, while F&B retail companies, like Autogrill, emerge as targets exerting a substantial influence over the sectors from which they are acquired. This reinforces the strategic foundation of the merger, indicating that the deal may redefine the boundaries of the two industries.

## 5. Ownership choices

Before the merger, Autogrill S.p.A. was under the control of Schema Beta S.p.A., whose ultimate owner was represented by Edizione S.p.A. (the holding company of the Benetton family), with a 50.3% shareholding in the group. The remaining shares were divided, with Moevenpick Holding A.G. holding 26.1% and the public owning the rest as the shares were publicly listed.

After the transaction, according to the shareholding percentages published on the website of the SIX Exchange Regulation AG (2023), since October 28, 2023, Schema Beta S.p.A. holds 23.23% of the shares of Dufry A.G. As indicated in the table below, detailing ownership of Dufry as of November 2023, there are no entities or individuals who possess the ability to exert control over the group in accordance with Article 963, Paragraph 2 of the Swiss Code of Obligations.

Dufry is a publicly traded company characterized by a widely dispersed ownership structure. Notably, various ownership percentages are held by investment funds, including Advent International Corporation, a global private equity firm specializing in international buyouts, as well as the Qatar Investment Authority, the sovereign wealth fund of Qatar, and BlackRock, one of the world's largest investment management firms.

Figure 33: Group's shareholding

Direct shareholder	Controlling entity	Shareholding %
Edizione S.p.A.	Schema Beta S.p.A.	23,23%
Advent International	AI Louvre (Luxembourg) S.a.r.l.	8,72%
Compagnie Financiere Rupert	Richemont Luxury Group Ltd	4,94%
Alibaba Group Holding Limited	Taobao China Holding Limited	4,87%
Qatar Investment Authority	Qatar Holding LLC	4,49%
BlackRock, Inc.		3,93%
Norges Bank		3,21%

Source: SIX Exchange Regulation AG (2023)

In light of this, Autogrill's majority shareholder chose to accept a dilution of its shareholding, moving from having a controlling stake of 50.3% in Autogrill, where ownership was concentrated within Edizione S.p.A., to holding a smaller stake (of 23.23%) in a larger and more diversified group, which is Dufry.

This decision, primarily grounded in business considerations, was thus facilitated by the choices made in terms of ownership. It was a joint decision taken by Autogrill's shareholders and management, in close collaboration with Dufry's top management.

Moreover, in accordance with the Combination Agreement, the parties (Dufry and Schema Beta) entered into a relationship agreement, which provides Edizione's commitment as a long-term shareholder to support the strategy of the merged entity by addressing specific governance matters. Specifically, up to 3 members appointed by Schema Beta must be elected, including: i) an honorary chairperson whose responsibilities involve the coordination of the activities concerning shareholder engagement; and ii) up to two vice-chairpersons who are focused on matters related to the integration of the merging entities.

As of the closing date, two directors designated by Schema Beta were elected (Autogrill Exemption Document, 2023):

- Alessandro Benetton, appointed as honorary chairman, currently holds the position of Chairman at Edizione S.p.A. and serves as a board member of Atlantia S.p.A. Additionally, he is known for founding 21 Invest, a notable player in the Italian private equity industry, serves as chairman of the Benetton Group and was a member of the board of Autogrill S.p.A.
- Enrico Laghi, appointed as vice-chairman, currently serves as the CEO of Edizione S.p.A and as a board member of Atlantia S.p.A. and Abertis Infraestructuras SA. Furthermore, he has a history of serving on the boards of various Italian companies, including Acea S.p.A., Pirelli & C. S.p.A., and UniCredit S.p.A.

Dufry therefore adopted the governance practices of its merger partner, with consequent positive impacts on management oversight and strategic decision-making, as discussed in Chapter 2, section [2.2](#), of the theory.

In line with Miletkov et al.'s (2017) findings, the appointments of Alessandro Benetton and Enrico Laghi, who have extensive experience on the boards of Italian and international companies, can significantly enhance the quality of the merged entity's board by importing superior governance standards from a foreign country known for its strong legal framework.

Furthermore, the group's shareholders may be interested in governance arrangements to guide management behaviour by addressing potential conflicts of interest. Breuer et al. (2020)

demonstrated that a more effective institutional framework has a positive influence on the acquiring firm's long-term performance, with these effects lasting up to three years after the announcement.

The significance of the institutional and legal environment across different countries for value creation is further underscored by Maung et al.'s (2019) research. Their study showed that foreign acquirers are willing to offer higher premiums for target firms located in countries with a better investment environment index, potentially resulting in increased value for the target firm's shareholders.

Hence the literature around this topic allows one to conclude that a cross-border transaction driven by corporate governance considerations can yield mutual benefits. On one hand, it can result in higher premiums, even in comparison to a similar domestic acquisition (as evidenced by Bris et al. 2008), and, on the other hand, it can enable the new group to adopt and benefit from enhanced governance standards.





## CHAPTER 4. Values at stake

### 1. Structure of the transaction

The potential merger between Autogrill and Dufry was publicly disclosed on April 19, 2022, through a press release by Autogrill in response to rumours circulated by Bloomberg. This announcement date is crucial for calculating cumulative abnormal returns (CARs) in [paragraph 2 of this chapter](#), marking the day of the information leakage.

Figure 34: Bloomberg press release

#### **Dufry Explores Combining With Benetton's Autogrill**

- Duty-free giant, billionaire clan are said to explore a deal
- Benetton family would be top investor in combined entity

By Tommaso Ebhardt

19 aprile 2022 at 16:13 CEST

Updated on 19 aprile 2022 at 17:51 CEST

Source: Bloomberg

The merger, categorized as a "merger of equals", unfolded in two stages (Autogrill Offer Document, 2023).

The initial step involved Edizione contributing its 50.3% stake in Autogrill in exchange for Dufry shares, entering into both the Relationship Agreement (which defines the main rights and governance mechanisms) and the Combination Agreement (which outlines the terms of the share transfer contingent upon antitrust and shareholder approvals, as well as lender consent under Dufry's existing debt facilities). Furthermore, the latter incorporates a Material Adverse Change (MAC) provision benefiting both shareholders, enabling them to terminate their contractual obligations in the face of unforeseeable extraordinary events (such as political, financial, economic, etc that could have detrimental effects either on Dufry or Autogrill).

Prior to the signing of the Combination Agreement, which occurred on July 11, 2022, a comprehensive due diligence process took place in the period from April to June 2022, which involved the review of financial, accounting, legal, and tax information to identify potential synergies and risks that could have jeopardized the success of the deal.

In the period between the signing and the closing (or "interim period") Dufry held an extraordinary shareholders' meeting on August 31, 2022, to approve the creation of additional conditional capital, utilized for the issuance of non-interest-bearing convertible notes to Schema Beta. These instruments, convertible into Dufry shares, constitute part of the consideration for the transfer.

Moreover, all conditions precedent to the transfer have been satisfied within this timeframe, including obtaining regulatory approvals and securing consents from lender under Dufry's term and revolving credit facilities.

As a result, on the closing date of February 3, 2023, the parties successfully completed the transfer, exchanging 193,730,675 Autogrill shares (equivalent to approximately 50.31% of its share capital) for 30,663,329 Dufry shares, based on a mutually agreed exchange ratio of 0.15827813. These terms consider the valuation of Dufry shares at F40.96 (€39.71) and Autogrill shares at €6.33 (F6.53) determined by the 3-month VWAP (Volume-Weighted Average Price) on the undisturbed pre-leak date (April 14, 2022), that is, the last trading day before rumours emerged regarding a potential combination.

On the same date, Edizione converted the notes into Dufry stocks, securing a 25.238% in its share capital. Thus, Edizione joined the combined group as long-term shareholder, formalized by entering into a lock-up agreement for a duration of two years following the closing of the transaction.

Prior to the closing date, Schema Beta additionally purchased 2,700,000 Dufry shares from the market, establishing a stake of approximately 27.47% in Dufry's share capital. Concerning control, it's important to note that Schema Beta's voting rights are restricted to 25.1% of the share capital, preventing any entity from exerting control over the parent company.

However, this percentage has later adjusted to the current 23.23%, reflecting the acceptance level of the second phase and thus the choices made by Autogrill shareholders who opted for the cash alternative consideration over the share consideration.

Dufry formally communicated to CONSOB the fulfilment of the legal prerequisites for the second step, which involves the launch of a Mandatory Tender Offer (MTO) with the objective of delisting Autogrill. This move aims to accelerate the realization of the business integration goals inherent in the transaction, facilitating the rapid achievement of synergies.

The scope of the procedure concerns 190,705,567 Autogrill shares, constituting 49.53% of its share capital, which are listed on the Euronext Milan Stock Exchange. This encompasses all the remaining shares, except for the 50.31% currently owned by Dufry and the 0.16% held as treasury shares. Thus, the offer exclusively targets Italian shareholders.

The Tender Period, agreed upon with Borsa Italiana, covers 24 trading days, starting on April 14, 2023, and ending on May 18, 2023, and has been reopened for an additional 5 trading days for the period from May 26 to June 1, 2023.

Dufry agreed to provide Autogrill shareholders participating in the offer with a share consideration equivalent to 0.1583 newly issued shares of the offeror, each with a nominal value of F5.00, for each Autogrill share tendered. Additionally, since the offered shares are traded on

a non-EU regulated market (the SIX Swiss Exchange), Autogrill shareholders expressing a preference for cash are offered an alternative cash consideration of €6.33.

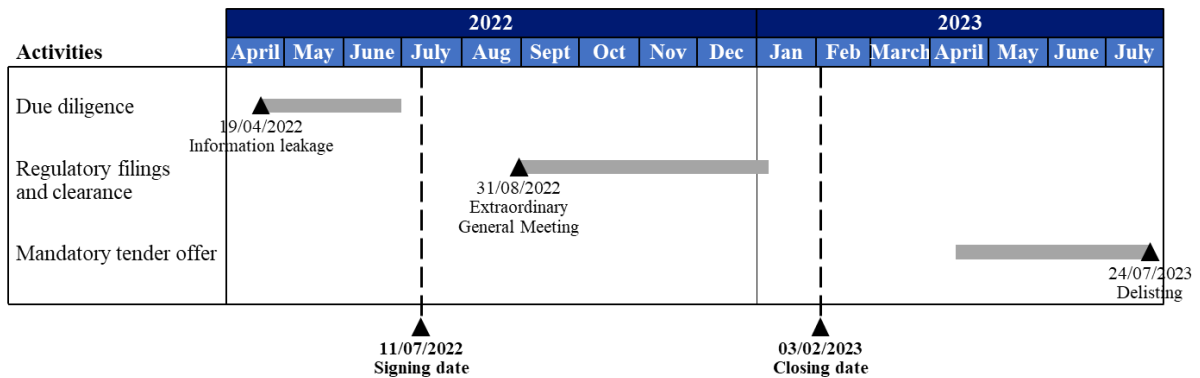
The MTO thus aligns with Article 106 of the CFA, stipulating that the stake in the combined group must be offered on the same terms presented to Edizione. This implies a price equal to or higher than the price paid by the bidder for Autogrill shares in the 12 months preceding the offer.

Under the terms negotiated, in a situation where all participating shareholders chose a share transfer, it would necessitate the issuance of 30,188,692 Dufry shares through the proposed capital increase. The offered shares, possessing equivalent rights to existing ones, will be listed on the SIX Swiss Exchange. Conversely, if shareholders opted for a cash payout, tendering shareholders would receive in total a maximum disbursement of €1,207 million, sourced from Dufry’s available liquidity and additional financing (the bridge loan).

Ultimately, Dufry will be exclusively listed on the SIX Swiss Exchange, as Swiss regulations preclude double listing in another European country. The delisting of Autogrill occurred automatically on July 24, 2023, as Dufry held 100% of Autogrill, exceeding the 90% threshold (Moody’s Analytics, 2023).

To facilitate understanding of the process, a Gantt chart has been crafted, which is presented in the figure below.

Figure 35: Gantt chart



Source: personal elaboration

The case study involving Edizione's transfer of its Autogrill stake to Dufry provides a practical illustration of the theoretical framework that delineates the typical M&A process presented by DePamphilis (2022).

The merger involved a comprehensive due diligence process, reflecting the typical approach where bidders access a data room containing relevant financial, commercial, and legal details about the target. Conducted from April to June 2022, this activity facilitated the validation of

preliminary valuations, identification of synergies, and detection of potential deal breakers. Transaction structuring activities, encompassing decisions on ownership, legal structure, and payment arrangements, were undertaken prior to the formalization of the Combination Agreement. It is essential to note that, even though not explicitly mentioned, due diligence and structuring activities often overlap with negotiations.

Concerning the closing phase, the Combination Agreement among Edizione, Dufry, and Autogrill delineated the share transfer terms, underscoring the significance of determining the purchase price. This exchange, contingent upon antitrust and shareholder approvals, was grounded in an exchange ratio negotiated between the parties. Additionally, the Relationship Agreement established governance mechanisms, highlighting the importance of specifying terms and rights in a merger involving a shares swap. The Material Adverse Change (MAC) provision aligned with the theoretical emphasis on safeguarding parties from unforeseeable events, giving them the right to terminate the agreement in the face of extraordinary events that could adversely impact either party, thus ensuring flexibility in the deal structure.

## **2. Event study**

Event studies serve as a method to assess how much value has been created, particularly in the context of mergers and acquisitions. The underlying idea involves examining the impact of a transaction announcement on the acquirer's and target's share price, reflecting the perceived value creation by the market. Focusing on a short-term timeframe, the event study thus seeks to capture the extent of price fluctuations during that period.

The specific event under investigation in this paragraph relates to market returns following the information leak about the potential combination between Autogrill and Dufry on April 19, 2022. After obtaining historical market prices (Yahoo Finance, 2023), here is a brief overview of the different steps implied.

1. Initially, the analysis involved assessing both the firms' stock returns and the reference index returns by calculating the percentage change in market prices for each trading day.
2. Subsequently, to determine the expected return, accounting for the firm's recent performance ( $\alpha$ ) and its sensitivity to market movements ( $\beta$ ), a "single index model" regression of the firms' returns was conducted onto the market returns during a pre-event period. The  $\alpha$  and  $\beta$  values were obtained using the "intercept" and "slope" formulas in Microsoft Excel, considering returns for one year leading up to 10 days before the announcement.

3. By applying the firms' alpha plus the firm's beta multiplied to the market index return, the expected returns during the event window (i.e., 20 days around the date of the information leak) were calculated.

The formula used was the following:

$$E(r) = \alpha + \beta * r_m$$

4. Abnormal returns were derived by subtracting the expected returns from the actual returns of the firm's stock throughout the event window. This process allows for an analysis of daily changes compared to market expectations, the ones predicted if the firm followed general market movements and the announcement had never occurred.
5. Cumulative abnormal returns (CARs) were then calculated by summing all abnormal returns. CARs represent the total market returns earned by a specific firm that are not attributable merely to ordinary market conditions. They are run over a certain period, typically spanning 2 days before to 2 days after the announcement for a 5-day CAR.

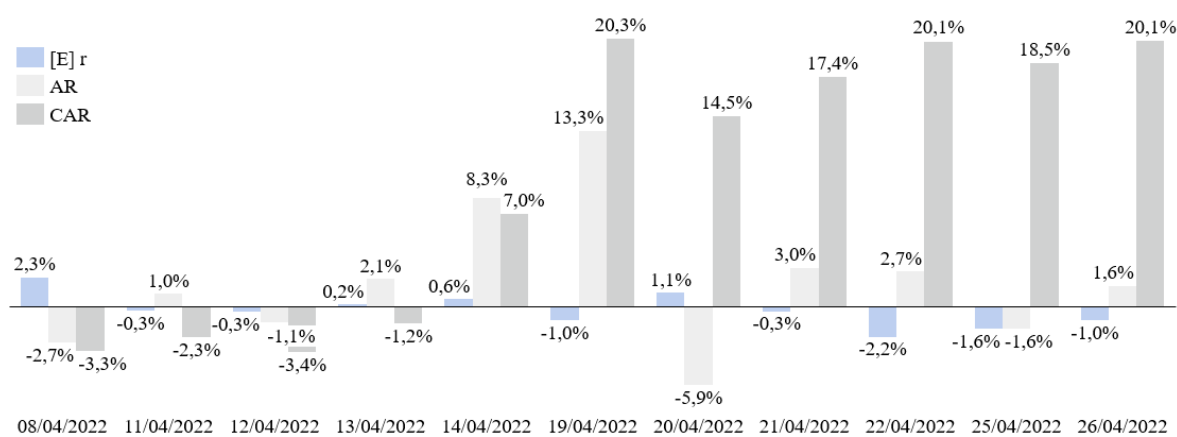
The following figure illustrates the event study's analysis for the target, encompassing stock prices and returns for both Autogrill and the FTSE MIB on various dates surrounding the announcement. The FTSE MIB serves as the primary stock index for the Italian equity market, representing the performance of the 40 most liquid and capitalized stocks listed on the Borsa Italiana Stock Exchange.

In the regression analysis of Autogrill's returns against the market index, the estimated parameters are as follows:

- The intercept ( $\alpha$ ) is 0,0001;
- The slope ( $\beta$ ) is 1,059;
- The R-square is 0,300 and represents the proportion of variance in Autogrill explained by the variance in FTSE MIB, with a value between 0 and 1;
- The standard error, which denotes the standard deviation of the abnormal return, is 0,021.

Figure 36: Autogrill's abnormal returns

Date	Price		Return		[E] r	AR
	AGL	FTSE MIB	AGL	FTSE MIB		
01/04/2022	6,07	25163,30	-1,04%	0,57%	0,61%	-1,66%
04/04/2022	6,04	25175,86	-0,46%	0,05%	0,06%	-0,52%
05/04/2022	5,95	24960,38	-1,46%	-0,86%	-0,90%	-0,56%
06/04/2022	5,88	24447,36	-1,24%	-2,06%	-2,17%	0,92%
07/04/2022	5,92	24302,71	0,61%	-0,59%	-0,62%	1,23%
08/04/2022	5,89	24819,15	-0,44%	2,13%	2,26%	-2,70%
11/04/2022	5,93	24749,49	0,75%	-0,28%	-0,29%	1,03%
12/04/2022	5,85	24667,27	-1,48%	-0,33%	-0,34%	-1,14%
13/04/2022	5,99	24722,16	2,39%	0,22%	0,25%	2,15%
14/04/2022	6,52	24862,35	8,89%	0,57%	0,61%	8,28%
<b>19/04/2022</b>	<b>7,32</b>	<b>24624,41</b>	<b>12,30%</b>	<b>-0,96%</b>	<b>-1,00%</b>	<b>13,31%</b>
20/04/2022	6,97	24878,23	-4,78%	1,03%	1,10%	-5,88%
21/04/2022	7,16	24805,62	2,70%	-0,29%	-0,30%	3,00%
22/04/2022	7,19	24279,63	0,45%	-2,12%	-2,24%	2,68%
25/04/2022	6,96	23908,55	-3,23%	-1,53%	-1,61%	-1,62%
26/04/2022	7,00	23681,76	0,63%	-0,95%	-0,99%	1,63%
27/04/2022	6,86	23830,11	-2,09%	0,63%	0,67%	-2,76%
28/04/2022	6,87	24055,56	0,18%	0,95%	1,01%	-0,84%
29/04/2022	7,12	24252,16	3,61%	0,82%	0,88%	2,73%
02/05/2022	6,94	23857,23	-2,50%	-1,63%	-1,71%	-0,79%
03/05/2022	7,04	24242,25	1,50%	1,61%	1,72%	-0,22%



Source: personal elaboration

Market movements generally align with the market index, yet some variations exist. Notably, Autogrill shares experienced a significant surge, marking a 13.3% increase on April 19, 2022. This is attributed to Bloomberg news disclosing Dufry's exploration of a potential merger with the Italian group, indicating a positive reaction to the information leakage. On that specific day, the t-test, calculated as the abnormal return divided by the standard error, equals 6,24. This value is compared to a Student's t-distribution with 255 degrees of freedom.

The resulting p-value, indicating the credibility of the result, is 0. Consequently, the abnormal return is significantly different from 0 at the 1% significance level.

This corresponds to a 20.3% CAR for the period [-10; 0], influenced by the +8.28% abnormal return on the preceding trading day. This suggests that the market might have been aware of the information even before the official news.

However, on the subsequent trading day, a potential correction to the initial positive reaction was registered, with a considerable negative abnormal return of -5,88%.

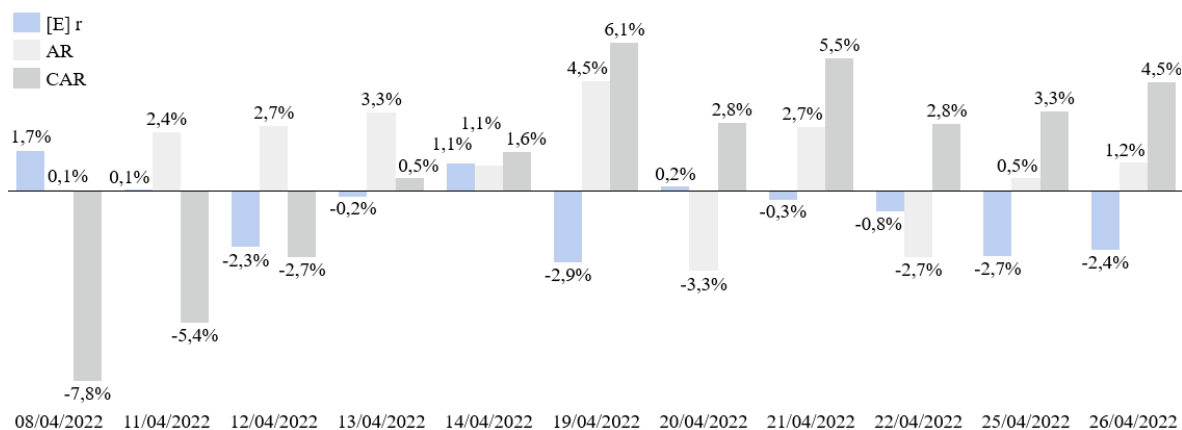
Similarly, the following figure presents the event study for the bidder, encompassing stock prices and returns for both Dufry and the Swiss Market Index (SMI) on various dates surrounding the announcement. The SMI represents the performance of the 20 largest and most liquid stocks listed on the SIX Swiss Exchange, commonly used by investors as a benchmark to assess the overall performance of Swiss equities.

In the regression analysis of Dufry's returns against the market index, the estimated parameters are as follows:

- The intercept ( $\alpha$ ) is -0,002;
- The slope ( $\beta$ ) is 1,739;
- The R-square is 0,252 and represents the proportion of variance in Dufry explained by the variance in SMI, with a value between 0 and 1;
- The standard error, which denotes the standard deviation of the abnormal return, is 0,026.

Figure 37: Dufry's abnormal returns

Date	Price		Return		[E] r	AR
	DFY	SMI	DFY	SMI		
01/04/2022	38,75	12.179,08	-0,92%	0,14%	0,03%	-0,95%
04/04/2022	38,84	12.340,87	0,23%	1,33%	2,09%	-1,86%
05/04/2022	38,02	12.376,97	-2,11%	0,29%	0,29%	-2,40%
06/04/2022	37,06	12.320,10	-2,52%	-0,46%	-1,02%	-1,50%
07/04/2022	36,80	12.372,46	-0,70%	0,42%	0,52%	-1,22%
08/04/2022	37,45	12.507,69	1,77%	1,09%	1,68%	0,09%
11/04/2022	38,38	12.528,61	2,48%	0,17%	0,07%	2,42%
12/04/2022	38,53	12.378,87	0,39%	-1,20%	-2,30%	2,69%
13/04/2022	39,70	12.378,68	3,04%	0,00%	-0,23%	3,26%
14/04/2022	40,57	12.475,08	2,19%	0,78%	1,13%	1,06%
<b>19/04/2022</b>	<b>41,22</b>	<b>12.281,42</b>	<b>1,60%</b>	<b>-1,55%</b>	<b>-2,92%</b>	<b>4,53%</b>
20/04/2022	39,94	12.310,17	-3,11%	0,23%	0,18%	-3,29%
21/04/2022	40,86	12.301,33	2,30%	-0,07%	-0,35%	2,65%
22/04/2022	39,41	12.258,33	-3,55%	-0,35%	-0,83%	-2,72%
25/04/2022	38,56	12.084,98	-2,16%	-1,41%	-2,68%	0,53%
26/04/2022	38,09	11.933,28	-1,22%	-1,26%	-2,41%	1,19%
27/04/2022	38,46	12.051,48	0,97%	0,99%	1,50%	-0,53%
28/04/2022	38,96	12.068,41	1,30%	0,14%	0,02%	1,28%
29/04/2022	39,41	12.128,76	1,16%	0,50%	0,65%	0,51%
02/05/2022	39,11	11.971,73	-0,76%	-1,29%	-2,48%	1,71%
03/05/2022	39,96	12.001,88	2,17%	0,25%	0,21%	1,96%



Source: personal elaboration

On the event date, a substantial positive abnormal return of 4,53% is observed, indicating a positive reaction by market participants to the potential combination. This positive reaction is not solely due to an outstanding performance by Dufry, which registered a +1.60%, but rather because the market was anticipating the company to exhibit a negative performance of -2.92%. On that specific day, the t-test equals 1,76. This value is compared to a Student's t-distribution with 255 degrees of freedom. The resulting p-value, indicating the credibility of the result, is



0,08. Consequently, the abnormal return is significantly different from 0 at the 10% significance level.

The outcomes of the event study, as depicted below, are consistent with DePamphilis's (2022) framework which delineates a notably positive cumulative impact for both parties around the announcement date of a merger or an acquisition. The literature further emphasizes that this impact is typically more pronounced for the target company's shareholders, contrasting with the marginal or slightly positive effect observed for the acquiring company's shareholders.

Figure 38: Cumulative abnormal returns

Autogrill			Dufry		
Variable	Return	P-value	Variable	Return	P-value
<b>CAR (-2;+2)</b>	20,85%	0,000***	<b>CAR (-2;+2)</b>	8,21%	0,155
<b>CAR (-5;+5)</b>	20,73%	0,004***	<b>CAR (-5;+5)</b>	12,40%	0,147
<b>CAR (-10;+10)</b>	18,27%	0,063*	<b>CAR (-10;+10)</b>	9,41%	0,426

Note: \*\*\* significant at 1% level; \*\* significant at 5% level; \* significant at 10% level

Source: personal elaboration

In the case of Autogrill, identified as the target, the cumulative abnormal returns span from 18.27% for the 20-day CAR to 20.85% for the 5-day CAR. All these results are characterized by high statistical significance, suggesting a robust and immediate market response to the event. On the other hand, Dufry, identified as the bidder, exhibits CARs ranging from 8.21% for the 5-day CAR to 12.40% for the 10-day CAR. Notably, these results are not statistically significant despite the 10-day CAR's p-value approaching the 10% level, suggesting caution in interpreting these results.

The existing literature argues that the announcement of a deal creates a surge in the target's share price, signalling an expected takeover premium, while recognizing that the acquirer's share prices may not register such increases. As a result, it can be inferred that while positive CARs for Autogrill are in line with expectations, those for Dufry exceed expected levels. These findings lead to the conclusion that shareholders have responded positively to the potential merger, indicating an anticipation of synergies and value creation.

The following will attempt to explain this phenomenon, referring to the papers presented in the theory.

According to Moeller et al. (2004), who identified a size effect in mergers, larger acquiring companies tend to yield lower abnormal returns compared to smaller ones. The study attributes the difference in abnormal returns to the decision-making process of large companies,

characterized by managerial hubris, resulting in offering higher premiums and leading to a risk of overpayment relative to synergies.

Alexandridis et al. (2013) found a negative association between the size of the target and the premiums offered, indicating that in larger transactions, the risk of overpayment by the acquiring firm is reduced. However, this paper also notes that these transactions often result in greater value destruction for acquiring shareholders due to the complexity of integrating large companies.

The theoretical expectation contrasts with Dufry's abnormal returns, prompting a deeper exploration of factors influencing shareholder reactions. Key to understanding why the market reacted so positively to the potential merger with Autogrill is the contribution of Hu et al. (2020), which highlighted the role of acquirer experience in mega-deals. The study revealed that companies with a considerable track record in completing transactions are more likely to create value. In the context of the Autogrill-Dufry case, the positive CARs may be attributed to Dufry's experience in dealing with M&As, suggesting a perception of strategic competence by Dufry.

The significance of managerial ability, highlighted in studies such as Chen et al. (2017), is a crucial factor in cross-border mergers. Their study found that deals led by highly capable managers, like Xavier Rossinyol, the current CEO of the group, tend to generate not only significant positive reactions around the announcement date, with a 0.7% higher CAR, but also exhibit greater long-term performance over a one-year horizon, outperforming their counterparts by approximately 12.2%.

This role is further emphasized by the findings of Cui et al. (2020), which suggest the sector-specific importance of managerial competencies in influencing the performance of M&As. Notably, the research suggests that superior managerial ability is particularly impactful in horizontal acquisitions, highlighting the significance of competencies specific to the industry. This aligns with the Autogrill-Dufry merger, where Rossinyol's extensive experience in the Food & Beverage industry, including his roles as former CEO of Gategroup and Areas SA (both providing catering services), likely played a crucial role in identifying a suitable target and positions him as a manager capable of navigating post-merger integration and realizing synergistic benefits.

The importance of sector-specific knowledge is deepened by the insights provided by Fich et al. (2020), who specifically focus on the value of acquirer CEOs having prior experience in the supply chain of the target industry. Such executives, like Rossinyol, can mitigate the challenges associated with asymmetric information in identifying suitable targets when engaging in cross-border transactions. This positive correlation suggests that executives with this expertise are

better equipped to negotiate favourable terms, reduce the risk of inaccurate valuation, and execute higher-quality deals.

Therefore, the Autogrill-Dufry merger highlights the critical role of experienced managers, whose capabilities significantly influence the value creation potential of the transaction.

Shifting the focus to country familiarity, it is crucial to consider that Autogrill is an Italian company and Dufry is Swiss, introducing potential cultural and geographic differences that influence cross-border mergers and acquisitions.

Research by Ahern et al. (2015) emphasizes that companies in countries frequently trading and sharing geographic proximity are more likely to engage in cross-border M&As. The study suggests that the common cultural values between Italy and Switzerland may contribute to higher combined abnormal returns, underscoring the potential positive impact of familiarity.

In the absence of proximity, its negative effects can be mitigated by certain firm characteristics. Indeed, large, well-managed, and experienced acquirers, such as Dufry, are believed to possess the necessary resources to effectively manage cultural issues associated with cross-border transactions (Boateng et al., 2019).

Furthermore, as highlighted by Kedia et al. (2016), linguistic differences can have a significant negative effect on post-acquisition performance. Potential language disparities between Italian and Swiss-German may have posed a barrier to the deal. However, bidder's transaction experience can positively moderate these effects, suggesting that firms with cross-border transaction expertise, like Dufry, may navigate language barriers more effectively.

In essence, these studies underscore the importance of cultural alignment and familiarity between countries in determining the value creation potential for cross-border M&As. While Autogrill and Dufry represent distinct nationalities, their potential European proximity and specific firm attributes may contribute to mitigating the challenges associated with cultural differences in the event of a merger.

Another critical issue in mergers is the choice of transaction consideration. Despite the market's preference for cash-financed transactions, cross-border mergers may exhibit unique characteristics favouring equity payments. Dutta et al.'s (2013) study found that the market favours equity-financed cross-border M&As over cash-financed ones, at least in the short run (with a higher 3-day CAR of 7,5%). However, the initial enthusiasm fades in the long run, with significant negative corrections in the 3-year abnormal returns, indicating that market participants initially overestimate synergies. This may be why Dufry's abnormal returns are so high relative to expectations and could potentially correct negatively if long-term operational improvements are not realized.

Product-relatedness, as discussed in [Chapter 3, paragraph 4](#), is another factor contributing to value creation. It's essential to reconsider the findings of Hoberg and Philips (2010) for the event study's purposes. Their research indicates that the highest combined abnormal returns for both acquiring and target firms occur when a company operating in a competitive market merge with another in a less competitive sector. The motive behind this is to broaden the product portfolio, setting the acquiring firm apart from competitors. Positive outcomes persist post-transaction, with significant improvements in profitability (a +7,9% increase after 3 years) and revenue growth (+61,9% after 3 years). This suggests that the market tends to reward acquirers, like Dufry, seeking related firms with asset complementarity, fostering product differentiation from competitors.

In essence, the interplay of the acquirer's experience, managerial ability, cultural familiarity, the use of stock, and product relatedness of the target firm has resulted in positive cumulative abnormal returns for the bidder, Dufry, contributing to the overall success and value creation of the merger.

Consistently, challenging the conventional notion that developed acquirers generally lose shareholder wealth, a recent paper by Otto et al. (2021) revealed consistent findings. In fact, the results of their research, involving 624 transactions from 1997 to 2015, suggest that publicly traded developed countries bidders tend to earn higher abnormal returns when announcing cross-border deals compared to domestic ones.

### **3. Evaluation of the deal**

A crucial aspect of the analysis revolves around the M&A economics, wherein the impact of a merger on the bidder's share price is examined based on negotiated terms for the target's share price (Buttignon, 2023).

The evaluation of the economic value of Dufry and Autogrill's capital adheres to national and international best valuation practices, employing the market share price method. This method assigns a value to a company equivalent to its market-traded share value, assuming market efficiency.

The market share price is especially pertinent for listed companies with substantial capitalization and trading volumes, and its reliability is strengthened by equity research analysts' coverage providing ongoing valuation guidance. Moreover, the methodology gains significance when referencing prices remain uninfluenced by speculation or extraordinary transactions, necessitating the consideration of an average stock price over an extended and volatility-free period.

Prior to the undisturbed date, these conditions were met for both Dufry and Autogrill, given their substantial market capitalizations, regular coverage by financial institutions' equity research departments, and robust daily trading volumes that ensured liquidity of the respective shares.

Consequently, the exchange ratio in the negotiations for the combination agreement was calculated in the 3-month VWAP of Autogrill and Dufry shares, which reflects the weighted average of daily closing stock prices in relation to daily traded volumes.

In the following model, the stock prices forming the basis for negotiation have been incorporated, amounting to F 40.96 for Dufry and F 6.53 for Autogrill (converted daily from € to F using the spot EUR/CHF FX rate). Multiplying these prices by the respective outstanding shares yields the Equity Value of the companies, approximately F 3.7 billion for the bidder and € 2.5 billion for the target.

In determining the price, the increase in value resulting from the combination is considered, reflecting synergies related to the exploration of growth options beyond current management practices. Valued from Dufry's perspective, the discounted potential synergies (net of integration costs) amount to approximately F 160 million<sup>3</sup>.

In fact, the new group's goal is to increase efficiency, innovate and grow through the realization of synergies identified in the following specific areas:

- Optimization of COGS in travel F&B and convenience segments, as well as synergies in Europe and RoW related to assortments in the travel retail channel, thus contributing to the improvement of gross profit.
- Cost reduction of support functions through optimization of staffing, including shared service centres, rationalization of common non-business and business-related OPEX, and optimization of overhead and back-office expenses in shared locations.

The new group anticipates realizing full run rate synergies of F 85 million from 2025 to 2027 at the operating FCF level, with the first two years after closing (2023 and 2024) seeing synergies totalling F 70 million absorbed by integration and transaction costs of about F 200 million.

Indeed, integration costs cover retraining and retention, severance payments, integration support, and IT system integration, estimated at around F 100 million. Transaction costs, which include fees and financing costs, are quantified at approximately F 100 million. It is important

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<sup>3</sup> Dufry management's estimate of synergies was discounted to provide a more precise estimate of their effect. See the following part of the DCF model to see how it was calculated.

to note that the latter costs are expensed out of equity free cash flow (Autogrill Exemption Document, 2023).

Figure 39: M&A economics

			Combined	
	Dufry	Autogrill	Stock deal	Cash deal
<b>Price per share pre-deal (CHF)</b>	<b>40,96</b>	<b>6,53</b>		
Shares outstanding (ml)	90,19	381,85	150,62	90,19
Equity value (ml)	3.694	2.493		
Synergies (net of integration costs)		160		
Transaction costs		-100		
Bid Premium	-0,7%	-18		
Equity price		2.476		
Equity value post deal			6.248	3.772
<b>Target price per share</b>		<b>6,48</b>		
<b>Exchange ratio</b>		<b>0,1583</b>		
<b>Price per share post deal</b>			<b>41,48</b>	<b>41,83</b>
Own (B)			59,87%	100,00%
Own (T)			40,13%	0,00%
Shareholders value added (SVA)			178	178
Shareholders value at risk (SVAR)			-0,29%	-0,49%
Net income (MI)	121	-20		
P/E ratio	1,34	-0,05		
Net income change			25	-132
Net income post deal			126	-31
EPS	1,34	-0,05	0,83	-0,35
Accretion/Dilution			-37,60%	-125,95%
P/E ratio			49,71	-120,54
Synergies (annual)	32,1			
Cost of debt	8,1%			
Tax rate	22,0%			

Source: personal elaboration

Typically, to acquire the target, the bidder should offer more than the simple equity value, thus offering a premium. This is done to convince the controlling shareholder to sell rather than retain control, which otherwise would be with the expectation of potentially selling to another counterparty for a higher value in the future. However, in this case, the negotiated exchange ratio results in an implied price per share for Autogrill of F 6.48, indicating a negative bid premium of -0.7%.

In the model's right section, the outcomes for the combined entity are presented. The bidder is set to pay F 2,476 million for a company valued at F 2,654 million (equity value of F 2,493 million plus F 160 million of synergies). This results in an expected value increase for the bidder of F 178 million, representing the shareholder value added (SVA). By definition, this constitutes a favourable deal, as the value of synergies exceeds the bid premium.

In a stock deal, as observed in this case, assuming that all remaining shareholders opt for the share consideration in the MTO procedure, the bidder will have to acquire approximately 60.44 million shares, totalling 150.62 million shares for the combined group. The post-deal equity value would be the sum of the equity value of both entities, the value of synergies, and of transaction costs, amounting to F 6,248 million. Consequently, the expected price per share after the deal realization would be F 41.48.

Regarding ownership of the combined entity, the bidder's shareholders would hold 59.87%, while the target's owners 40.13%.

Therefore, the shareholder value at risk (SVAR) is -0.29%, given the negative bid premium. This measure indicates the magnitude of bidder's market value at risk of realizing the increase in value along with the management of the target, contingent on the realization of synergies (Rappaport and Sirower, 1999).

The expected increase in equity value from F 3,694 million to F 6,248 million implies a value per share of F 41.48, translating to a price increase of 1.27%. This expected reaction aligns with the perspectives and rationale of the management and of the board of the bidder in analysing the potential merger. However, it is acknowledged that the market reaction may differ, underscoring the importance of evaluating the deal's merits irrespective of the market response. The anticipated change in net income due to the transaction is F +25 million, stemming from the realization of synergies spread over an average of five years per management expectations for F 32,1 million, taxed at the 22% corporate tax rate. Financed through the issuance of new shares, the deal introduces a dilution effect of -37.60%, resulting in an EPS of 0.83 and a P/E ratio of 49,71. Nevertheless, the impact on EPS is considered insignificant, being an accounting effect resulting from the merger and contingent on the combination of the bidder's and target's share prices.

The main consideration in assessing the merits of the deal lies in its effect on the bidder's share price post-deal. If, as happened in this case, the bidder's price per share increases, the transaction can be considered to create value.

Alternatively, if the parties had chosen a cash deal, the combined entity would be wholly owned by the bidder's owners, resulting in a shareholder value at risk (SVAR) of -0.49%. The bidder's reduced risk results from the absence of premium sharing with the target company's shareholders.

The equity value is expected to rise from 3,694 to 3,772, which means a value per share of 41.83, a price increase of 2.12%. This is because higher risk corresponds to a higher price per share.

The anticipated change in net income due to the cash transaction is F -132 million, resulting from the realization of annual synergies and transaction costs, but also from interest expenses on the financing of the transaction, taxed with the 22% tax rate. Assuming a debt-financed transaction, the interest expense would be higher than the annual value of synergies, leading to a dilution effect of -125.95% with an EPS of -0.35, and a P/E ratio of -120.54.

Despite the higher EPS for the stock transaction, the overall price is higher for the cash financed. Consequently, judging in the best interests of the bidder's shareholders in terms of paying the price, the cash deal appears more favourable. This is because, in a share swap, the positive SVA is shared with the target shareholders, diminishing the value for those of the bidder.

Additionally, the exchange ratio, established through negotiations among the involved parties in the merger agreement, has been subject to validation against the target prices provided by various research analysts. These analyses were published after Autogrill's press release on March 10, 2022 (concerning the disclosure of 2021 results) and before April 14, 2022 (the undisturbed date), aiming to incorporate the latest information disclosed to the market. The accompanying table illustrates the research analysts' target prices for both Autogrill and Dufry shares.

Figure 40: Research analysts' target prices

Autogrill			Dufry		
Research Analyst	Date	Target Price (€)	Research Analyst	Date	Target Price (F)
Mediobanca	14/04/2022	8,00	Santander	12/04/2022	57,20
Equita SIM	14/04/2022	7,50	Morgan Stanley	28/03/2022	58,00
Intesa Sanpaolo	05/04/2022	7,00	BNP Paribas Exane	18/03/2022	41,00
Banca Akros	05/04/2022	6,70	RBC	14/03/2022	36,00
BNP Paribas Exane	18/03/2022	8,30	Bank Vontobel	14/03/2022	42,00
BofA	15/03/2022	6,80	UBS	14/03/2022	46,00
Deutsche Bank	14/03/2022	7,00	Deutsche Bank	10/03/2022	50,00
Kepler Cheuvreux	11/03/2022	6,80	Kepler Cheuvreux	10/03/2022	37,00
UBS	10/03/2022	7,10	Oddo	09/03/2022	64,00
Stifel	10/03/2022	8,50	BofA	09/03/2022	60,00
<b>Average</b>		<b>7,37</b>	Stifel	08/03/2022	54,00
<b>Median</b>		<b>7,05</b>	<b>Average</b>		<b>49,56</b>
			<b>Median</b>		<b>50,00</b>

Source: Autogrill, 2023 - Offer Document of data taken from Bloomberg

The implied exchange ratio, based on the average target prices, is 0.152x. This result, derived from the ratio of € 7.37/48.48, aligns closely with the 0.1583x negotiated between the parties, underscoring the fairness of the consideration paid.

It is crucial to highlight that the board of directors of Dufry ultimately determined the Exchange Ratio based solely on negotiations with Edizione and Schema Beta. To confirming fairness,



Dufry obtained specific fairness opinions from Credit Suisse and Banco Santander, issued on July 7, 2022, and July 8, 2022, respectively. Both opinions affirmed that the consideration is fair from a financial standpoint.

Moreover, a Discounted Cash Flow (DCF) analysis will follow to forecast the post-merger financial landscape of the new group. This analysis aims to illustrate the steps that research analysts should take in assessing the per-share price of the combined entity based on pro-forma 2022 results.

Utilizing reclassified historical financial statements of Autogrill and Dufry, projections for the period 2023-2027 have been formulated based on management expectations and historical performance. The weighted average cost of capital (WACC) for both entities has been calculated to discount Free Operating Cash Flows (FOCF)<sup>4</sup>.

Figure 41: Stand-alone DCF for Autogrill (in €) and for Dufry (in F)

		1	2	3	4	5	
<b>DCF Autogrill (EUR)</b>	<b>2022A</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>CV</b>
NOPAT		215	264	300	324	337	337
<b>FOCF</b>		<b>349</b>	<b>402</b>	<b>391</b>	<b>380</b>	<b>367</b>	<b>5.267</b>
long-term g							2%
WACC		8,53%	8,53%	8,53%	8,53%	8,53%	8,53%
Discount factor		0,92	0,85	0,78	0,72	0,66	
NPV		322	341	306	274	244	3.498
<b>EV</b>	<b>4.984</b>						
NFP	-1.581						
Minorities	-57						
<b>Equity Value</b>	<b>3.345</b>						
Shares outstanding	382						
<b>Price per share</b>	<b>8,76</b>						
		1	2	3	4	5	
<b>DCF Dufry (CHF)</b>	<b>2022A</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>CV</b>
NOPAT		905	1.019	1.095	1.137	1.144	1.144
<b>FOCF</b>		<b>973</b>	<b>873</b>	<b>911</b>	<b>946</b>	<b>966</b>	<b>13.144</b>
long-term g							2%
WACC		10,88%	10,88%	10,88%	10,88%	10,88%	10,88%
Discount factor		0,90	0,81	0,73	0,66	0,60	
NPV		878	710	669	626	576	7.843
<b>EV</b>	<b>11.302</b>						
NFP	-5.813						
Minorities	-73						
<b>Equity Value</b>	<b>5.416</b>						
Shares outstanding	90						
<b>Price per share</b>	<b>60,05</b>						

Source: personal elaboration

<sup>4</sup> For the projections and WACC on which the DCF model was built, see the annexes of this thesis.

The resulting share prices for Autogrill and Dufry (€8.76 and F60.05, respectively) are slightly higher than the research analysts' estimates. This aligns with the valuation considering the companies at the year-end of 2022, reflecting their growth following the 2020 slowdown, which saw Autogrill grow by 59,7% and Dufry by 75,7% in sales.

However, the FOCF and WACC of Autogrill are denominated in the target country's local currency. In the context of a cross-border merger, enabling a meaningful comparison between the two companies requires the acquirer to consider specific valuation adjustments. These adjustments involve the conversion of cash flows from one currency to another and the adaptation of discount rates (DePamphilis, 2020).

Figure 42: Conversion of Autogrill's FCF and WACC from € to F

		1	2	3	4	5	
<b>Conversion</b>	<b>2022A</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>CV</b>
<b>Autogrill FOCF (€)</b>		<b>349</b>	<b>402</b>	<b>391</b>	<b>380</b>	<b>367</b>	<b>5.267</b>
Italian interest rate (%)		3,90%	4,00%	4,20%	4,60%	4,60%	
Swiss interest rate (%)		1,20%	1,30%	1,50%	1,80%	2,10%	
Current spot rate (F/€)	1,0155						
Projected spot rate (F/€)		0,989	0,963	0,939	0,911	0,900	
<b>Autogrill FOCF (F)</b>		<b>346</b>	<b>387</b>	<b>367</b>	<b>346</b>	<b>330</b>	<b>4.739</b>
<b>Autogrill WACC (€)</b>		<b>8,53%</b>	<b>8,53%</b>	<b>8,53%</b>	<b>8,53%</b>	<b>8,53%</b>	
Autogrill Ke (€)		17,56%	17,56%	17,56%	17,56%	17,56%	
Expected inflation rate IT		6,10%	2,70%	2,30%	2,00%	2,00%	
Expected inflation rate CH		2,30%	1,50%	1,20%	1,00%	1,00%	
Autogrill Ke (F)		13,34%	16,18%	16,29%	16,40%	16,40%	
<b>Autogrill WACC (F)</b>		<b>6,93%</b>	<b>8,01%</b>	<b>8,05%</b>	<b>8,09%</b>	<b>8,09%</b>	

Source: personal elaboration

The figure above illustrates the process of translating Autogrill's FOCF, denominated in Euro (€), into the bidder's currency, which is the Swiss Franc (F). Given that both companies operate in countries with well-developed and globally integrated capital markets, this conversion is executed based on the interest rate parity theory.

Accordingly, FOCF denominated in F are calculated by multiplying the FOCF denominated in € by the forward rate for the Swiss Franc-to-Euro exchange rate. Also called projected spot rate, it is determined based on the differences in interest rates between the two countries, adjusted by the current spot rate, using the formula in [section 3.2 of chapter 2](#).

As per projections from Banca d'Italia (Banca d'Italia, 2022), the expected Italian interest rate is anticipated to increase from 3.90% in 2023 to 4.60% in 2027. According to projections by the Swiss Federal Finance Administration (Eidgenössische Finanzverwaltung EFV, 2022), the Swiss interest rate is expected to rise from 1.20% in 2023 to 2.10% in 2027. While the current spot rate (F/€) for 30 December 2022 is 1.0155 (European Central Bank, 2023), the forward

rate is thus expected to decrease from 0.989 in 2023 to 0.900 in 2027, resulting in a consequent reduction in Autogrill's FOCF.

The conversion of the WACC is executed through the Fischer effect, suggesting that the cost of equity (Ke) expressed in terms of € can be converted into that expressed in terms of F using the expected inflation rates of the two countries where the companies are located.

The expected inflation rate for Italy is forecasted to decrease from 6.10% in 2023 to 2.00% in 2027 (European Commission, 2023), while that of Switzerland is expected to decrease from 2.30% in 2023 to 1.00% in 2027 (Eidgenössische Finanzverwaltung EFV, 2022). Consequently, the Ke expressed in F is slightly lower than that expressed in terms of €. Developed economies exhibit minimal differences in the cost of equity due to the integration of their capital markets.

With the data now expressed in the same currency, and under the assumption that no intercompany transactions exist, the following figure illustrates the DCF model for the new group.

Figure 43: Price per share of the combined entity

		1	2	3	4	5	
<b>DCF Combined (CHF)</b>	<b>2022A</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>CV</b>
FOCF Autogrill (F)		346	387	367	346	330	4.739
Synergies (net of integration costs)		-15	-15	85	85	85	
WACC AGL (F)		6,93%	8,01%	8,05%	8,09%	8,09%	
Discount factor		0,94	0,86	0,79	0,73	0,68	
<b>NPV Autogrill's FOCF</b>		<b>323</b>	<b>332</b>	<b>291</b>	<b>253</b>	<b>224</b>	<b>3.212</b>
<b>NPV Synergies</b>		<b>-14</b>	<b>-13</b>	<b>67</b>	<b>62</b>	<b>58</b>	
FOCF Dufry (F)		973	873	911	946	966	13.144
<b>NPV Dufry's FOCF</b>		<b>878</b>	<b>710</b>	<b>669</b>	<b>626</b>	<b>576</b>	<b>7.843</b>
<b>Consolidated EV</b>	<b>16.097</b>						
NFP	-8.822						
Minorities	-172						
Transaction costs	-100						
<b>Consolidated Equity Value</b>	<b>7.003</b>						
Shares outstanding	150,62						
<b>Price per share</b>	<b>46,49</b>						

Source: personal elaboration

The consolidated Enterprise Value amounts to F 16,097 million, considering the net present value of both entities together with the discounted value of synergies. Performance improvements for the first two years are impacted by integration costs, with a return to full capacity projected for the period 2025-2027.

The Equity Value is then computed by subtracting net financial position (NFP), minorities, but also transaction costs that must be considered outside FOCF. This results in € 7,003 million that, divided by the shares outstanding, gives a price per share of € 46.49.

The DCF analysis presented serves a crucial role in allowing analysts to assess the prospective value of the combined entity prior to the closing of the transaction. This exercise not only demonstrates the practical application of converting FOCF and WACC in the context of well-developed financial markets, but also unveils the impact of synergies, integration costs, and transaction costs on this widely employed valuation method. This comprehensive evaluation forms an integral part of the broader assessment of the merger's financial viability, providing stakeholders with a deeper understanding of the potential outcomes and contributing to informed decision-making.

## CONCLUSION

The term M&A refers to a strategic business activity involving the consolidation of companies through a financial transaction between an acquiring and a target company, in exchange for consideration in the form of cash or stock, or a combination of both. M&A activity exhibits a cyclical pattern, surging during economic upturns and contracting in recessions. While a peak of \$5.2 trillion was reached in 2021, 2022 marked a substantial decline to \$3.4 trillion. The -35% drop can be attributed mainly to high inflation and subsequent interest rate increases, which affected the cost of financing and equity valuations.

The buy-side process typically involves a few recurring steps. After contacting potential counterparties and sharing information through an information memorandum and nondisclosure agreement, the bidder and its advisors conduct due diligence. Subsequently, the transaction is structured, negotiations take place, and the definitive merger agreement is signed. The closing takes place after obtaining shareholder consent and regulatory approval from antitrust authorities. However, the critical phase lies in the post-closing integration, which is critical for realizing the synergies that motivated the deal.

Synergies arise when the combined equity value exceeds what would be expected separately, often manifesting as increased cash flows or reduced cost of capital. To assess value creation, Bruner et al. (2003) use investors' required returns as a benchmark. Indeed, the common research approach involves "event studies", analysing cumulative abnormal returns (CARs) for shareholders around the transaction announcement date. On average, the combined effect is significantly positive, with greater benefits for target shareholders and either nil or slightly positive effects for acquirer shareholders.

Hereafter, the sources of value creation that connect to the case study are presented. Although larger transactions can lead to greater value destruction for the bidder's shareholders due to the complexities of integrating large firms (Alexandridis et al., 2013), these challenges can be addressed by companies with a substantial track record, ultimately leading to value creation, as pointed out by Hu et al. (2020). Chen et al. (2017) reveal that transactions led by highly capable managers generate significant positive reactions upon announcement. Cui et al. (2020) highlights the importance of their sector-specific competencies in target selection and resource integration, indicating a higher likelihood of achieving greater synergies in intra-industry transactions.

Mergers can serve as strategies for redefining a firm's boundaries (Rhodes-Kropf et al., 2008), creating value when bidders seek related firms with asset complementarity (Hoberg and Philips, 2010). Brower (2001) suggests that this approach could reshape industries through mergers with

firms in sectors experiencing fading boundaries, as supported by Taesoo Jung and Choonseong Leem (2021), who observed a gradual blurring of industry boundaries driven by the cross-border phenomenon.

In structuring a transaction, the consideration chosen is critical in determining the control and distribution of wealth. In a stock deal, both shareholder value added (SVA) and value at risk (SVAR) are shared with the target's shareholders. The exchange ratio, determined upon negotiations, specifies the number of shares of the bidder exchanged for each share of the target.

The research explores cross-border M&As, representing a faster and more efficient strategy for multinational enterprises (MNEs) seeking strategic and complementary assets compared to greenfield investments. In 2022, Italy experienced an inbound movement of \$11 billion and an outbound movement of \$6 billion, whereas Switzerland recorded an inflow of \$17 billion along with an outflow of \$24 billion, indicating notable changes in their respective patterns.

Regarding value creation, Otto et al. (2021) observed that publicly traded bidders from developed countries tend to achieve higher abnormal returns in cross-border deals than domestic ones.

Cross-border M&As are more likely among companies located in countries engaged in frequent trade and with geographical proximity, contributing to higher combined announcement returns when common cultural values are shared (Ahern et al., 2015), with experience and managerial expertise potentially overcoming cultural differences (Boateng et al., 2019). Another determinant of value creation is corporate governance, leading to the adoption of superior governance practices that enhance corporate board quality (Miletkov et al., 2017), while also resulting in higher premiums for target firms situated in countries with a better investment environment (Maung et al., 2019). Concerning the choice of consideration, in the short run, abnormal returns are higher for equity-financed cross-border deals (Dutta et al., 2013), proving advantageous in reducing risk in underdeveloped institutional or culturally dissimilar environments (Cho et al., 2017).

In this context, ownership decisions are significantly influenced by host country factors, including corruption levels and economic connectivity (Di Guardo et al, 2016), but also depend on the degree of economic openness, financial development, and cultural differences (Dang et al., 2018).

In the valuation process, bidders or their advisors need to account for adjustments. When dealing with a target in a developed country, the projection of total nominal cash flows in the local currency allows them to be translated into the bidder's currency through interest rate parity. This conversion involves multiplying by the forward exchange rate, calculated based on the expected interest rate differences between the two countries. Furthermore, based on the

Fischer effect, the cost of equity ( $K_e$ ) must be converted from one currency to another using expected inflation rates in the countries where the companies are located.

Dufry, the main driving force behind the industry's consolidation, recently pursued a remarkable merger with Autogrill, aiming to establish a larger and more diversified group.

In the changing landscape of the travel retail industry, characterized by a strategic shift towards adjacent markets for expanded revenue streams (Bain, 2023), a thorough analysis of the deal's business rationale becomes imperative. The merger with Autogrill represents a strategic entry into previously unexplored locations in the robust North American market, to combine travel retail and travel F&B into innovative hybrid formats. The inherent low cost-sharing and limited customer overlap suggest potential synergies that redefine traditional business boundaries (Rhodes-Kropf et al., 2008). The merger's significance lies in its ability to navigate the fragmented and competitive travel retail market, creating value for the acquirer pursuing related firms with asset complementarity (Hoberg and Philips, 2010). The concept of forming a new industry segment through M&A, as argued by Sick et al. (2019), aligns with the observation that industry boundaries are gradually disappearing due to the cross-border phenomenon, with travel service firms prominently positioned as acquirers and F&B retail firms assuming influential roles as targets (Taesoo Jung and Choonseong Leem, 2021). These business considerations were complemented by governance decisions. According to Maung et al. (2019), the transaction can yield higher premiums for a target firm located in a country with a favourable investment environment. Furthermore, the appointments of prominent figures like Alessandro Benetton and Enrico Laghi to the new entity's board facilitated the adoption of governance practices from its merging partner, enhancing board quality by importing superior standards from a foreign country known for its strong legal framework (Miletkov et al., 2017).

Following a comprehensive due diligence process, the Combination Agreement was signed, also securing all necessary regulatory approvals, as well as consents from shareholders and lenders. On the closing date, Edizione transferred its 50.3% stake in Autogrill using a mutually agreed exchange ratio of 0.15827813. Subsequently, Dufry launched a Mandatory Tender Offer (MTO) for the remaining 49.53% of outstanding shares on the Milan Stock Exchange, with the aim of delisting Autogrill. This involved extending shareholders the option of share or cash alternative considerations, in line with the terms presented to Edizione.

Conducting an event study to assess the impact of the transaction announcement on the companies' share prices, CARs were observed for Autogrill ranging from 18.27% (20-day CAR) to 20.85% (5-day CAR), all statistically significant. In contrast, CARs for Dufry varied from 8.21% (5-day CAR) to 12.40% (10-day CAR), although not statistically significant.

Shareholders responded positively to the potential merger, with Autogrill matching expectations and Dufry exceeding anticipated levels. This higher abnormal return can be attributed to several value-creating determinants: Dufry's significant track record in large M&A deals (Hu et al., 2020); CEO Xavier Rossinyol's extensive experience in the F&B industry (Cui et al., 2020; Fich et al., 2020); the role of cultural familiarity in countries sharing common values (Ahern et al., 2015), with Dufry's transaction experience mitigating linguistic differences (Kedia et al., 2016); the use of stock as consideration, potentially leading to initial overreaction and long-term correction if synergies are not realized (Dutta et al., 2013); and the importance of product relatedness and asset complementarity for differentiation from competitors (Hoberg and Philips, 2010).

The impact of the merger on the bidder's share price is assessed through an M&A economics analysis, based on an evaluation of discounted potential synergies (net of integration costs) of approximately F160 million, derived from the optimization of costs related to goods sold and support functions and, simultaneously, on a negative bid premium of F18 (or -0.7%) implied in the exchange ratio. This results in an expected increase in value for Dufry, as indicated by the SVA, of F178 million. Assuming all shareholders opt for share consideration in the MTO procedure, the expected post-deal price per Dufry share would be F41.48, signifying value creation, with a risk to the bidder's shareholders, denoted by SVAR, of -0,29%. However, it's worth noting that a cash deal might appear more favourable. The impact on EPS is considered insignificant in this context.

Elements of specificity emerged from this work that enriched the understanding of the valuation of cross-border transaction using the DCF model. Autogrill's FOCF, originally denominated in €, require conversion into F by multiplying them by the forward rate for the Swiss Franc-to-Euro exchange rate, which accounts for expected interest rate differences between Italy and Switzerland, adjusted by the current spot rate. Additionally, to be expressed in F, the cost of equity ( $K_e$ ) in € should consider the expected inflation rates of both countries. Given that Italy has higher expected inflation rates than Switzerland, this adjustment results in a lower  $K_e$ . Notably, synergies (net of integration costs) should be discounted using the target's WACC, while transaction costs are expensed outside the FOCF. Applying these adjustments, the computed price per share of the new entity, based on 2022 pro-forma figures, amounts to F46.49.



## APPENDIX

### Appendix 1: Autogrill's projected financial statements and WACC

#### Projections Autogrill

Income Statement (M €)	Stand alone									
	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	
<b>Sales</b>	<b>4.997</b>	<b>1.984</b>	<b>2.597</b>	<b>4.148</b>	<b>4.568</b>	<b>4.939</b>	<b>5.241</b>	<b>5.457</b>	<b>5.573</b>	
<i>Growth rate %</i>		-60,3%	30,9%	59,7%	10,1%	8,1%	6,1%	4,1%	2,1%	
Other income	231	126	193	242	242	242	242	242	242	
COGS	-1.535	-716	-900	-1.348	-1.530	-1.654	-1.755	-1.828	-1.866	
<i>on Sales</i>	30,7%	36,1%	34,7%	32,5%	33,5%	33,5%	33,5%	33,5%	33,5%	
<b>Primary contribution margin</b>	<b>3.693</b>	<b>1.394</b>	<b>1.890</b>	<b>3.043</b>	<b>3.280</b>	<b>3.527</b>	<b>3.728</b>	<b>3.872</b>	<b>3.948</b>	
Indirect costs	-2.732	-1.234	-1.234	-2.417	-2.543	-2.750	-2.918	-3.038	-3.102	
<i>on Sales</i>	54,7%	62,2%	47,5%	58,3%	55,7%	55,7%	55,7%	55,7%	55,7%	
<b>EBITDA</b>	<b>961</b>	<b>159</b>	<b>656</b>	<b>626</b>	<b>737</b>	<b>777</b>	<b>810</b>	<b>833</b>	<b>846</b>	
<i>EBITDA margin %</i>	19,2%	8,0%	25,2%	15,1%	16,1%	15,7%	15,5%	15,3%	15,2%	
D&A of operating fixed assets	-593	-639	-509	-520	-439	-412	-394	-384	-378	
<i>on operating fixed assets</i>		17,9%	18,0%	22,0%	19,3%	19,3%	19,3%	19,3%	19,3%	
<b>EBITA</b>	<b>368</b>	<b>-480</b>	<b>147</b>	<b>106</b>	<b>298</b>	<b>366</b>	<b>416</b>	<b>450</b>	<b>468</b>	
<i>EBITA margin %</i>	7,4%	-24,2%	5,6%	2,5%	6,5%	7,4%	7,9%	8,2%	8,4%	
D&A of goodwill and similar assets	-31	-32	-28	-33	-31	-31	-31	-31	-31	
<b>EBIT</b>	<b>337</b>	<b>-512</b>	<b>119</b>	<b>73</b>	<b>267</b>	<b>335</b>	<b>385</b>	<b>419</b>	<b>437</b>	
<i>EBIT margin %</i>	6,7%	-25,8%	4,6%	1,8%	5,8%	6,8%	7,3%	7,7%	7,8%	
Financial expenses	-104	-121	-108	-70	-89	-108	-105	-103	-100	
<i>Interest rate on debt</i>	3,1%	3,3%	4,9%	3,2%	4,2%	5,2%	5,2%	5,2%	5,2%	
Financial income	5	8	7	10	15	22	30	38	46	
<i>Interest rate on cash</i>		2,3%	1,1%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	
Other financial income/(loss)	36	-13	2	-1	-1	-1	-1	-1	-1	
<b>EBT</b>	<b>274</b>	<b>-638</b>	<b>19</b>	<b>13</b>	<b>192</b>	<b>248</b>	<b>309</b>	<b>353</b>	<b>382</b>	
Taxes	-48	134	-40	-33	-47	-61	-76	-86	-94	
<i>Adjusted tax rate</i>					24,5%	24,5%	24,5%	24,5%	24,5%	
<b>Net income</b>	<b>226</b>	<b>-504</b>	<b>-21</b>	<b>-20</b>	<b>145</b>	<b>187</b>	<b>233</b>	<b>267</b>	<b>288</b>	
<b>EBITA</b>	<b>368</b>	<b>(480)</b>	<b>147</b>	<b>106</b>	<b>298</b>	<b>366</b>	<b>416</b>	<b>450</b>	<b>468</b>	
Taxes	-90	118	-36	-26	-83	-102	-116	-125	-130	
<i>Adjusted tax rate %</i>	24,5%	24,5%	24,5%	24,5%	27,9%	27,9%	27,9%	27,9%	27,9%	
<b>NOPAT</b>	<b>278</b>	<b>(362)</b>	<b>111</b>	<b>80</b>	<b>215</b>	<b>264</b>	<b>300</b>	<b>324</b>	<b>337</b>	

Balance Sheet (M €)	Stand alone									
	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	
Trade receivables	55	37	46	51	53	57	61	63	65	
<i>Days on Sales</i>		8	6	4	4	4	4	4	4	
Inventory	134	97	117	133	142	153	163	169	173	
<i>Days on COGS</i>		58	43	33	33	33	33	33	33	
Trade payables and similar liabilities	-397	-292	-358	-416	-436	-472	-500	-520	-530	
<i>Days on Purchases</i>		-183	-127	-102	-102	-102	-102	-102	-102	
<b>Trade working capital</b>	<b>-208</b>	<b>-158</b>	<b>-195</b>	<b>-232</b>	<b>-241</b>	<b>-262</b>	<b>-277</b>	<b>-287</b>	<b>-292</b>	
Other current assets/(liabilities)	-266	-153	-214	-327	-333	-360	-382	-398	-406	
<i>on Sales</i>	5,3%	7,7%	8,2%	7,9%	7,3%	7,3%	7,3%	7,3%	7,3%	
<b>Operating working capital</b>	<b>-474</b>	<b>-311</b>	<b>-409</b>	<b>-560</b>	<b>-574</b>	<b>-622</b>	<b>-659</b>	<b>-685</b>	<b>-699</b>	
Operating fixed assets	3.581	2.822	2.359	2.274	2.132	2.041	1.988	1.959	1.943	
<i>Capex</i>		-119	45	436	297	321	341	355	362	
<i>Capex on Sales</i>		-6,0%	1,7%	10,5%	6,5%	6,5%	6,5%	6,5%	6,5%	
Other noncurrent assets/(liabilities)	-47	71	43	-8	15	15	15	15	15	
<b>Operating fixed capital</b>	<b>3.533</b>	<b>2.893</b>	<b>2.401</b>	<b>2.267</b>	<b>2.147</b>	<b>2.056</b>	<b>2.002</b>	<b>1.973</b>	<b>1.957</b>	
<b>Invested capital (excluding goodwill)</b>	<b>3.059</b>	<b>2.583</b>	<b>1.992</b>	<b>1.707</b>	<b>1.572</b>	<b>1.434</b>	<b>1.343</b>	<b>1.288</b>	<b>1.258</b>	
Goodwill	855	819	817	844	813	782	752	721	690	
<b>Invested capital</b>	<b>3.914</b>	<b>3.402</b>	<b>2.809</b>	<b>2.551</b>	<b>2.385</b>	<b>2.217</b>	<b>2.095</b>	<b>2.009</b>	<b>1.948</b>	
Surplus assets/(liabilities)	38	31	24	29	29	29	29	29	29	
<b>Total funds invested</b>	<b>3.952</b>	<b>3.433</b>	<b>2.833</b>	<b>2.580</b>	<b>2.415</b>	<b>2.246</b>	<b>2.124</b>	<b>2.038</b>	<b>1.977</b>	
Cash and cash equivalents	-365	-677	-396	-589	-850	-1156	-1461	-1763	-2062	
Short-term debt	462	691	349	872	822	772	722	672	622	
Long-term debt	2.851	2.960	1.860	1.299	1.299	1.299	1.299	1.299	1.299	
<b>Net financial position (NFP)</b>	<b>2948</b>	<b>2974</b>	<b>1814</b>	<b>1581</b>	<b>1271</b>	<b>915</b>	<b>560</b>	<b>207</b>	<b>-142</b>	
Postretirement benefit liabilities	68	60	45	31	31	31	31	31	31	
<b>Debt equivalents</b>	<b>68</b>	<b>60</b>	<b>45</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>31</b>	
<b>NFP and debt equivalents</b>	<b>3016</b>	<b>3034</b>	<b>1859</b>	<b>1612</b>	<b>1302</b>	<b>946</b>	<b>591</b>	<b>238</b>	<b>-110</b>	
Noncontrolling interests	78	60	51	57	57	57	57	57	57	
Shareholders' equity	858	340	923	911	1.056	1.243	1.476	1.742	2.031	
<b>Group's total equity</b>	<b>936</b>	<b>400</b>	<b>974</b>	<b>968</b>	<b>1.113</b>	<b>1.300</b>	<b>1.533</b>	<b>1.799</b>	<b>2.088</b>	
<b>Total funds invested</b>	<b>3.952</b>	<b>3.433</b>	<b>2.833</b>	<b>2.580</b>	<b>2.415</b>	<b>2.246</b>	<b>2.124</b>	<b>2.038</b>	<b>1.977</b>	

Cash Flow Statement (M €)	Stand alone									
	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	
NOPAT	278	-362	111	80	215	264	300	324	337	
D&A	593	639	509	520	439	412	394	384	378	
Δ Trade Working Capital		-50	37	37	9	20	15	11	5	
Δ Other current assets/liabilities		-114	61	114	6	27	22	16	8	
<b>Cash From Operations</b>	<b>870</b>	<b>113</b>	<b>718</b>	<b>750</b>	<b>669</b>	<b>723</b>	<b>731</b>	<b>734</b>	<b>729</b>	
Net capital expenditures		119	-45	-436	-297	-321	-341	-355	-362	
Δ Other noncurrent assets		-118	28	50	-22	0	0	0	0	
Δ Goodwill and similar assets		4	-25	-60	0	0	0	0	0	
<b>Cash From Investments</b>		<b>4</b>	<b>-42</b>	<b>-445</b>	<b>-319</b>	<b>-321</b>	<b>-341</b>	<b>-355</b>	<b>-362</b>	
<b>Free cash flow</b>		<b>118</b>	<b>676</b>	<b>305</b>	<b>349</b>	<b>402</b>	<b>391</b>	<b>380</b>	<b>367</b>	
Δ Surplus assets		7	7	-5	0	0	0	0	0	
Non operating taxes		17	-4	-7	36	41	40	39	37	
Financial income		8	7	10	15	22	30	38	46	
Other financial income/(loss)		-13	2	-1	-1	-1	-1	-1	-1	
<b>Non operating cash flow</b>		<b>18</b>	<b>12</b>	<b>-3</b>	<b>50</b>	<b>62</b>	<b>69</b>	<b>76</b>	<b>82</b>	
<b>Cash available to investors</b>		<b>136</b>	<b>688</b>	<b>302</b>	<b>400</b>	<b>464</b>	<b>460</b>	<b>455</b>	<b>449</b>	
Financial expenses		-121	-108	-70	-89	-108	-105	-103	-100	
Δ Short-term debt		229	-342	523	-50	-50	-50	-50	-50	
Δ Long-term debt		109	-1.099	-562	0	0	0	0	0	
Δ Debt equivalents		-8	-15	-14	0	0	0	0	0	
<b>Cash flow to debtholders</b>		<b>208</b>	<b>-1.564</b>	<b>-122</b>	<b>-139</b>	<b>-158</b>	<b>-155</b>	<b>-153</b>	<b>-150</b>	
Δ NClS		-18	-9	6	0	0	0	0	0	
Δ Equity		-15	604	8	0	0	0	0	0	
<b>Cash flow to equityholders</b>		<b>-32</b>	<b>595</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Excess cash change		312	-281	194	260	306	305	303	299	

Cost of capital	2022A	Notes
Risk-free rate (Rf)	2,09%	Long term government bond yields (Germany, 10yrs) - Eurostat
Country risk premium (Italy)	3,79%	DB Damodaran 2023 - Current Risk Premium for Italy based on rating BBB
Market risk premium (MRP)	5,94%	DB Damodaran 2023 - Current Risk Premium for a mature equity Market
Levered Beta	1,96	
<b>Cost of Equity (ke)</b>	<b>17,56%</b>	
Credit spread	1,89%	
Interest Coverage Ratio	2,76	
<b>Cost of Debt (kd)</b>	<b>3,98%</b>	
Effective tax rate	24,50%	
D/(D+E)	62,03%	
E/(D+E)	37,97%	
<b>WACC</b>	<b>8,53%</b>	

Beta calculation	2022A	Notes
Unlevered beta of the industry	0,88	Damodaran's web site Restaurant Dining
Autogrill D/E	163,35%	Company specific
t	25%	
<b>Levered Beta</b>	<b>1,96</b>	

## Appendix 2: Dufry's projected financial statements and WACC

### Projections Dufry

Income Statement (M €)	Stand alone								
	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E
<b>Sales</b>	<b>8.849</b>	<b>2.561</b>	<b>3.915</b>	<b>6.878</b>	<b>7.566</b>	<b>8.172</b>	<b>8.662</b>	<b>9.008</b>	<b>9.188</b>
<i>Growth rate %</i>		-71,1%	52,9%	75,7%	10,0%	8,0%	6,0%	4,0%	2,0%
Other income	122	33	54	62	62	62	62	62	62
COGS	-3.525	-1.184	-1.704	-2.685	-3.190	-3.445	-3.651	-3.798	-3.873
<i>on Sales</i>	39,8%	46,2%	43,5%	39,0%	42,2%	42,2%	42,2%	42,2%	42,2%
<b>Primary contribution margin</b>	<b>5.445</b>	<b>1.411</b>	<b>2.265</b>	<b>4.256</b>	<b>4.438</b>	<b>4.788</b>	<b>5.072</b>	<b>5.272</b>	<b>5.377</b>
Indirect costs	-3.235	-1.070	-841	-2.659	-2.619	-2.828	-2.998	-3.118	-3.180
<i>on Sales</i>	36,6%	41,8%	21,5%	38,6%	34,6%	34,6%	34,6%	34,6%	34,6%
<b>EBITDA</b>	<b>2.210</b>	<b>341</b>	<b>1.424</b>	<b>1.597</b>	<b>1.820</b>	<b>1.960</b>	<b>2.074</b>	<b>2.155</b>	<b>2.197</b>
<i>EBITDA margin %</i>	25,0%	13,3%	36,4%	23,2%	24,0%	24,0%	23,9%	23,9%	23,9%
D&A of operating fixed assets	-1374	-1825	-994	-899	-779	-789	-816	-848	-882
<i>on operating fixed assets</i>		22,3%	14,0%	17,3%	17,9%	17,9%	17,9%	17,9%	17,9%
<b>EBITA</b>	<b>836</b>	<b>-1.484</b>	<b>430</b>	<b>698</b>	<b>1.040</b>	<b>1.171</b>	<b>1.258</b>	<b>1.307</b>	<b>1.315</b>
<i>EBITA margin %</i>	9,4%	-57,9%	11,0%	10,1%	13,7%	14,3%	14,5%	14,5%	14,3%
D&A of goodwill and similar assets	-403	-1.017	-496	-196	-196	-196	-196	-196	-196
<b>EBIT</b>	<b>433</b>	<b>-2.501</b>	<b>-66</b>	<b>502</b>	<b>845</b>	<b>976</b>	<b>1.063</b>	<b>1.111</b>	<b>1.119</b>
<i>EBIT margin %</i>	4,9%	-97,6%	-1,7%	7,3%	11,2%	11,9%	12,3%	12,3%	12,2%
Financial expenses	-387	-385	-365	-351	-402	-448	-430	-412	-393
<i>Interest rate on debt</i>	4,8%	4,2%	4,9%	5,3%	6,3%	7,3%	7,3%	7,3%	7,3%
Financial income	72	15	26	69	74	108	132	162	197
<i>Interest rate on cash</i>		2,7%	7,2%	8,6%	8,6%	8,6%	8,6%	8,6%	8,6%
Other financial income/(loss)	-9	0	-3	-23	-23	-23	-23	-23	-23
<b>EBT</b>	<b>108</b>	<b>-2871</b>	<b>-408</b>	<b>197</b>	<b>493</b>	<b>613</b>	<b>742</b>	<b>838</b>	<b>899</b>
Taxes	-78	131	43	-76	-109	-135	-163	-184	-198
<i>Adjusted tax rate</i>					22,0%	22,0%	22,0%	22,0%	22,0%
<b>Net income</b>	<b>30</b>	<b>-2741</b>	<b>-365</b>	<b>121</b>	<b>385</b>	<b>478</b>	<b>579</b>	<b>654</b>	<b>702</b>
<b>EBITA</b>	<b>836</b>	<b>-1.484</b>	<b>430</b>	<b>698</b>	<b>1.040</b>	<b>1.171</b>	<b>1.258</b>	<b>1.307</b>	<b>1.315</b>
Taxes	-184	326	-95	-154	-135	-152	-164	-170	-171
<i>Adjusted tax rate %</i>	22,0%	22,0%	22,0%	22,0%	13,0%	13,0%	13,0%	13,0%	13,0%
<b>NOPAT</b>	<b>652</b>	<b>-1.157</b>	<b>335</b>	<b>544</b>	<b>905</b>	<b>1.019</b>	<b>1.095</b>	<b>1.137</b>	<b>1.144</b>

Balance Sheet (M €)	Stand alone								
	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E
Trade receivables	44	17	85	62	81	88	93	97	99
<i>Days on Sales</i>		4	5	4	4	4	4	4	4
Inventory	1.050	660	692	928	963	1.040	1.102	1.146	1.169
<i>Days on COGS</i>		260	143	109	109	109	109	109	109
Trade payables and similar liabilities	-646	-155	-335	-486	-453	-495	-522	-540	-548
<i>Days on Purchases</i>		-182	-51	-51	-51	-51	-51	-51	-51
<b>Trade working capital</b>	<b>449</b>	<b>522</b>	<b>442</b>	<b>504</b>	<b>591</b>	<b>632</b>	<b>673</b>	<b>703</b>	<b>720</b>
Other current assets/(liabilities)	-524	-267	-340	-393	-581	-628	-665	-692	-706
<i>on Sales</i>	5,9%	10,4%	8,7%	5,7%	7,7%	7,7%	7,7%	7,7%	7,7%
<b>Operating working capital</b>	<b>-75</b>	<b>255</b>	<b>102</b>	<b>112</b>	<b>9</b>	<b>5</b>	<b>8</b>	<b>11</b>	<b>14</b>
Operating fixed assets	8.191	7.089	5.187	4.360	4.413	4.564	4.744	4.932	5.107
<i>Capex</i>		722	-907	72	832	940	996	1036	1057
<i>Capex on Sales</i>		28,2%	-23,2%	1,0%	11,0%	11,5%	11,5%	11,5%	11,5%
Other noncurrent assets/(liabilities)	-98	-5	97	24	4	4	4	4	4
<b>Operating fixed capital</b>	<b>8.094</b>	<b>7.084</b>	<b>5.284</b>	<b>4.383</b>	<b>4.417</b>	<b>4.568</b>	<b>4.748</b>	<b>4.936</b>	<b>5.111</b>
<b>Invested capital (excluding goodwill)</b>	<b>8.019</b>	<b>7.339</b>	<b>5.387</b>	<b>4.495</b>	<b>4.427</b>	<b>4.573</b>	<b>4.756</b>	<b>4.947</b>	<b>5.125</b>
Goodwill	2.611	2.369	2.360	2.272	2.077	1.881	1.686	1.490	1.295
<b>Invested capital</b>	<b>10.630</b>	<b>9.708</b>	<b>7.747</b>	<b>6.767</b>	<b>6.503</b>	<b>6.454</b>	<b>6.441</b>	<b>6.437</b>	<b>6.420</b>
Surplus assets/(liabilities)	32	7	15	24	24	24	24	24	24
<b>Total funds invested</b>	<b>10.662</b>	<b>9.715</b>	<b>7.762</b>	<b>6.792</b>	<b>6.528</b>	<b>6.478</b>	<b>6.466</b>	<b>6.461</b>	<b>6.444</b>
Cash and cash equivalents	-554	-360	-794	-855	-1253	-1531	-1872	-2280	-2749
Short-term debt	1.139	1.451	1.179	1.206	1.156	1.106	1.056	1.006	956
Long-term debt	6.921	7.674	6.330	5.463	5.263	5.063	4.863	4.663	4.463
<b>Net financial position (NFP)</b>	<b>7.507</b>	<b>8.765</b>	<b>6.716</b>	<b>5.813</b>	<b>5.165</b>	<b>4.637</b>	<b>4.046</b>	<b>3.388</b>	<b>2.669</b>
Postretirement benefit liabilities	47	33	12	12	12	12	12	12	12
<b>Debt equivalents</b>	<b>47</b>	<b>33</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>
<b>NFP and debt equivalents</b>	<b>7.554</b>	<b>8.797</b>	<b>6.728</b>	<b>5.826</b>	<b>5.177</b>	<b>4.649</b>	<b>4.058</b>	<b>3.400</b>	<b>2.682</b>
Noncontrolling interests	463	79	78	73	73	73	73	73	73
Shareholders' equity	2.645	839	957	893	1.278	1.756	2.335	2.988	3.690
<b>Group's total equity</b>	<b>3.108</b>	<b>918</b>	<b>1.035</b>	<b>966</b>	<b>1.351</b>	<b>1.829</b>	<b>2.408</b>	<b>3.061</b>	<b>3.763</b>
<b>Total funds invested</b>	<b>10.662</b>	<b>9.715</b>	<b>7.762</b>	<b>6.792</b>	<b>6.528</b>	<b>6.478</b>	<b>6.466</b>	<b>6.461</b>	<b>6.444</b>

Cash Flow Statement (M €)	Stand alone									
	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	
NOPAT	652	-1.157	335	544	905	1.019	1.095	1.137	1.144	
D&A	1.374	1.825	994	899	779	789	816	848	882	
Δ Trade Working Capital		-73	79	-62	-86	-42	-41	-30	-17	
Δ Other current assets/liabilities		-257	73	53	189	46	38	27	14	
<b>Cash From Operations</b>	<b>2.026</b>	<b>337</b>	<b>1.482</b>	<b>1.434</b>	<b>1.787</b>	<b>1.813</b>	<b>1.908</b>	<b>1.982</b>	<b>2.022</b>	
Net capital expenditures		-722	907	-72	-832	-940	-996	-1.036	-1.057	
Δ Other noncurrent assets		-92	-102	74	19	0	0	0	0	
Δ Goodwill and similar assets		-775	-487	-108	0	0	0	0	0	
<b>Cash From Investments</b>		<b>-1.590</b>	<b>318</b>	<b>-106</b>	<b>-813</b>	<b>-940</b>	<b>-996</b>	<b>-1.036</b>	<b>-1.057</b>	
<b>Free cash flow</b>		<b>-1.252</b>	<b>1.801</b>	<b>1.328</b>	<b>973</b>	<b>873</b>	<b>911</b>	<b>946</b>	<b>966</b>	
Δ Surplus assets		25	-8	-9	0	0	0	0	0	
Non operating taxes		-196	137	77	27	17	0	-14	-27	
Financial income		15	26	69	74	108	132	162	197	
Other financial income/(loss)		0	-3	-23	-23	-23	-23	-23	-23	
<b>Non operating cash flow</b>		<b>-156</b>	<b>152</b>	<b>113</b>	<b>77</b>	<b>102</b>	<b>109</b>	<b>124</b>	<b>147</b>	
<b>Cash available to investors</b>		<b>-1.408</b>	<b>1.953</b>	<b>1.442</b>	<b>1.051</b>	<b>976</b>	<b>1.021</b>	<b>1.070</b>	<b>1.112</b>	
Financial expenses		-385	-365	-351	-402	-448	-430	-412	-393	
Δ Short-term debt		313	-272	26	-50	-50	-50	-50	-50	
Δ Long-term debt		752	-1.343	-868	-200	-200	-200	-200	-200	
Δ Debt equivalents		-15	-21	1	0	0	0	0	0	
<b>Cash flow to debtholders</b>		<b>665</b>	<b>-2.001</b>	<b>-1.192</b>	<b>-652</b>	<b>-698</b>	<b>-680</b>	<b>-662</b>	<b>-643</b>	
Δ NCI's		-384	-1	-5	0	0	0	0	0	
Δ Equity		935	483	-184	0	0	0	0	0	
<b>Cash flow to equityholders</b>		<b>551</b>	<b>482</b>	<b>-189</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Excess cash change		-193	433	61	399	278	341	408	469	

Cost of capital	2022A	Notes
Risk-free rate (Rf)	2,09%	Long term government bond yields (Germany, 10yrs) - Eurostat
Country risk premium (Switzerland)	0,00%	DB Damodaran 2023 - Current Risk Premium for Switzerland based on rating AAA
Market risk premium (MRP)	5,94%	DB Damodaran 2023 - Current Risk Premium for a mature equity Market
Levered Beta	6,07	
<b>Cost of Equity (ke)</b>	<b>38,17%</b>	
Credit spread	6,04%	Based on ICR - Damodaran's table for large non-financial service firms
Interest Coverage Ratio	1,43	
<b>Cost of Debt (kd)</b>	<b>8,13%</b>	
Effective tax rate	22,00%	
D/(D+E)	85,75%	
E/(D+E)	14,25%	
<b>WACC</b>	<b>10,88%</b>	

Beta calculation	2022A	Notes
Unlevered beta of the industry	1,07	Damodaran's web site Retail Special Lines
Dufry D/E	601,73%	Company specific
t	22%	
<b>Levered Beta</b>	<b>6,07</b>	

## REFERENCES

- AHERN K. R., DAMINELLI D., FRACASSI, C., 2015. *Lost in translation? The effect of cultural values on mergers around the world*. Journal of Financial Economics, Volume 117, Issue 1, Pages 165-189.
- ALEXANDRIDIS G., FULLER K. P., TERHAAR L., TRAVLOS N. G., 2013. *Deal size, acquisition premia and shareholder gains*. Journal of Corporate Finance, Volume 20, Pages 1-13.
- ALQUIST R., BERMAN N., MUKHERJEE R., TESAR L. L., 2019. *Financial constraints, institutions, and foreign ownership*. Journal of International Economics, Volume 118, Pages 63-83.
- ARULAMPALAM W., DEVEREUX M. P., LIBERINI F., 2019. *Taxes and the location of targets*. Journal of Public Economics, Volume 176, Pages 161-178.
- AUTOGRILL, 2023. *Annual Report 2022*. Novara, Italy.
- AUTOGRILL, 2023. *Exemption Document: mandatory public exchange offer with alternative cash consideration*. Novara, Italy.
- AUTOGRILL, 2023. *Offer document: mandatory public exchange offer with alternative cash consideration*. Novara, Italy.
- BAE S. C., CHANG K., KIM D., 2013. *Determinants of target selection and acquirer returns: Evidence from cross-border acquisitions*. International Review of Economics & Finance, Volume 27, Pages 552-565.
- BAKER, J. B., BRESNAHAN T. F., 1985. *The Gains from Merger or Collusion in Product-Differentiated Industries*. The Journal of Industrial Economics, 33(4), 427-444.
- BANCA D'ITALIA, 2022. *Macroeconomic projections for the Italian economy*. Eurosystem staff macroeconomic projections. [https://www.bancaditalia.it/pubblicazioni/proiezioni-macroeconomiche/2022/Macroeconomic-Projections-Italy-December-2022.pdf?language\\_id=1#:~:text=Consumer%20price%20inflation%2C%20equal%20to,1.9%20per%20cent%20in%202025](https://www.bancaditalia.it/pubblicazioni/proiezioni-macroeconomiche/2022/Macroeconomic-Projections-Italy-December-2022.pdf?language_id=1#:~:text=Consumer%20price%20inflation%2C%20equal%20to,1.9%20per%20cent%20in%202025)
- BARBOPOULOS L., MARSHALL A., MACINNES C., MCCOLGAN P., 2014. *Foreign direct investment in emerging markets and acquirers' value gains*. International Business Review, Volume 23, Issue 3, Pages 604-619.

- BATSAKIS G., WOOD G., AZAR G., SINGH, S., 2018. *International diversification and firm performance in the post-acquisition period: A resource dependence perspective*. Journal of Business Research, Volume 93, Pages 151-159.
- BOATENG A., DU M., BI X., LODORFOS G., 2019. *Cultural distance and value creation of cross-border M&A: The moderating role of acquirer characteristics*. International Review of Financial Analysis, Volume 63, Pages 285-295.
- BODNARUK A., MANCONI A., MASSA M., 2016. *Cross-border alliances and risk management*. Journal of International Economics, Volume 102, Pages 22-49.
- BOWER J. L., 2001. *Not All M&A Are Alike: and That Matters*. Harvard Business Review.
- BREUER W., GHUFRAN B., SALZMANN A. J., 2020. *Investors' time preferences and takeover performance*. International Review of Financial Analysis, Volume 67.
- BRIS A., BRISLEY N., CABOLIS C., 2008. *Adopting better corporate governance: Evidence from cross-border mergers*. Journal of Corporate Finance, Volume 14, Issue 3, Pages 224-240.
- BRUNER R. F., 2003. *Does M&A Pay? A Survey of Evidence for The Decision-Maker*. Journal of applied Finance. University of Virginia.
- BUSH H., STOREY D., 2016. *Economic impact of duty free and travel retail in Europe*. Paris: Duty Free World Council.
- BUTTIGNON F., 2023. Investment banking: M&A Economics. Slides of the course "Advanced Corporate Finance". Padova: Università degli Studi di Padova
- CAO X., CUMMING D., GOH J., WANG X., 2019. *The impact of investor protection law on global takeovers: LBO vs. non-LBO transactions*. Journal of International Financial Markets, Institutions and Money, Volume 59, Pages 1-18.
- CHEN S., LIN C., 2018. *Managerial ability and acquirer returns*. The Quarterly Review of Economics and Finance, Volume 68, Pages 171-182.
- CHO H., AHN H. S., 2017. *Stock payment and the effects of institutional and cultural differences: A study of shareholder value creation in cross-border M&As*. International Business Review, Volume 26, Issue 3, Pages 461-475.
- CUI H., LEUNG S. C., 2020. *The long-run performance of acquiring firms in mergers and acquisitions: Does managerial ability matter?* Journal of Contemporary Accounting & Economics, Volume 16, Issue 1.

DANDAPANI K., HIBBERT A. M., LAWRENCE E. R., 2020. *The Shareholder's response to a firm's first international acquisition*. Journal of Banking & Finance, Volume 118.

DANG M., HENRY D., NGUYEN M. T., HOANG V. A., 2018. *Cross-country determinants of ownership choices in cross-border acquisitions: Evidence from emerging markets*. Journal of Multinational Financial Management, Volume 44, Pages 14-35.

DEPAMPHILIS D., 2022. *Mergers, acquisitions, and other restructuring activities: an integrated approach to process, tools, cases, and solutions*. Eleventh edition. San Diego: Elsevier Inc.

DESSAINT O., GOLUBOV A., VOLPIN P., 2017. *Employment protection and takeovers*. Journal of Financial Economics, Volume 125, Issue 2, Pages 369-388.

DI GUARDO M. C., MARROCU E., PACI R., 2016. *The effect of local corruption on ownership strategy in cross-border mergers and acquisitions*. Journal of Business Research, Volume 69, Issue 10, Pages 4225-4241.

DUFREY AG, 2023. *Annual Report 2022*. Basel, Switzerland.

DUFREY AG. Company website [online]. Available on <https://www.dufrey.com/en/company/our-brands>, [09/08/2023].

DUTTA S., SAADI S., ZHU P., 2013. *Does payment method matter in cross-border acquisitions?* International Review of Economics & Finance, Volume 25, Pages 91-107.

EIDGENÖSSISCHE FINANZVERWALTUNG EFV, 2022. Dataportal – overview. Federal budget.

[https://www.data.finance.admin.ch/superset/dashboard/20/?native\\_filters\\_key=MQ2RnvtFK33fTOPyhP\\_wjAaKNLZTcKq1jyix5TFoEr63KuWFwYAt4FodPEQ42QLA](https://www.data.finance.admin.ch/superset/dashboard/20/?native_filters_key=MQ2RnvtFK33fTOPyhP_wjAaKNLZTcKq1jyix5TFoEr63KuWFwYAt4FodPEQ42QLA)

EUROMONITOR INTERNATIONAL, 2023. *World Market for Duty-Free: Unlocking Value and New Opportunities*. Passport.

EUROPEAN CENTRAL BANK, 2023. Euro foreign exchange reference rates – Swiss Franc (CHF). Statistics.

[https://www.ecb.europa.eu/stats/policy\\_and\\_exchange\\_rates/euro\\_reference\\_exchange\\_rates/html/eurofxref-graph-chf.en.html](https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/eurofxref-graph-chf.en.html)

EUROPEAN COMMISSION, 2023. Economic forecast for Italy. Economy and Finance. <https://economy-finance.ec.europa.eu/economic-surveillance-eu-economies/italy/economic-forecast->

[italy\\_en#:~:text=Inflation%20is%20forecast%20to%20fall,2024%20and%202.3%25%20in%202025](#)

FICH E. M., NGUYEN T., 2020. *The value of CEOs' supply chain experience: Evidence from mergers and acquisitions*. Journal of Corporate Finance, Volume 60.

FU F., LIN L., OFFICER M. S., 2013. *Acquisitions driven by stock overvaluation: Are they good deals?* Journal of Financial Economics. Volume 109, Issue 1.

GRABOWSKI R. J., HARRINGTON J. P., NUNES C., 2017. *Valuation Handbook-US Guide to Cost of Capital*. In DEPAMPHILIS D., 2022. *Mergers, acquisitions, and other restructuring activities: an integrated approach to process, tools, cases, and solutions*. Eleventh edition. San Diego: Elsevier Inc.

HOBERG G., PHILLIPS G., 2010. *Product Market Synergies and Competition in Mergers and Acquisitions: A Text-Based Analysis*. The Review of Financial Studies, Volume 23, Issue 10.

HU N., LI L., LI H., WANG X., 2020. *Do mega-mergers create value? The acquisition experience and mega-deal outcomes*. Journal of Empirical Finance, Volume 55, Pages 119-142.

HUANG P., OFFICER M. S., POWELL R., 2016. *Method of payment and risk mitigation in cross-border mergers and acquisitions*. Journal of Corporate Finance, Volume 40, Pages 216-234.

IANNOTTA G., 2010. *Investment Banking. A Guide to Underwriting and Advisory Services*. Berlin-Heidelberg: Springer-Verlag.

INSTITUTE FOR MERGERS, ACQUISITIONS AND ALLIANCES (IMAA), 2023. *Number and value of merger and acquisition (M&A) transactions worldwide from 1985 to April 2023*. In Statista. Available at: <https://www.statista.com/statistics/267368/number-of-mergers-and-acquisitions-worldwide-since-2005/>, [30/08/2023].

IRELAND K., 2022. *Travel retail industry database & insights 2022/23*. London: Duty Free News International.

JUNG T., LEEM C., 2021. *A study on global industrial landscape changes through M&A convergence analysis*. Technology Analysis & Strategic Management.

KAPLAN S. N., WEISBACH M.S., 1992. *The Success of Acquisitions: Evidence from Divestitures*. The Journal of Finance, Volume 47: 107-138.



- KEDIA B. L., REDDY R. K., 2016. *Language and cross-border acquisitions: An exploratory study*. International Business Review, Volume 25, Issue 6, Pages 1321-1332.
- KOLLER T., GOEDHART M., WESSELS D., 2020. *Valuation: measuring and managing the value of companies*. Seventh edition. Hoboken, New Jersey: Wiley.
- LEGARDERE SCA, 2023. *Universal registration document including the annual financial report: Fiscal year 2022*. Paris.
- MAKSIMOVIC V., PHILLIPS G., PRABHALA N. R., 2011. *Post-merger restructuring and the boundaries of the firm*. Journal of Financial Economics, Volume 102, Issue 2, Pages 317-343.
- MARKETLINE, 2022. *Company profile Dufry AG*. London: a Progressive Digital Media business.
- MAUNG M., SHEDDEN M., WANG Y., WILSON C., 2019. *The investment environment and cross-border merger and acquisition premiums*. Journal of International Financial Markets, Institutions and Money, Volume 59, Pages 19-35.
- MILETKOV M., POULSEN A., WINTOKI M. B., 2017. *Foreign independent directors and the quality of legal institutions*. Journal of International Business Studies, Volume 48, Pages 267-292.
- MOELLER S. B., SCHLINGEMANN F. P., STULZ R. M., 2004. *Firm size and the gains from acquisitions*. Journal of Financial Economics, Volume 73, Issue 2, Pages 201-228.
- MOODIE M., DAVITT D., 2022. *The world's leading travel retailers in profile*. The Moodie Davitt eZine [online], issue 313. Available on <https://ezine.moodiedavittreport.com/the-moodie-davitt-ezine-313/>, [24/07/2023].
- MOODY'S ANALYTICS, 2023. Bureau Van Dijk, Orbis. Dufry AG, ownership structure
- MOODY'S, 2022. *Dufry AG: Autogrill deal is complementary and credit positive*. Investor service, report 1336178.
- MOSCHIERI C., CAMPA J. M., 2014. *New trends in mergers and acquisitions: Idiosyncrasies of the European market*. Journal of Business Research, Volume 67, Issue 7, Pages 1478-1485.
- NORBÄCK P., PERSSON L., 2019. *Stock market impact of cross-border acquisitions in emerging markets*. The North American Journal of Economics and Finance, Volume 48, Pages 346-363.

- OTTO F., SAMPAIO J. O., SILVA V. A. B., 2021. *Domestic and cross-border effect of acquisition announcements: A short-term study for developed and emerging countries*. Finance research letters, Volume 38.
- RAPPAPORT A., SIROWER M. L., 1999. *Stock or Cash? The Trade-Offs for Buyers and Sellers in Mergers and Acquisitions*. Harvard Business Review.
- RHODES-KROPF M., ROBINSON D.T., 2008. *The Market for Mergers and the Boundaries of the Firm*. The Journal of Finance, 63: 1169-1211.
- S&P GLOBAL, 2022. *Travel Retailer Dufry 'B+' Ratings On CreditWatch Positive On Autogrill Acquisition Announcement*. London: RatingsDirect.
- S&P GLOBAL, 2023. *M&A Equity Offerings: Market Report*. Market Intelligence.
- SHEEN A., 2014. *The Real Product Market Impact of Mergers*. The Journal of Finance, Volume 69, Issue 6.
- SHETTY A., MANLEY J., & KYAW N., 2019. *The impact of exchange rate movements on mergers and acquisitions FDI*. Journal of Multinational Financial Management, Volume 52.
- SICK N., PRESCHITSCHK N., LEKER J., BRÖRING S., 2019. *A new framework to assess industry convergence in high technology environments*. Technovation, Volumes 84–85, Pages 48-58.
- SIX Exchange Regulation AG, 2023. *Disclosure of Shareholdings*. [https://www.ser-ag.com/en/resources/notifications-market-participants/significant-shareholders.html#/,](https://www.ser-ag.com/en/resources/notifications-market-participants/significant-shareholders.html#/) [30/08/2023].
- STATISTA, 2023. *Food: market data analysis & forecast*. Market Insights.
- STULZ R. M., 1995. *Globalization of capital markets and the cost of capital: The case of Nestlé*. Journal of Applied Corporate Finance, Volume 8, Issue 3, Pages 30-38.
- TRANSPARENCY INTERNATIONAL, 2022. *Corruption Perceptions Index*. <https://www.transparency.org/en/cpi/2022>
- UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD), 2023. *World Investment Report 2023*. Geneva: United Nations Publications.
- VANDIERENDONCK V., PARSHLEY M., MOHAN Y., KOSZYK S., 2023. *Global M&A Report 2023: Retail's New M&A Balancing Act*. Bain & Company.

WALL STREET JOURNAL, 2023. Leading financial advisors to merger and acquisition (M&A) transactions worldwide in 2022, by number of deals and value. In Statista. Available at: <https://www.statista.com/statistics/245937/leading-financial-advisers-to-global-m-and-a/>, [30/08/2023].

WHITE & CASE, 2023. *Value of merger and acquisition deals worldwide from 2015 to 2022, by target country (in billion U.S. dollars)*. In Statista. Available at: <https://www.statista.com/statistics/520772/value-of-merger-and-acquisition-deals-worldwide-from-2015-to-2022-by-target-country/>, [30/08/2023].

YAHOO FINANCE, 2023. <https://it.finance.yahoo.com/>

ZOTTI A., 2023. *Strategic approach to M&A process: Business Definition*. Slides of the course "Mergers, acquisitions and corporate restructuring". Padova: Università degli Studi di Padova.